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TASMAN
geotechnics

LANDSLIDE CONDITION REPORT
PORT ROAD, BOAT HARBOUR

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1 INTRODUCTION

Tasman Geotechnics was commissioned by Chris Martin of CSE Tasmania to provide a summary report on landslide conditions along Port Road, Boat Harbour.

Port Road is currently the only access route to Boat Harbour. The road crosses a number of landslides and has been subject to road closures in the past due to landslides. The aim of the report is to summarise previous investigations, come to an understanding of the geology and provide a framework for future-proofing Port Road.

The aim of the investigation is to:

- Summarise current understanding of geology, geomorphology and geotechnical model along Port Road,
- Identify zones along the road where failure is likely,
- Scope an investigation or instrumentation plan to improve the geotechnical model of Port Road,
- Identify ways of reducing the risk of failure due to landslide activity,
- Identify maintenance issues which should be addressed

The distance along Port Road from Sisters Beach Road to the surf club is about 1.4km. For most of this distance, Port Road traverses the coastal escarpment, descending from 110m above sea level to about 5m above sea level.

For the purpose of this report, four main sections are identified for Port Road, with approximate chainages measured from the intersection with Sisters Beach Road:

- Upper portion: on the plateau, from CH 0m to about CH 250m
- Middle portion: predominantly on the Landslip A area from the crest of the plateau to about 263 Port Road, from CH 250m to CH1200m
- Lower A portion: on the toe of a large landslide between 263 Port Road and the surf club, from CH1200m to CH1400m
- Lower B portion: from the surf club to the end of Port Road, from CH1400m to CH1700m.

The landslides occur on the Middle portion and Lower A portion.

2 BACKGROUND INFORMATION

2.1 Implications of Landslip A and B Areas

Approximately 1km of Port Road is located on Landslip A or B Area. The landslip areas were declared by the *Mineral Resources Development Act 1995*.

It is our understanding that the provisions of the Building Act 2000 and Building Regulations 2014 remain applicable until the new Tasmanian Planning Scheme comes into effect.

For an A landslip area, the Tasmanian *Building Act 2000* states that

(1) A person must not erect, alter or add to a building in an A landslip area except in accordance with subsection (2)

(2) The minister, on the recommendation of a general manager, may permit a person to –

(a) Erect, in an A landslip area-

(i) A shed; or

(j) An insubstantial building; or

(b) Carry out building work, other than erections, in respect of a building in an A landslip area; or

(c) Erect a building within the boundaries of a wharf in an A landslip area.

The Building Regulations stipulate that a person may only erect, alter or add to a building in a B landslip area if the total floor area will not exceed 200m^2 when the building work is completed.

In landslip areas, a person may only (Clause 13, Building Regulations 2014):

a) Excavate or deposit, material in a landslip if the excavation or deposition is carried out in such a manner as to allow rainwater or seepage to drain from the site; or

b) Permanently excavate or deposit any material for, or in connection with, building work in a landslip are if –

i. The excavation is not more than 600 millimeters in depth; and

ii. The material, when deposited, is not more than one meter in height above ground level and is compacted and graded so as not to aggravate existing landslip conditions; or

c) Backfill a trench or hole in a landslip area if the trench or hole is backfilled with well compacted material which was previously removed from the trench or hole; or

d) Fell or remove trees or other vegetation for, or in connection with, building work on land in a landslip area if the person has obtained the written agreement of a permit authority; or

e) Use any earth-moving or vibrating compaction equipment for, or in connection with, building work on land in a landslip are if the person has obtained the written agreement of a permit authority.

While construction or modifications of a road are not a 'building activity', it is likely that such construction will be assessed under the Building Regulations.

2.2 Regional Setting

Boat Harbour is a seaside town built at the base of a steep coastal escarpment with a sheltered beach as the main attraction. Many of the houses were initially holiday shacks and still display their origins.

A prominent headland, Table Cape is situated to the east of the town and a rugged rocky coastline extends to the west. To the south a steep escarpment rises to a plateau approximately 120m above sea level.

2.3 Geology

The Mineral Resources Tasmania (MRT) 1:25,000 Series Digital Geological map, Wynyard Sheet, shows two dominant geological units along the Port Road alignment:

i) deeply weathered Tertiary basalt, and

ii) Quaternary aged landslide deposits derived predominantly from weathered Tertiary rocks.

The deeply weathered basalt is mapped the Upper and Middle portions, while the landslide deposits are predominantly mapped on the Middle and Lower A portions. Outcrops of basalt occur at the shore line, and an outcrop of Proterozoic rock is mapped near the change from Upper to Middle portions.

The Lower B portion (ie north of the surf club) is located on Tertiary sediments and Proterozoic rocks, metamorphosed siliceous shelf sequences. The Proterozoic rocks are also mapped at Shelter Point and the coastline west of Boat Harbour.

An extract of the MRT geology map is presented on Figure 1.

2.4 Landslide Inventory

In 2010, MRT published the *"Tasmanian Landslide Hazard Series"* maps which includes 6 maps for the Wynyard area. The Landslide Inventory map shows 7 landslides of different scale in the Boat Harbour township and another 5 along the Middle portion of Port Road. There have also been reports of damage to dwellings in the Boat Harbour township.

An active landslide complex is located near Hepples Road (for the purposes of this report this is referred to as the "Hepples Road Complex"). The Lower A portion of Port Road is located on a larger dormant complex and this is termed as the "Town Complex". The 5 landslides along Port Road are referred to as the "Port Road Complex". Two smaller, probably dormant, landslides are located on the escarpment and are referred to as "escarpment slides".

An extract of the MRT landslide inventory map together with the declared Landslip A and B areas is shown in Figure 2.

2.5 Landslide Susceptibility Mapping

For the basalt soils of the North-West coast of Tasmania, MRT have identified two scales of landslides:

- Deep-seated rotational landslides; and
- Shallow slides or debris flows.

Landslide susceptibility maps for both scales of land sliding have been developed by MRT, and extracts are presented in Figure 3 and 4.

Susceptibility zones for first time deep-seated failures were developed by MRT by statistical analysis of slope geometry and geological material of known landslides, and are mapped as possible source, regression and runout areas associated with potential landslide movement. For the Tertiary basalts, threshold values of source, regression and runout areas are 14°, 20° and 16° respectively.

For shallow slides and debris flows, the susceptibility for source area is also based on slope angle:

- High: greater than 20°
- Moderate: between 10° and 20°
- Low: between 6° and 10°
- Very Low: less than 6°

The Wynyard Deep-seated Landslide Susceptibility Map shows that the majority of the Middle Portion of Port Road is mapped as source areas, while the Lower A portion of Port Road is mapped as runout areas. Some areas near the surf club are also mapped as source areas for deep seated landslides. The Lower B portion (ie north of the surf club) shows no susceptibility for deep seated landslides.

The Wynyard Shallow Slide and Debris Flow Susceptibility Map shows that the Middle Portion of Port Road is mapped as Moderate to High susceptibility for shallow slides. The Upper and Lower A portions of Port Road are mostly mapped as Low susceptibility. The Lower B portion (ie north of the surf club) shows no susceptibility for shallow slides.

2.6 Previous Reports

Boat Harbour has had a history of landslides some of which have damaged buildings and others which have damaged roads and other infrastructure. A search of the MRT website identified 5 reports on landslides in the Boat Harbour Beach area. Three of these were considered relevant to the present investigation: Jennings (1965), Matthews (1972) and Matthews (1974).

In addition, we obtained copies of other investigations:

- A Coffey Geosciences report (dated 2001), commissioned by DPIPWE and Waratah-Wynyard Council,

- A BFP report (dated 2003) commissioned by Fairbrother for the caravan park at 263 Port Road,
- A Coffey Geotechnics report (dated 2007) for a development at 4 Moore Street,
- A Tasman Geotechnics report (dated 2013) for a failed section of Port Road near the Lookout car park, for Waratah-Wynyard council,
- A Geoton report (dated 2016) of a failed embankment on Port Road, near 1 Hepples Road, for Waratah-Wynyard council,
- A Tasman Geotechnics report (dated 2017) on the stability of the Hepples Road slide,
- A Tasman Geotechnics report (dated 2017) for a house at 13 Hepples Road, and
- A Tasman Geotechnics report (dated 2018) for a development at 263 Port Road.

The summaries of the various reports are as follows. Where boreholes were drilled as part of the investigation, they are shown in Figure 5.

Jennings (1965) identified the risks for Port Road crossing a landslide and recommended that an alternative route be found to access the town. He also stated the use of septic tanks and careless disposal of drainage water was aggravating an already dangerous situation in relation to landslides.

Matthews (1972) explained that the risk of landslides in Boat Harbour area were due to deeply weathered basalt forming clays which when saturated were liable to move. He mapped the Hepples Road Complex.

A comprehensive report on the landslide crossing Hepples Road by Matthews (1974) identifies some of the issues that characterize the area:

- Groundwater flow through the basalt talus appearing as springs above the basalt bedrock near the foreshore,
- Subsidence by 1m of a 128m long section of Port Road, and
- Identification of a landslide extending about 230m uphill from the beach, that was active in 1969.

Coffey Geosciences (2001) undertook an investigation for the Department of Primary Industries Water and Environment and Waratah-Wynyard Council to provide a landslide risk assessment for the town. In this report they defined geomorphological units and described the existing landslides. The mapping produced by Coffey Geosciences is very similar to the landslide maps produced by MRT. This report found that the risk of loss of life for landslides in this area was very low. They also stated that movement on the landslide crossing Port Road was "Almost Certain" which has proved to be true.

The BFP investigation comprised drilling of 8 boreholes using a 4WD mounted auger rig. One boreholes was drilled to auger refusal at 3.3m below ground level. The other boreholes were terminated at 2m or 2.8m below ground level (no refusal). The soils encountered were red/brown to dark grey clay. Groundwater inflow was observed at 2.6m below ground level in 2 boreholes, rising to about 2.1m below ground level after 2 hours. No groundwater inflow was observed in the other 6 boreholes.

The investigation by Coffey Geosciences at 4 Moore Street involved drilling 2 boreholes (CGBH1 and CGBH2) using a track mounted rig, capable of both hollow stem auger and diamond drilling. Both boreholes encountered slightly weathered to fresh quartzite rock: in CGBH1 at 1m below ground level, in CGBH2 at 5m below ground level.

A section of Port Road near the lookout carpark failed in 2013. The road had dropped about 0.1m across approximately three quarters of the road, for a distance of approximately 25m. Tasman Geotechnics carried out an inspection and noted that a permanent solution to landslide movement would be difficult to achieve due to the presence of the landslide. Reconstruction of the road was recommended, with modifications to the surface drainage (ie culverts and table drains). In reconstructing the road surface, it was recommended to incorporate a geogrid across

the full width of the pavement to provide some lateral restraint to movement of the road formation.

Geoton carried out investigation to design the reconstruction of a section of Port Road uphill of 1 Hepples Road and a retaining wall at 1 Hepples Road. A section of Port Road had failed in July 2016, causing the south bound lane to be closed. Three boreholes were drilled to depths of 10m, 4m and 3.5m, respectively. No bedrock was encountered in the boreholes. Geoton recommended that the retaining wall be reconstructed with a verti-block retaining wall and reinforced soil backfill, while the fill embankment of Port Road be reconstructed with reinforced rock fill. It was recommended that the top layer of geofabric layer was extended across the full width of the road.

In 2016, Tasman Geotechnics carried out a geotechnical investigation for the Hepples Road landslide, at the request of Waratah-Wynyard Council, as a number of houses and the road were showing signs of distress. Survey data provided by Council showed that about 300mm of movement has occurred between 2009 and 2016. Two boreholes were drilled to 7m and 8m below road level, respectively, with a monitoring well installed in one of the boreholes. The subsurface conditions below the road were identified as about 6m of talus, overlying basalt bedrock. The basalt bedrock was also confirmed in a borehole drilled by Tasman Geotechnics at 13 Hepples Road in 2017.

In 2017 Tasman Geotechnics carried out a geotechnical investigation for a proposed subdivision at 251/263 Port Road. The investigation involved drilling 2 boreholes (BH1 and BH2), to 10m and 17.1m, on the uphill side of Port Road and on the downhill side of Port Road, respectively. Borehole BH1 encountered 7m of fill which is understood to be spoil from construction of the Bass Highway near Sisters Hills. Fractured basalt bedrock was encountered in BH1 from 8m depth. Borehole BH2 encountered 5m of fill which is understood to be building rubble when the Boat Harbour District school was demolished. Beach sand was encountered in BH2 from 5m to about 12m below ground level. Sand and basalt boulders were encountered in BH2 to 16m below ground level, overlying fractured basalt from 16m to 17.1m, which was assumed to be bedrock.

3 FIELD INVESTIGATION

As part of the current assessment, a Principal Geotechnical Engineer and Engineering Geologist from Tasman Geotechnics carried out a walkover of Port Road and surrounds on 17 May and 18 May 2018. The aim of the walkover was to look for features indicative of landslide effects on the road and to determine features surrounding the road which could lead to future problems.

Selected photographs are shown in Appendix A.

3.1 Port Road

During our site walkover, we noted three sections of Port Road that have recently been reconstructed:

- From about CH 720m to 820m (in the vicinity of the lookout car park),
- From about CH 900m to 970m (immediately uphill of 1 Hepples Road), and
- From about CH 1000m to 1080m (immediately above the Hepples Road slide).

A culvert near CH 1075m diverts water under the road. The culvert appears to be blocked. This could be due to a break in the concrete pipe caused by soil movement.

At CH 1000m there is a drop in the road of approximately 0.1m (Photo 1). This drop occurs at the edge of the recent reconstruction. The guard posts at CH 980m are being pulled out of the ground (Photo 2).

At CH 700m a culvert diverts runoff under Port Road into an open drain. A private driveway, built on a fill embankment, joins Port Road on the north side of the road. The embankment forms a dam for surface water runoff flowing through the culvert. While there is a culvert through the embankment, surface water does not flow through the culvert but seeps into the soil.

3.2 Adjacent Areas

The hillsides above Port Road were inspected to look for features indicative of landslide activity.

Numerous springs were observed on the hillside immediately uphill of CH 1000m. In addition, the ground was wet and boggy. A number of large boulders were also present (Photo 3) and it was apparent these had rolled to the current positions from higher upslope.

The headscarp of the Hepples Road Complex is located approximately 150m uphill and south west of CH 1000m. A rotated block is located below the exposed rock of the head scarp (Photo 4), trapping surface runoff. Water in the pond is likely to be seeping into the underlying talus material and surfacing downhill as springs.

A second rotated block below a head scarp was noted uphill of CH 680m. Surface water is also trapped behind this rotated block. An attempt has been made to drain this area by excavating a trench. However, the works have not been well thought out, as the trench concentrates water down a steep slope.

Trees growing on the head scarp uphill of CH 680m are straight (Photo 5).

A farm dam located uphill of CH 670m also poses a risk to Port Road. There is seepage through the face of the dam the soil on the steep slope below the dam is saturated. The spillway for this dam is not well defined. Currently, flow through the spillway is directed into the culvert at CH 700m.

Steep slopes above Port Road have been cleared of vegetation and are currently covered in pasture grasses. There is abundant evidence of soil creep in this zone (Photo 6) and cattle grazing in this zone exacerbate the problem.

4 DISCUSSION

4.1 Geological History

To understand why landslides are a particular problem in Boat Harbour it is necessary to understand the geological history. A brief summary of the geological history of Boat Harbour area follows.

The basement rocks, now quartzite, were deposited as sandy sediments on the floor of a shallow sea during Mesoproterozoic times. Ripple marks still evident in some beds can be used to determine depositional depths below wave base. Age determinations have been based on radiometric dating of detrital zircons. Later sedimentation included siltstone and dolomite sequences which can now be seen west of Boat Harbour.

Orogenic movements caused folding and faulting at intervals, early Neoproterozoic to Cryogenian and again Ediacaran to Cambrian. A major fault known as the Boat Harbour Fault, prominent between Boat Harbour and Sister's Beach, probably occurred during the Wickham Orogeny at approximately 760Ma.

Unconformities are present at a number of levels indicating periods of erosion.

Major folding occurred due to a terrane collision during the Cambrian. The terrane boundary is marked by the Arthur Lineament which runs from the north coast just east of Boat Harbour to Ahrberg Bay on the west coast. Rocks within the lineament are intensely folded and high pressure metamorphic affects are prominent.

Further deposition and erosion occurred after the Cambrian but the next major event of significance to landslide activity was the opening of Bass Strait. This subjected the underlying quartzite to further erosion and wave cut activity at times. The sea levels rose and fell so that wave cut platforms developed at a number of levels. Steep slopes formed on the tilted quartzite beds and sharp ridges formed due to the hard rock.

Volcanic activity occurred at approximately 13Ma (basalt date from Tollymore Road, just south of Boat Harbour) and Table Cape was a major volcanic centre which poured basalt lava across the pre-Tertiary landscape. Lava flowed towards and past Boat Harbour and flowed down over the

steep faces of the underlying rock forming the basement of what is now an escarpment. A photograph of the underlying quartzite is shown on Photo 7.

In the time since the volcanic activity ceased the basalt has weathered into deep clays. The clay surrounding Boat Harbour is resting on steep flat surfaces (Photo 8) offering very little frictional resistance to sliding so that when the clay becomes saturated it generates landslides.

4.2 Landslide Morphology

A number of landslides have been mapped along Port Road as indicated in Section 2.4. The location of the landslide complexes and geological constraints are shown in Figure 5. Schematic cross sections through three of the landslides are presented in Figure 6. It should be noted that these sections are based on rock outcrop and limited borehole data.

Hepples Road Complex

This complex of active landslides is located near CH 1000m and exhibits slow creep. A number of houses have been affected by the creep, as well as Hepples Road. The house damage includes lateral movement and rotation of footings which in turn leads to gaps or jamming of windows and doors. Walls have buckled and retaining walls have started to lean and in some cases have broken. Hepples Road has developed tension cracks and small scarps.

The hill slope in the vicinity of this slide is continuous to basalt rock outcrop at beach level. It appears that groundwater flows through the clay overlying the bedrock, and forms springs at beach level immediately above the rock surface. The slide rests on a continuous slope that finishes on outcropping basalt rock near the shoreline. The base of the slide is not subject to wave activity.

A number of retaining walls and surface drains have been constructed in the area. It is not clear if these have been engineer designed or are essentially landscaping features.

The head scarp for this landslide is located about 150m uphill of Port Road. A backward rotated block has created an area of internal drainage which collects surface runoff from the plateau. Large basalt boulders are exposed in the head scarp, as well as on the slope above Port Road.

Town Complex

This is a large landslide complex with a bowl shaped head scarp, now somewhat eroded, on the escarpment above the houses. The landslide complex impacts Port Road from about CH 1200m to 1400m. An eroded rotated block occurs just below the head scarp and displaced material forms a slope with the toe west of Port Road. To the east of the toe is a relatively level former wave cut platform which probably extends back under the displaced material. A major part of the town is built over the displaced material from this landslide.

The northern side of this landslide complex is bounded by a quartzite ridge.

From observations made during previous investigations a quartzite ridge is inferred to occur on the southern side of the landslide complex. We inferred the presence of the ridge by following the strike of an outcrop of quartzite on the beach (see Photo 9).

This landslide has a classic head scarp, rotated block and debris flow profile and the toe is well defined. The toe rests on a flat wave cut platform of the underlying quartzite encountered in the 2007 Coffey Geotechnics investigation, which provides frictional resistance to the landslide debris. It would appear that very slow creep occurs at times in the displaced material but essentially the landslide complex is dormant.

Port Road Complex

This slide complex has a head scarp above Port Road, south east of the town, and impacts on Port Road from approximate CH 450m to 900m. The slope extends all the way to the shoreline where the base of the slide is lapped by waves at high tide. The base area of the slide is also wet and marshy above high tide level (see Photo 10) probably due to groundwater seeping through the clay and running over the basalt rock which outcrops at sea level near this site. This landslide is active and caused major disruptions to the town in the 1960's when landslide activity destroyed Port Road, the only access road into the town. The latest slide on the Port Road

Complex occurred in July 2013 (Tasman Geotechnics, 2013). A retaining wall has subsequently been built on the top side of the road where the landslide crosses Port Road.

The eastern side of this landslide is bounded by a quartzite ridge which runs from below sea level and outcrops on the plateau above (Photo 11).

Escarpment Slides

These are shallow landslides mapped on the escarpment upslope of 263 Port Road. They probably occurred due to weathered basalt sliding down hill on the steep slope. It was not possible to confirm the presence of these slides, as the hillside was too overgrown with trees and shrubs. There is no recorded evidence of recent movement and no historical records of these slides moving so they are assumed to be dormant. The toe of one of these escarpment slides extends onto 263 Port Road, but the Escarpment slides do not impact on Port Road.

4.3 Survey Data

Survey data provided by Waratah-Wynyard Council is presented in Appendix B. The survey markers at Hepples Road have been surveyed on 3 occasions since being installed in 2004. Figure 7 shows the total horizontal movement of the survey points since 2004. The rate of movement between September 2016 and May 2018 at points E and D is about 50 to 65mm per year.

Additional survey monitoring points have been installed by PDA Surveyors along Port Road between CH 650m and 1050m.

In conversation with PDA Surveyors, we also discovered that a boundary survey mark near the headscarp of the Hepples Road Complex has moved about 300mm in a north north-easterly direction between 1950 and 2004.

4.4 Port Road

Three of the landslides described above impact on Port Road.

The following is a chronology of landslides impacting Port Road:

- 1969, a section of Port Road north of Hepples Road (CH 1050m) subsided and required reconstruction. Exact length of road impacted is not known, but estimated to be 60m,
- 1971, a 128m section of road subsided about 1m. Exact location is not known, but was probably from CH 700m to 800m (near the lookout carpark),
- 2013, a 30m section of road from about CH 700m to 730m subsided about 0.1m. This is within the area that was impacted in 1971,
- 2016, a 30m section of road from CH 900m to 950m subsided about 0.1m. This is uphill of 1 Hepples Road,
- 2017, a 60m section of road from CH 1000m to 1060m was re-sealed after experiencing subsidence, but continues to subside. This is immediately uphill of the part of Hepples Road that is experiencing movement, and probably the same area that subsided in 1969,

The reports which investigate these landslides all mention high rainfall in the period prior to the landslide activity. While there may be other events not included above, the above list shows 3 sections of Port Road have been affect by landslides over the past 50 years. Two of the sections correspond to known landslides:

i) CH 700m to 800m, which is on the Port Road landslide complex, and

ii) CH 1000m to 1060m which is on the Hepples Road slide.

For these sections of Port Road there have been 2 instances of subsidence: late 1960's and mid 2010's. No history of movement is known for the third section, uphill of 1 Hepples Road, prior to 2016.

The rate of movement at two of the survey markers at Hepples Road is currently about 50mm to 65mm per year. The existing buildings and roads will continue to experience damage due to these movements. It is highly likely that seepage into the talus material at the headscarp is

activating the landslide. Arresting movement of the Hepples Road Complex is recommended to ensure the roads remain serviceable and houses remain habitable. Several options are discussed in Section 5. At least two boreholes are recommended to improve the geotechnical model of the Hepples Road Complex.

No information on rates of movement are known for the Town Complex or the Port Road Complex. The rate of movement of the Town Complex is probably slower than the Port Road Complex. Recently, additional survey marks have been placed along Port Road between CH 650m and 1050m. However, no data from these markers is available was available for this report. At this stage, only minor remedial works are recommended for these two slides as detailed in Section 5. Further investigation and monitoring at each of the landslides is recommended to improve the geotechnical models presented above.

5 RECOMMENDATIONS

5.1 Hepples Road Complex

Although not proven for Port Road, there is usually a strong correlation between rainfall and landslide events. Therefore, management of surface runoff, and to a lesser extent groundwater, is recommended to improve the stability of the road. However, once a landslide is moving, such as is the case for the Hepples Road Complex, lowering of the groundwater table may not be sufficient as some of the soil layers will have sheared and exhibit residual strength. In such cases, slope reinforcement may be required, such as by installing piles or soil nails.

The most urgent action is required for the Hepples Road Complex. Initially, we recommend excavating a trench through the rotated block at the head scarp, to prevent surface runoff ponding behind the rotated block. The water from behind the rotated block should be piped to existing stormwater system along Port Road. Alternatively, the water could be drained into tanks as an addition to the town water supply.

The culvert under Port Road at CH 1075m needs reconstruction as it appears to have broken, allowing water to seep into the talus material. We recommend that the culvert be repaired using flexible piping to allow for soil movement.

While stabilizing measures, such as piles or soil nails will also improve the stability of the slide, such measures are (very) expensive. Also, the depth at which movement occurs is not clearly understood: below Hepples Road, the surface of rupture is about 5 to 6m below the road. However, the depth to the surface of rupture below Port Road is not known.

Therefore, we recommend that survey monitoring continue on a 6-monthly basis after the head scarp area is drained to assess the impact of the drainage measures.

5.2 Port Road Complex

The Port Road Complex is currently less active than the Hepples Road Complex. Therefore, we recommend the following actions:

- Previous movement may have been caused by blocked culverts. Therefore, culverts need to be regularly checked and cleared (if blocked). Table drains should also be regularly cleared of debris, particularly leaf debris.
- Water collected in culverts should preferably be piped all the way to the beach.
- The ponds behind the rotated block uphill of CH 680m should be drained to reduce water seeping into the talus soil.
- Seepage through the farm dam uphill of CH 670m needs to be collected and discharged (preferably piped) to the road side table drain. The dam spillway should be improved, preferably by piping down the slope.
- Steep slopes above Port Road between CH 700m and 900m should be revegetated.

- Cattle should be excluded from steep slopes above Port Road between CH 700m and 900m.

5.3 Town Complex

The Town Complex is showing very little evidence of movement. No remediation measures are proposed for this landslide.

5.4 Further Investigations

Further investigation are proposed for each of the landslide complexes.

One of the ways to obtain information about the subsurface conditions is by borehole drilling. The aim of the boreholes is to provide further data on subsurface conditions and establish the likely depth to the surface of rupture at each of the borehole location.

The boreholes will be converted to groundwater monitoring wells or inclinometers. Weekly measurements of the water level in the monitoring wells will provide data on groundwater response to rainfall, while the inclinometer will provide data on the depth and direction of movement.

Table 1 summarises the number of boreholes and estimated cost of investigating each landslide complex. The borehole locations are shown in Figure 8. As many of the proposed boreholes are located in road reserve, traffic management will be required.

Table 1. Summary of proposed investigation boreholes

Landslide Complex	Boreholes	Groundwater monitoring wells	Inclinometer	Estimated Cost
Port Road	4	2	2	$40K
Hepples Road	3	2	1	$30K
Town	2	1	1	$20K

The boreholes at Hepples Road Landslide will also assist with selecting an appropriate pile driving technique to install slope stabilizing piles.

In addition, geophysical investigations techniques can be used, such as seismic refraction, gravity or electrical conductivity, to develop longitudinal or transverse cross sections and tie the boreholes to a geological subsurface profile. No quotes have been obtained, but costs are likely to be $20K to $30K. Consideration could be given to making this part of an Honours or Masters project for a university student, which is likely to present a significant cost saving.

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Important information about your report

These notes are provided to help you understand the limitations of your report.

Project Scope

Your report has been developed on the basis of your unique project specific requirements as understood by Tasman Geotechnics at the time, and applies only to the site investigated. Tasman Geotechnics should be consulted if there are subsequent changes to the proposed project, to assess how the changes impact on the report's recommendations.

Subsurface Conditions

Subsurface conditions are created by natural processes and the activity of man.

A site assessment identifies subsurface conditions at discrete locations. Actual conditions at other locations may differ from those inferred to exist, because no professional, no matter how qualified, can reveal what is hidden by earth, rock and time.

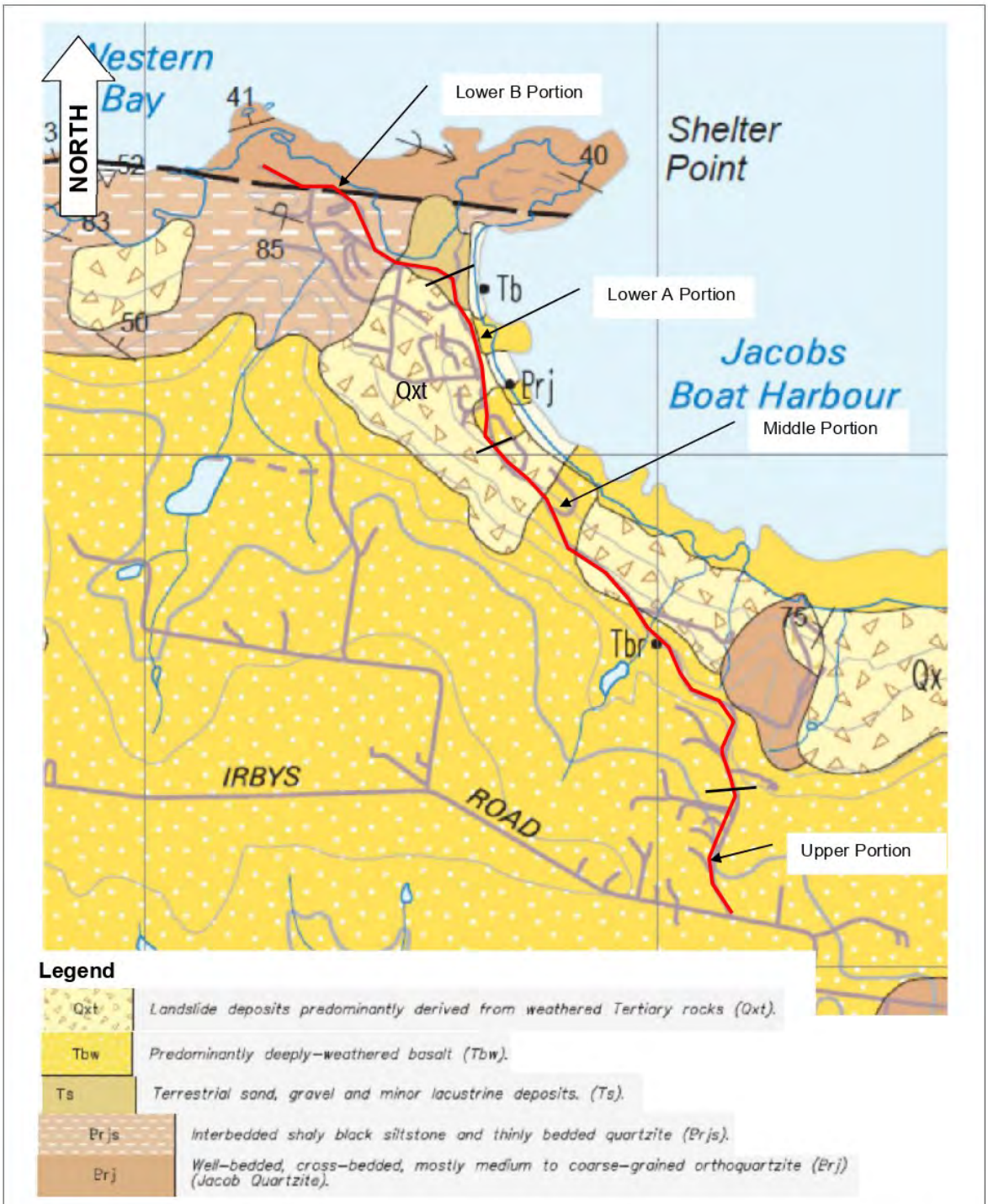
Nothing can be done to change the conditions that exist, but steps can be taken to reduce the impact of unexpected conditions. For this reason, the services of Tasman Geotechnics should be retained throughout the project, to identify variable conditions, conduct additional investigation or tests if required and recommend solutions to problems encountered on site.

Advice and Recommendations

Your report contains advice or recommendations which are based on observations, measurements, calculations and professional interpretation, all of which have a level of uncertainty attached.

The recommendations are based on the assumption that subsurface conditions encountered at the discrete locations are indicative of an area. This can not be substantiated until implementation of the project has commenced. Tasman Geotechnics is familiar with the background information and should be consulted to assess whether or not the report's recommendations are valid, or whether changes should be considered.

The report as a whole presents the findings of the site assessment, and the report should not be copied in part or altered in any way.



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approved	WG		project:	Landslide Condition Port Road, Boat Harbour
date	27/7/2018			
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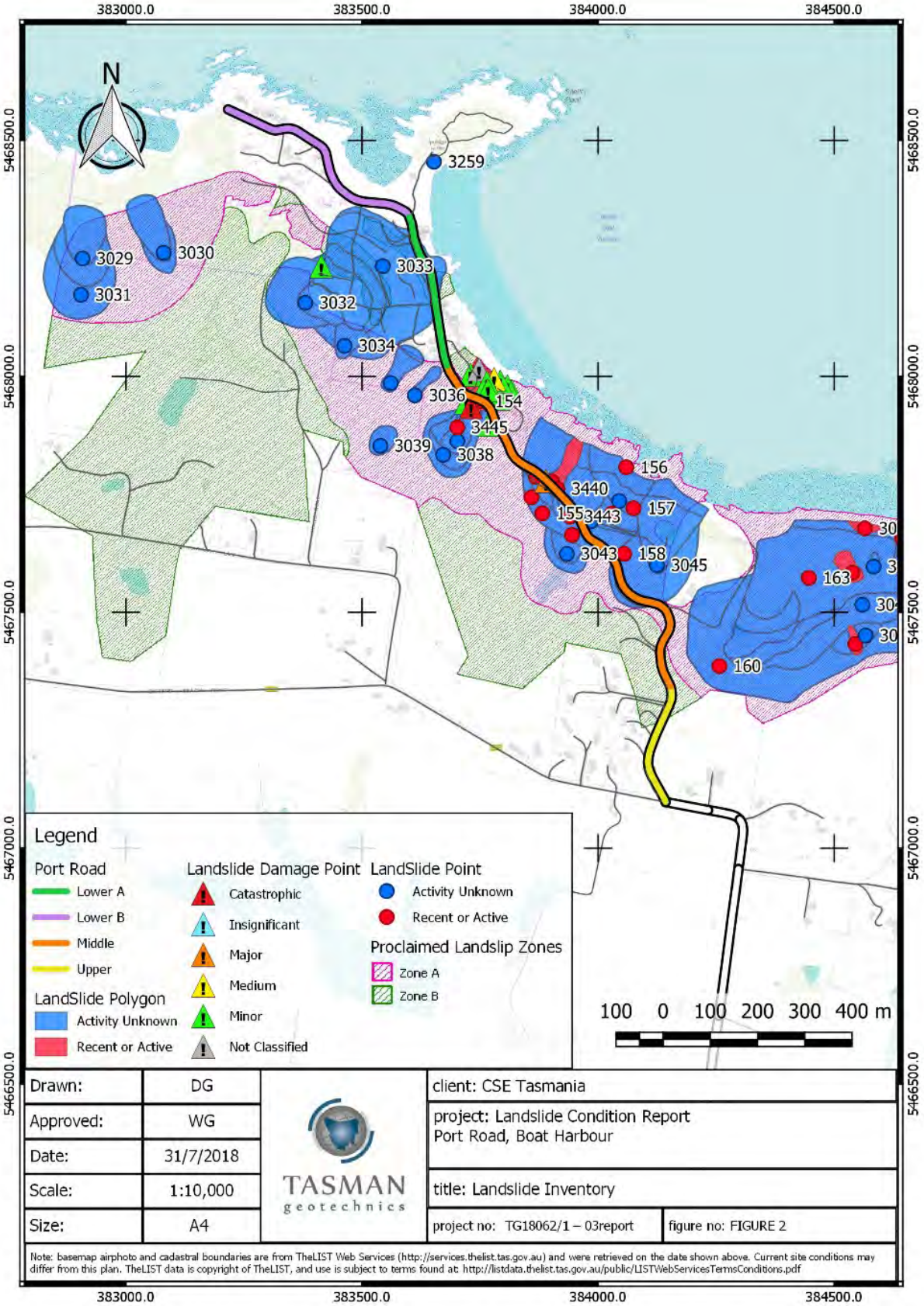
original size	A4		project no: TG18062/1 – 03report	figure no: FIGURE 1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3036
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3445
3039
3038
156
3440
155
3443
157
3043
158
3045
163
160
Legend
Port Road
Lower A
Lower B
Middle
Upper
LandSlide Polygon
Activity Unknown
Recent or Active
Landslide Damage Point
Catastrophic
Insignificant
Major
Medium
Minor
Not Classified
LandSlide Point
Activity Unknown
Recent or Active
Proclaimed Landslip Zones
Zone A
Zone B
100 0 100 200 300 400 m
Drawn: DG
Approved: WG
Date: 31/7/2018
Scale: 1:10,000
Size: A4
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client: CSE Tasmania
project: Landslide Condition Report
Port Road, Boat Harbour
title: Landslide Inventory
project no: TG18062/1 – 03report
figure no: FIGURE 2
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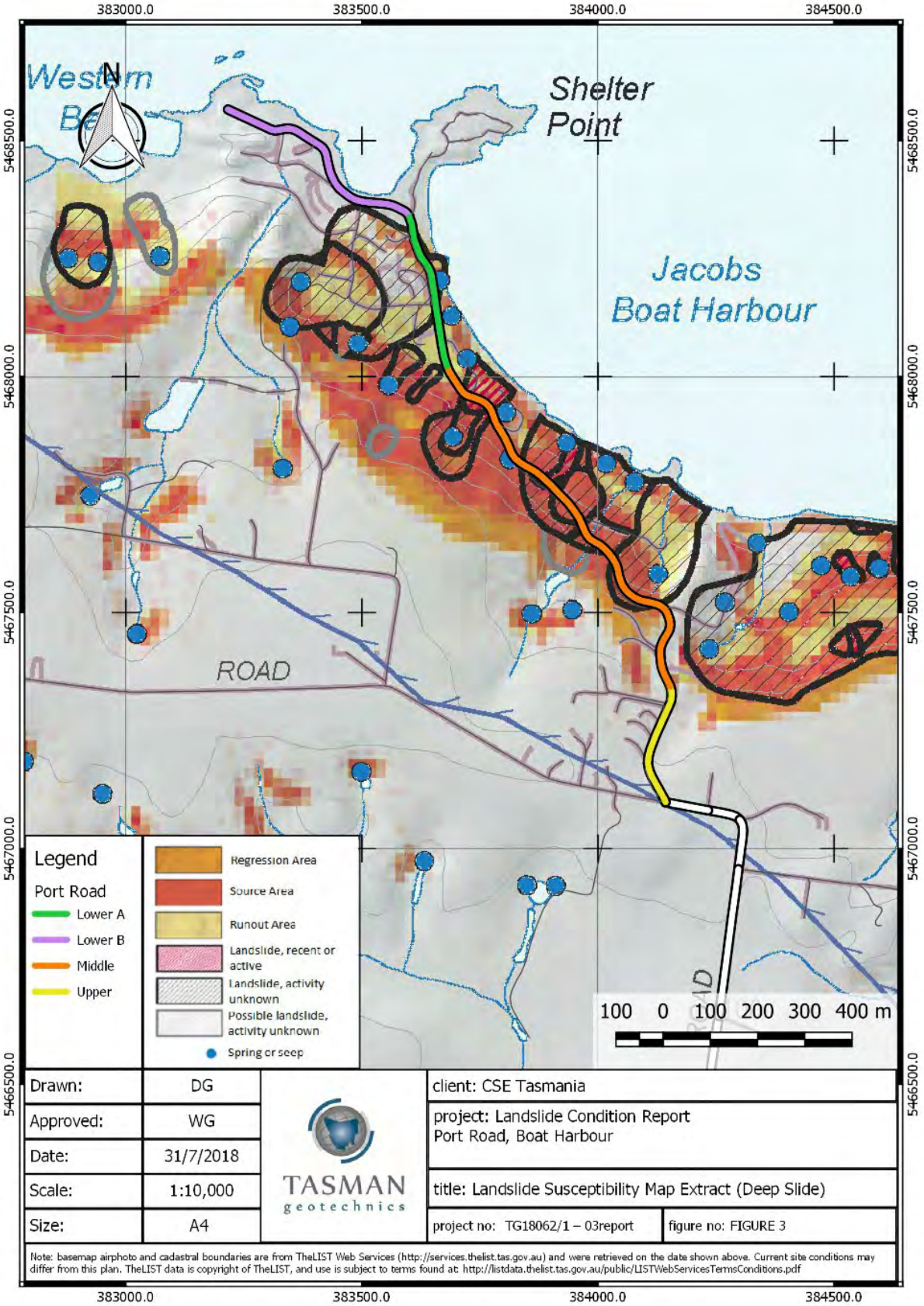
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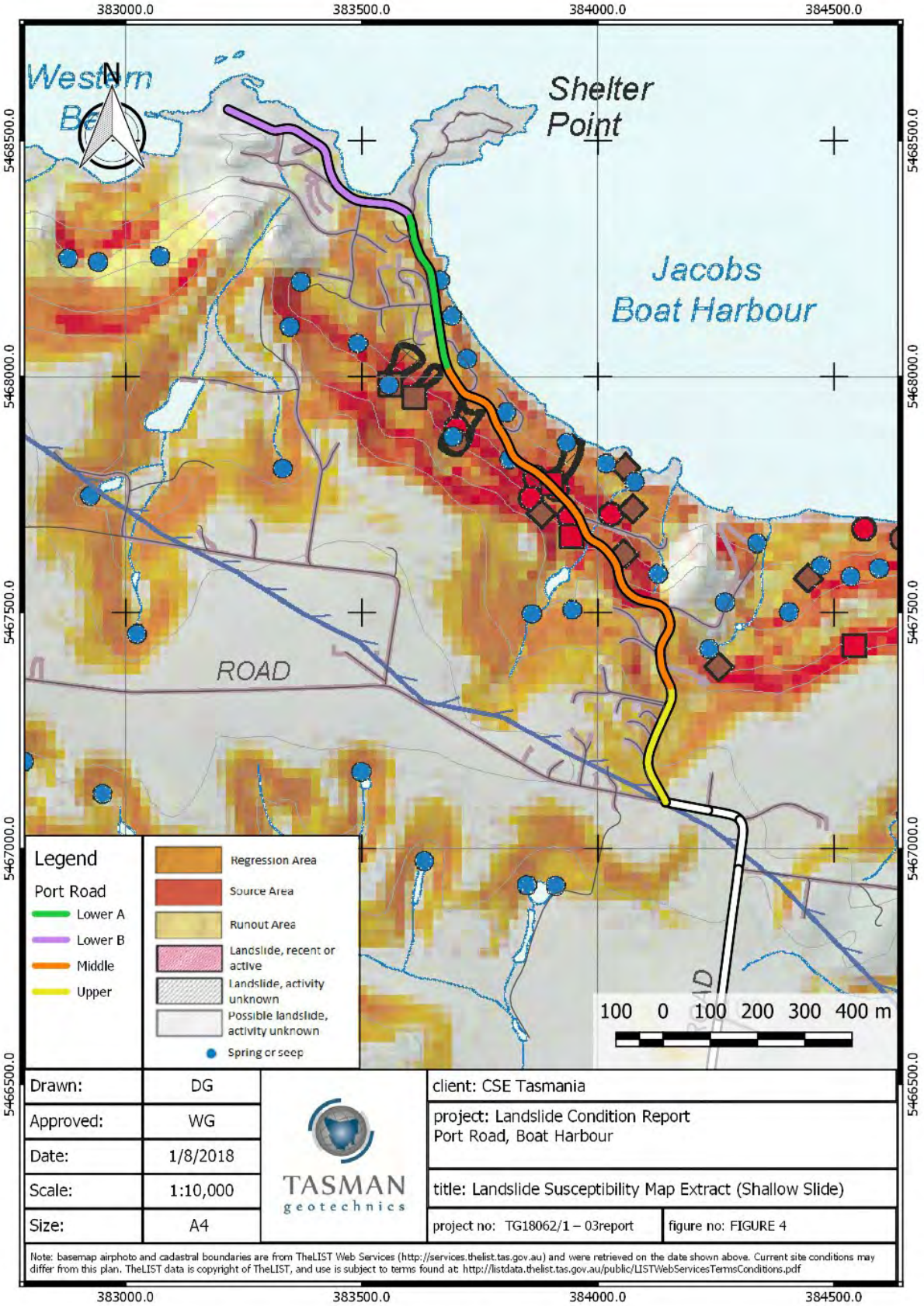
Western
Shelter
Point
Jacobs
Boat Harbour
ROAD
Legend
Port Road
Lower A
Lower B
Middle
Upper
Regression Area
Source Area
Runout Area
Landslide, recent or active
Landslide, activity unknown
Possible landslide, activity unknown
Spring or seep
100 0 100 200 300 400 m
Drawn: DG
Approved: WG
Date: 31/7/2018
Scale: 1:10,000
Size: A4
TASMAN geotechnics
client: CSE Tasmania
project: Landslide Condition Report
Port Road, Boat Harbour
title: Landslide Susceptibility Map Extract (Deep Slide)
project no: TG18062/1 – 03report
figure no: FIGURE 3
Note: basemap airphoto and cadastral boundaries are from TheLIST Web Services (http://services.thelist.tas.gov.au) and were retrieved on the date shown above. Current site conditions may differ from this plan. TheLIST data is copyright of TheLIST, and use is subject to terms found at: http://listdata.thelist.tas.gov.au/public/LISTWebServicesTermsConditions.pdf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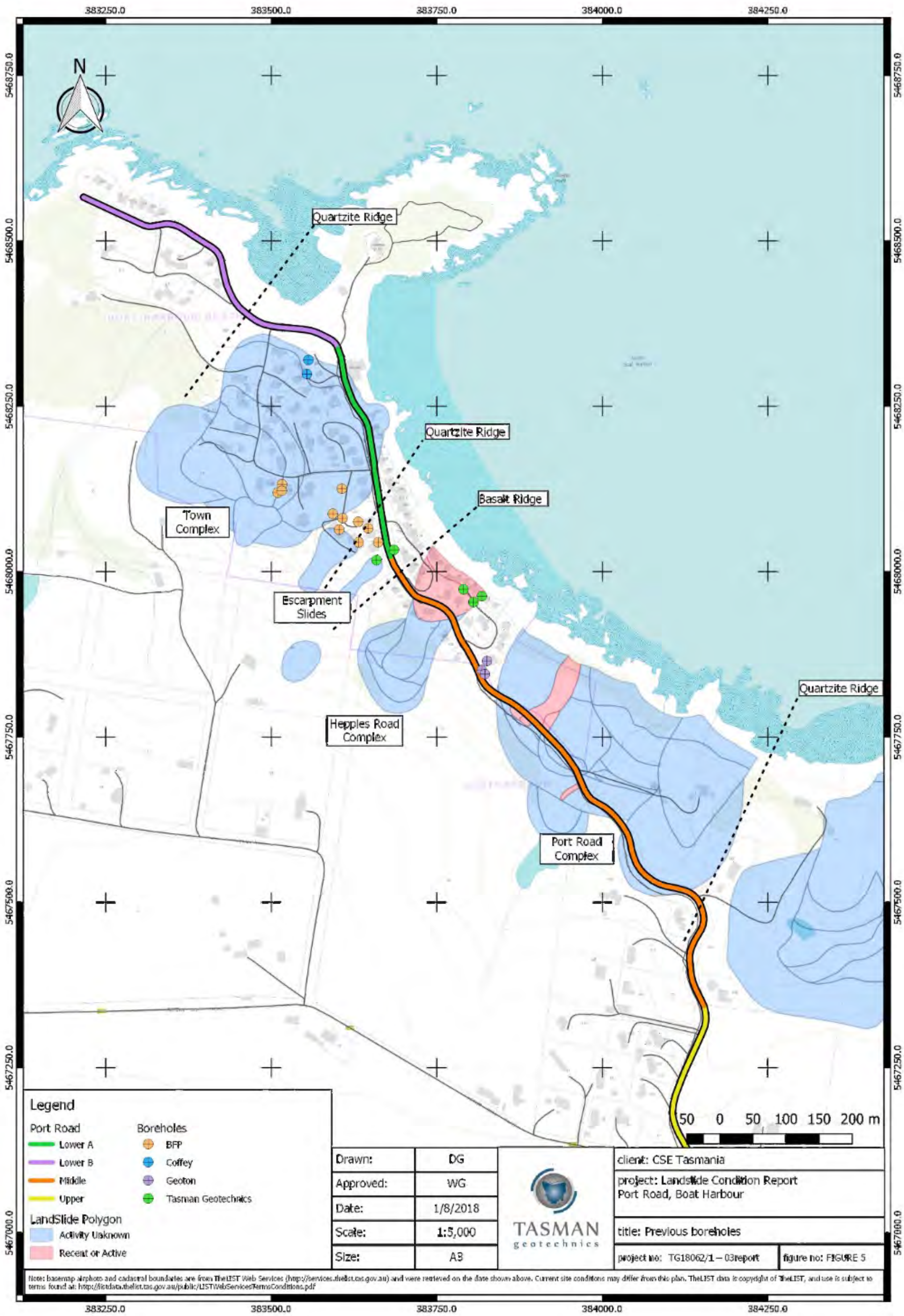
Western Beach
N
Shelter Point
Jacobs Boat Harbour
ROAD
Legend
Port Road
Lower A
Lower B
Middle
Upper
Regression Area
Source Area
Runout Area
Landslide, recent or active
Landslide, activity unknown
Possible landslide, activity unknown
Spring or seep
100 0 100 200 300 400 m
Drawn: DG
Approved: WG
Date: 1/8/2018
Scale: 1:10,000
Size: A4
TASMAN geotechnics
client: CSE Tasmania
project: Landslide Condition Report
Port Road, Boat Harbour
title: Landslide Susceptibility Map Extract (Shallow Slide)
project no: TG18062/1 – 03report
figure no: FIGURE 4
Note: basemap airphoto and cadastral boundaries are from TheLIST Web Services (http://services.thelist.tas.gov.au) and were retrieved on the date shown above. Current site conditions may differ from this plan. TheLIST data is copyright of TheLIST, and use is subject to terms found at http://listdata.thelist.tas.gov.au/public/LISTWebServicesTermsConditions.pdf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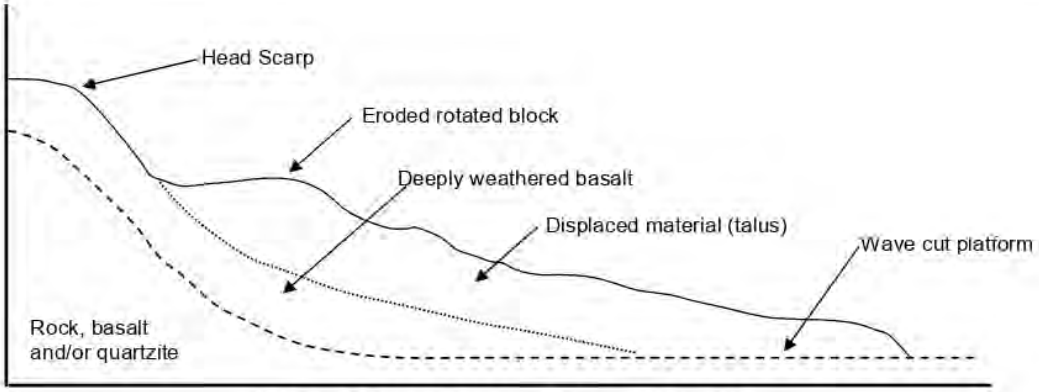
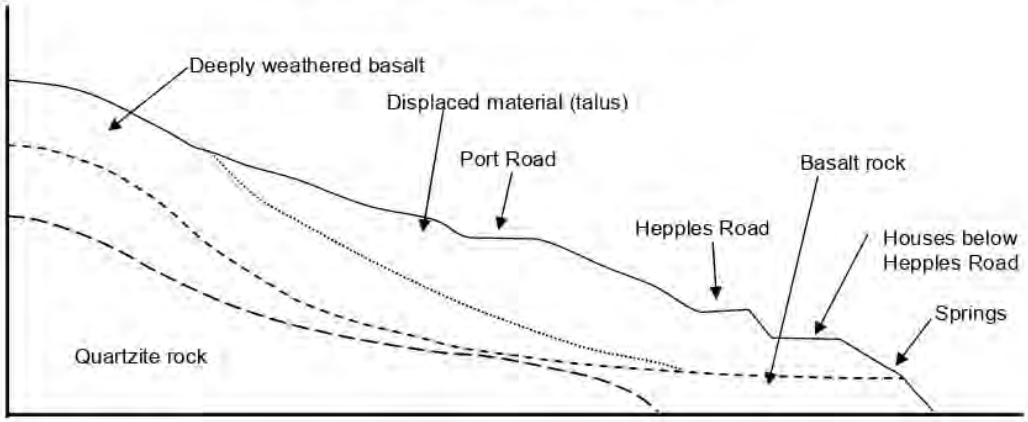
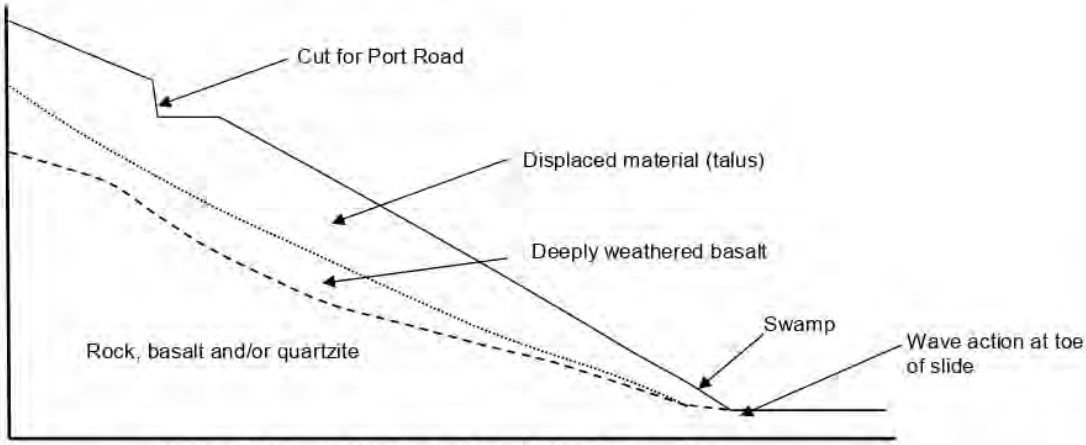
N
Quartzite Ridge
Quartzite Ridge
Basalt Ridge
Town Complex
Escarpment Slides
Hepples Road Complex
Quartzite Ridge
Port Road Complex
50 0 50 100 150 200 m
Legend
Port Road
Lower A
Lower B
Middle
Upper
Boreholes
BFP
Coffey
Geoton
Tasman Geotechnics
LandSlide Polygon
Activity Unknown
Recent or Active
Drawn: DG
Approved: WG
Date: 1/8/2018
Scale: 1:5,000
Size: A3
TASMAN geotechnics
client: CSE Tasmania
project: Landslide Condition Report Port Road, Boat Harbour
title: Previous boreholes
project no: TG18062/1 – 03report
figure no: FIGURE 5
Note: basemap airphoto and cadastral boundaries are from TheLIST Web Services (http://services.thelist.tas.gov.au) and were retrieved on the date shown above. Current site conditions may differ from this plan. TheLIST data is copyright of TheLIST, and use is subject to terms found at: http://listdata.thelist.tas.gov.au/public/LISTWebServicesTermsConditions.pdf



Inferred Cross Section of Town Complex



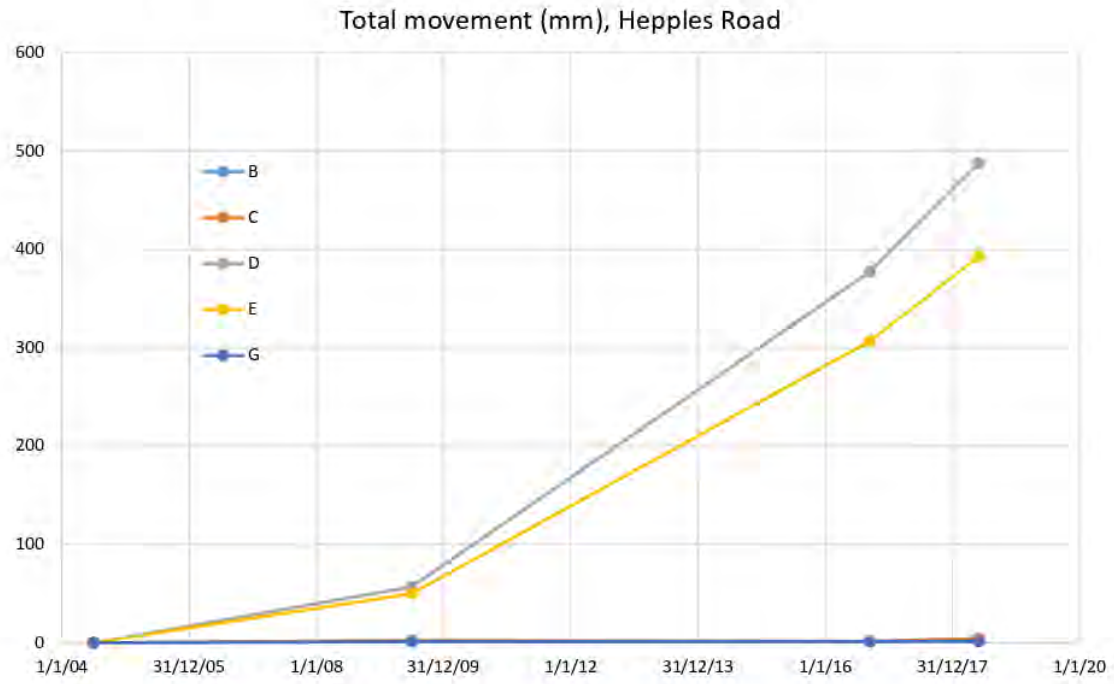
Inferred Cross Section of Hepples Road Complex



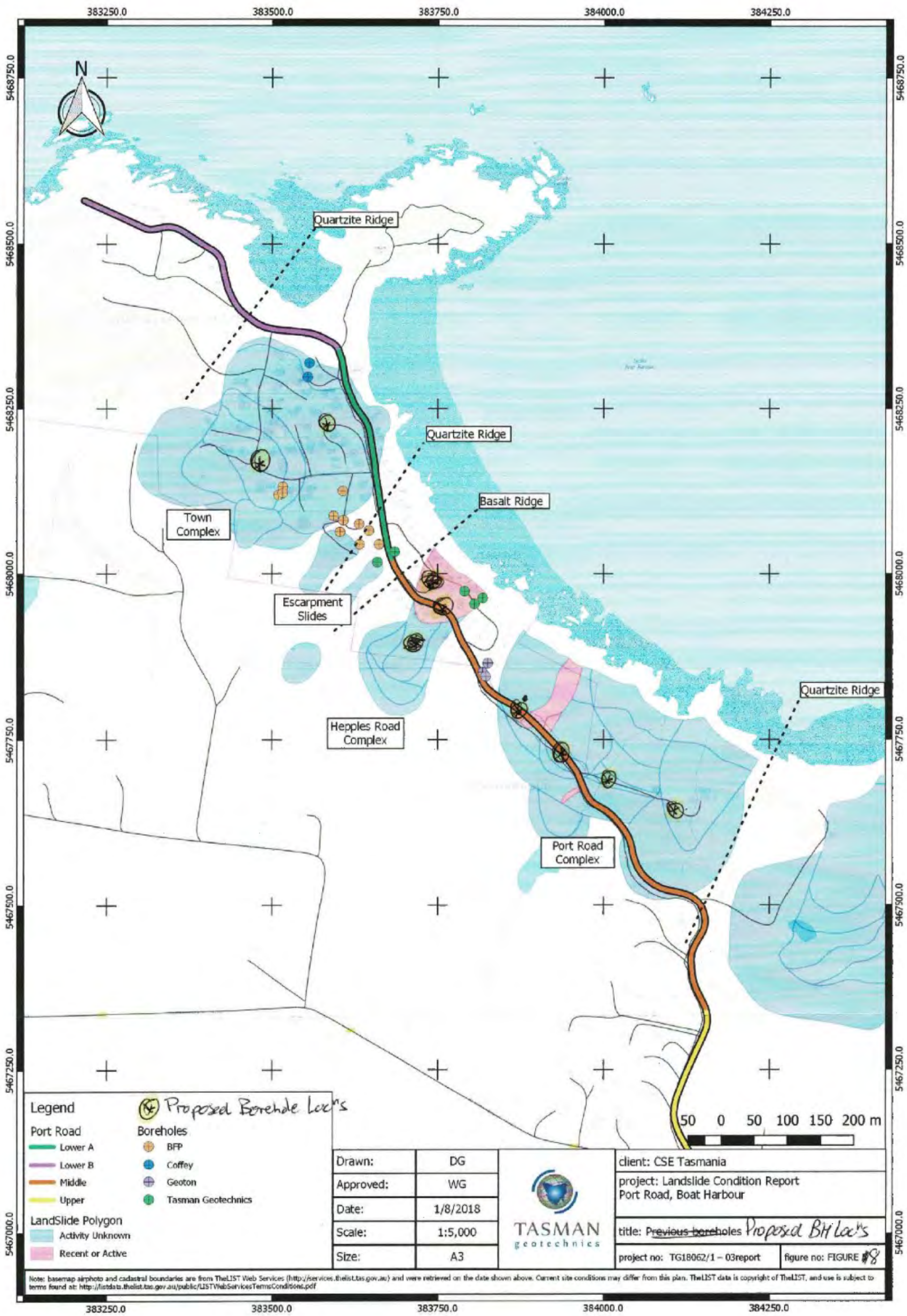
Inferred Cross Section of Port Road Complex

drawn	WG	TASMAN geotechnics	client:	CSE
approved	WG		project:	Landslide Condition Port Road, Boat Harbour
date	18/7/2018			
scale	NTS		title:	Inferred Cross Sections of Mapped Landslides
original size	A4		project no: TG18062/1 – 03report	figure no: FIGURE 6

Point	1/07/2004	1/07/2009	14/09/2016	31/05/2018
B	0	2.24	1.00	4.24
C	0	2.24	1.41	4.47
D	0	56.80	377.19	487.83
E	0	49.93	306.63	392.59
F	0	0.00	0.00	0.00
G	0	1.00	1.41	1.41



Drawn	WG	TASMAN geotechnics	**Client**	CSE
approved	WG		**Project**	Port Road Landslide Condition
date	1/08/2018			
scale	NTS		**Title**	Survey Results of Landslide Movement
original size	A4		**Project No:** TG18062/1 - 03report	**Figure:** Figure 7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Quartzite Ridge
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Basalt Ridge
Town Complex
Escarpment Slides
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Quartzite Ridge
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50 0 50 100 150 200 m
Legend
Proposed Borehole Loc'ns
Port Road
Lower A
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Middle
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Boreholes
BFP
Coffey
Geoton
Tasman Geotechnics
LandSlide Polygon
Activity Unknown
Recent or Active
Drawn: DG
Approved: WG
Date: 1/8/2018
Scale: 1:5,000
Size: A3
TASMAN geotechnics
client: CSE Tasmania
project: Landslide Condition Report Port Road, Boat Harbour
title: ~~Previous boreholes~~ Proposed BH Loc'ns
project no: TG18062/1 – 03report
figure no: FIGURE #8
Note: basemap airphoto and cadastral boundaries are from TheLIST Web Services (http://services.thelist.tas.gov.au) and were retrieved on the date shown above. Current site conditions may differ from this plan. TheLIST data is copyright of TheLIST, and use is subject to terms found at: http://listdata.thelist.tas.gov.au/public/LISTWebServicesTermsConditions.pdf

Appendix A

Selected Site Photographs

Photo 1. Looking south along Port Road at drop near CH 1000m

Photo 2. Guard posts along Port Road being pulled out of the ground.

Photo 3. Basalt boulders at surface uphill of CH 1000m

Photo 4. Head scarp of Hepples Road Complex (note large basalt boulders exposed in head scarp)

Photo 5. View of trees growing on head scarp above Port Road at CH 680m

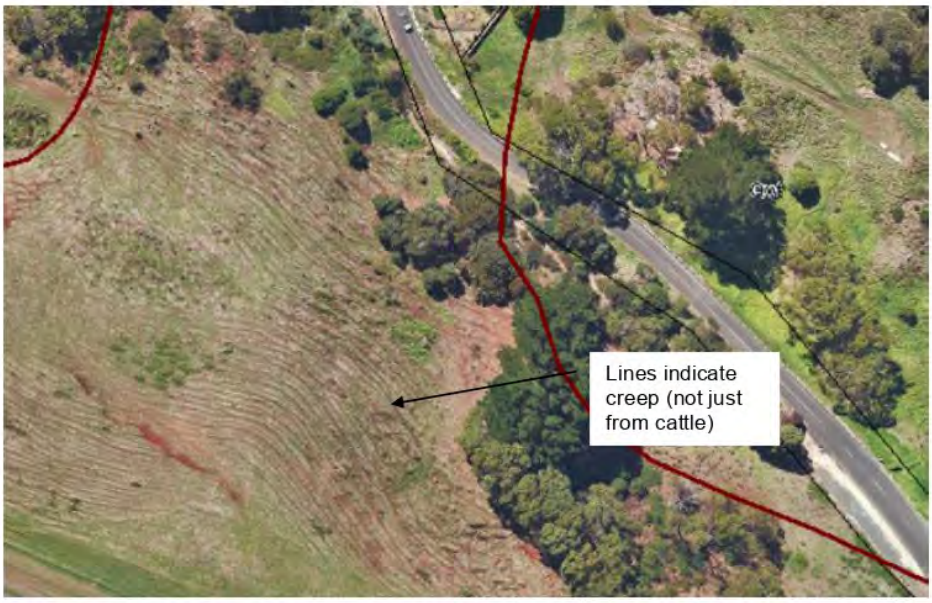

Photo 6. Evidence of creep on slopes above Port Road

Photo 7. Basement quartzite rock, west of Boat Harbour.

Photo 8. Steeply dipping quartzite faces, typical of quartzite underlying basalt.

Photo 9. Quartzite rock outcrop on beach.

Photo 10. Base of Port Road Slide Complex.

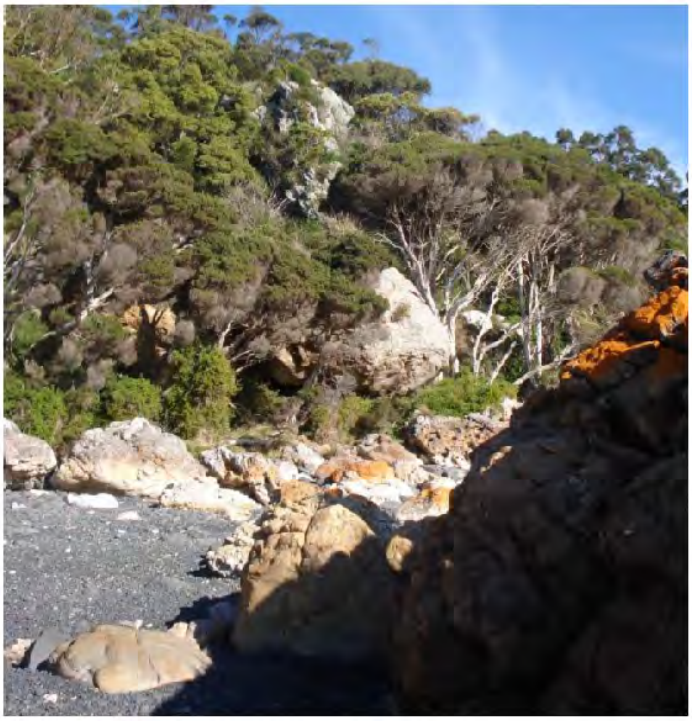

Photo 11. Quartzite rock outcrop at sea level.

Appendix B

Hepples Road Survey Data

SCALE 1: 800 (A3)

0 8 16 24 32 40
Metres

		2004		2009		Δ to 2004	2016		Δ to 2009
ID	Mark Type	Easting	Northing	Easting	Northing	Displacement	Easting	Northing	Displacement
A	Nail in lawn	383826.867	5467876.266	------	------	------	383826.859	5467876.263	------
B	Nail at back of kerb	383842.562	5467913.578	383842.561	5467913.576	0.002	383842.562	5467913.577	0.001
C	Nail in kerb	383820.081	5467940.270	383820.083	5467940.271	0.002	383820.080	5467940.271	0.003
D	Nail in driveway	383788.243	5467964.835	383788.288	5467964.886	0.057	383788.431	5467965.142	0.321
E	Nail at back of kerb	383782.869	5467974.357	383782.896	5467974.399	0.050	383783.018	5467974.625	0.257
F	Nail in kerb	------	------	383739.231	5468000.933	------	383739.233	5468000.933	0.002
G	Nail in manhole	383732.681	5468013.691	383732.680	5468013.691	0.001	383732.682	5468013.690	0.002
H	Nail in rock	383889.167	5467976.106	------	------	------	383889.183	5467976.097	------

NOTES:

Date of Survey: 14 September 2016

Horizontal Coordinate Datum is planar based on GDA94, MGA zone 55

Coordinate origin SPM9472, with coordinates (2009) of
E: 383593.427
N:5468418.012

If there are a questions relating to the datum of this survey PDA Surveyors should be contacted.

The data shown on this plan was recorded on 13/09/2016 and has been compared to registered surveys P143922 (2004) and SIO159620 (2009). PDA Surveyors accepts no responsibility for the measurements shown on P143922 and SIO159620. Arrows denote the approximate bearing of (D) & (E) displacement.

SIO159620 has been used as the common datum for comparison, with this survey and P143922 both fitted using a Helmert Transformation at (B), (C) & (F). Points (A) and (G) were not observed by SIO159620.

Background imagery is from Google Earth.

REV	AMENDMENT	DRAWN	DATE	APPR
E				
D				
C				
B				
A				

SURVEYOR: JM
ORIGINAL: B16617
DRAWN: JM
CHECKED: AE
DATE: 14 SEPTEMBER 2016

COORDINATE COMPARISONS
HEPPLES ROAD
BOAT HARBOUR BEACH
FOR WARATAH WYNYARD COUNCIL

PDA Surveyors
Surveying, Engineering & Planning

SCALE: 1: 800
PAPER: (A3)
B16617 - 1

SCALE 1: 2000 (A3)

0 20 40 60 80 100
Metres

NOTES:

Date of Survey: 1st June 2018

Coordinate Datum is MGA94/AHD83 derived from SPM 9472, with coordinates of
E 383593.446
N 5468417.936
RL 4.155 As per SurCom.
with combined scale factor of 0.999766

Only those features points specifically requested by James Brewer of Waratah Wynyard Council have been located and subsequently shown on this plan.

The boundaries shown on this plan are from the LIST and, as such, are approximate only. Imagery is also from the LIST and is approximately georeferenced only.

Marks have been located using Trimble SPS930 1" total station controlled using RTK GNSS to determine horizontal position. Heights determined using Trimble Dini Digital Level. Estimated relative accuracy of points is 5mm+/- horizontal, 2mm+/- vertical.

Monitoring Points - 01/06/2018

Datum: MGA94/AHD84 derived from SPM 9472

Point ID	Easting	Northing	Height
B	383842.468	5467913.682	15.437
C	383819.993	5467940.373	13.050
D	383788.401	5467965.333	11.471
E	383782.977	5467974.793	10.611
F	383739.186	5468001.029	11.480
G	383732.61	5468013.774	11.522
STAR1	384024.963	5467627.839	57.896
STAR2	383990.749	5467655.286	53.420
STAR3	383938.189	5467733.757	44.448
STAR4	383901.299	5467766.713	41.099
STAR5	383824.775	5467832.981	38.827
STAR6	383861.194	5467802.54	37.058
STAR8	383735.181	5467959.588	19.985
STAR8	383752.021	5467953.705	20.298
STAR10	383760.657	5467948.587	20.516
STAR11	383766.736	5467943.727	21.067
STAR12	383774.832	5467934.586	22.036
STAR13	383795.655	5467888.119	27.989
SP9	383981.006	5467663.177	51.761
SP10	383976.855	5467658.106	52.538
SP11	383965.357	5467704.667	46.889
SPJM	383788.027	5467900.978	26.605
SC13	383838.563	5467809.843	38.032
SC15	383794.941	5467889.317	27.898

REV	AMENDMENTS	DRAWN	DATE	APPR
E				
D				
C				
B				
A				

NOTES:

SURVEYOR: AH & ML
JOB NO: 40466
DRAWN: AH
CHECKED: AE
DATE: 7/6/18

LAND SLIP MONITORING SURVEY
PORT RD, HEPPLES RD, FENTON CRES
BOAT HARBOUR
FOR WARATAH-WYNYARD COUNCIL

PDA Surveyors
Surveying, Engineering & Planning
6 Queen Street
Burnie Tasmania 7320
www.pda.com.au Also at Hobart, Launceston & Kingston
ABN 71 247 559 928
PHONE: +61 (03) 6431 4400
FAX: +61 (03) 6431 6693
EMAIL: pda.burnie@pda.com.au

SCALE: 1: 2000
PAPER: (A3)
JOB NUMBER: 40466
DRAWING: - 1

Waratah-Wynyard Council

Boat Harbour Beach Access Road Preliminary Options Assessment

August 2017

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Figure index

Appendices

1. Introduction

1.1 Background

Boat Harbour Beach is currently accessed solely via Port Road, a narrow, winding access road constructed across a steep coastal escarpment with a history of instability. There is understood to be a long history of landslides impacting on Port Road, with the most recent and significant being in 2016 which resulted in closure of the road for an extended period, isolating the town. An increase in traffic accessing the town via the narrow Port Road is understood to be a concern to Council and residents with little scope for widening or alignment and safety improvements.

In the interests of public safety, access certainty, and mitigation against the ongoing issues with Port Road, GHD have been engaged by Waratah-Wynyard Council (Council) to undertake a preliminary options assessment for a second access road connecting Boat Harbour Beach to the external road network.

1.2 Purpose of this report

This report has been prepared to document the first stage of the project to identify and assess potential access road routes in collaboration with Council. As such, this report investigates a number of potential routes including consideration of the following aspects:

- Topography
- Constructability
- Geology
- Landslip risk
- Safety
- Waratah-Wynyard Interim Planning Scheme
- Land tenure
- Land use
- Land capability
- Environmental (including flora, fauna and vegetation communities)
- Heritage (Aboriginal and European)
- Construction cost order of magnitude

1.3 Study Area

The Study Area comprises Boat Harbour Beach and the immediate surrounding area and is presented in Figure 1. The area presents a challenging topography with a steep escarpment located south of Boat Harbour Beach and an elevation difference exceeding 80 metres between the town end of Port Road and other roads in the area (including Strawberry Lane / Pokes Road and Banksia Park Road).

Figure 1 Study Area

Base imagery obtained from TheLIST © State of Tasmania

1.4 Scope and limitations

This report has been prepared by GHD for Waratah-Wynyard Council and may only be used and relied on by Waratah-Wynyard Council for the purpose agreed between GHD and the Waratah-Wynyard Council as set out in this report.

GHD otherwise disclaims responsibility to any person other than Waratah-Wynyard Council arising in connection with this report. GHD also excludes implied warranties and conditions, to the extent legally permissible.

The services undertaken by GHD in connection with preparing this report were limited to those specifically detailed in the report and are subject to the scope limitations set out in the report.

The opinions, conclusions and any recommendations in this report are based on conditions encountered and information reviewed at the date of preparation of the report. GHD has no responsibility or obligation to update this report to account for events or changes occurring subsequent to the date that the report was prepared.

The opinions, conclusions and any recommendations in this report are based on assumptions made by GHD described in this report. GHD disclaims liability arising from any of the assumptions being incorrect.

GHD has prepared this report on the basis of information provided by Waratah-Wynyard Council and others who provided information to GHD (including Government authorities), which GHD has not independently verified or checked beyond the agreed scope of work. GHD does not accept liability in connection with such unverified information, including errors and omissions in the report which were caused by errors or omissions in that information.

Environmental Limitations

This desktop ecological assessment of the proposed road alignment options by GHD:

a. Has been prepared pursuant to a contract with Waratah-Wynyard Council;

b. Has been prepared based on information provided up to July 2017;

c. Is for the sole use of Waratah-Wynyard Council for the sole purpose of understanding the ecological attributes applicable to the site;

d. Must not be used (1) by any other person/entity other than Waratah-Wynyard Council or (2) for a purpose other than for understanding the ecological attributes applicable to the site; and

e. Must not be copied without the prior written permission of GHD.

Neither GHD, its servants, employees nor officers accepts responsibility for any person/entity other than Waratah-Wynyard Council in connection with this document. GHD has prepared the report on the basis of information provided by Waratah-Wynyard Council and provided by people identified in the acknowledgements and consultation sections of this report, which GHD has not independently verified or checked.

This ecological assessment covers vascular plant species (ferns, conifers and flowering plants), terrestrial and migratory vertebrate fauna and is based solely on desktop investigations and no field survey was undertaken.

2. Initial Alignment Options Review

An initial eight (8) potential road corridors were identified by Waratah-Wynyard Council and GHD in the first stage of the assessment. The initial corridors were assessed for feasibility and constructability with the aim to shortlist three (3) routes for further investigation. The initial corridor options are presented in Figure 2.

The steep escarpment behind Boat Harbour Beach presented difficulties in selecting feasible road alignments, particularly with regard to maximum trafficable vertical grades and constructability associated with the natural surface cross slope.

The following factors were considered when identifying potential routes, and assessed in consultation with Council, to shortlist options for further investigation.

- Adopted maximum longitudinal grade of 15% (or 1 in 6.67)
- Adopted maximum desirable natural surface cross slope of 20% (or 1 in 5) with absolute maximum of 33.3% (or 1 in 3)
- Minimise impact on existing developed properties
- Proclaimed Land Slip Zones (Class A and Class B)

The initial review of the eight initial options are summarised in Table 1.

The potential road alignment options identified are not the only potential routes which may be available and is not considered to be an exhaustive list of all routes. The routes identified were based on a brief initial desktop assessment to provide a broad spread of possible alignments across the area of interest to the south and West of Boat Harbour Beach. Each route may also have potential variations which could be explored if an area warrants further investigation.

Table 1 Initial Alignment Options Review

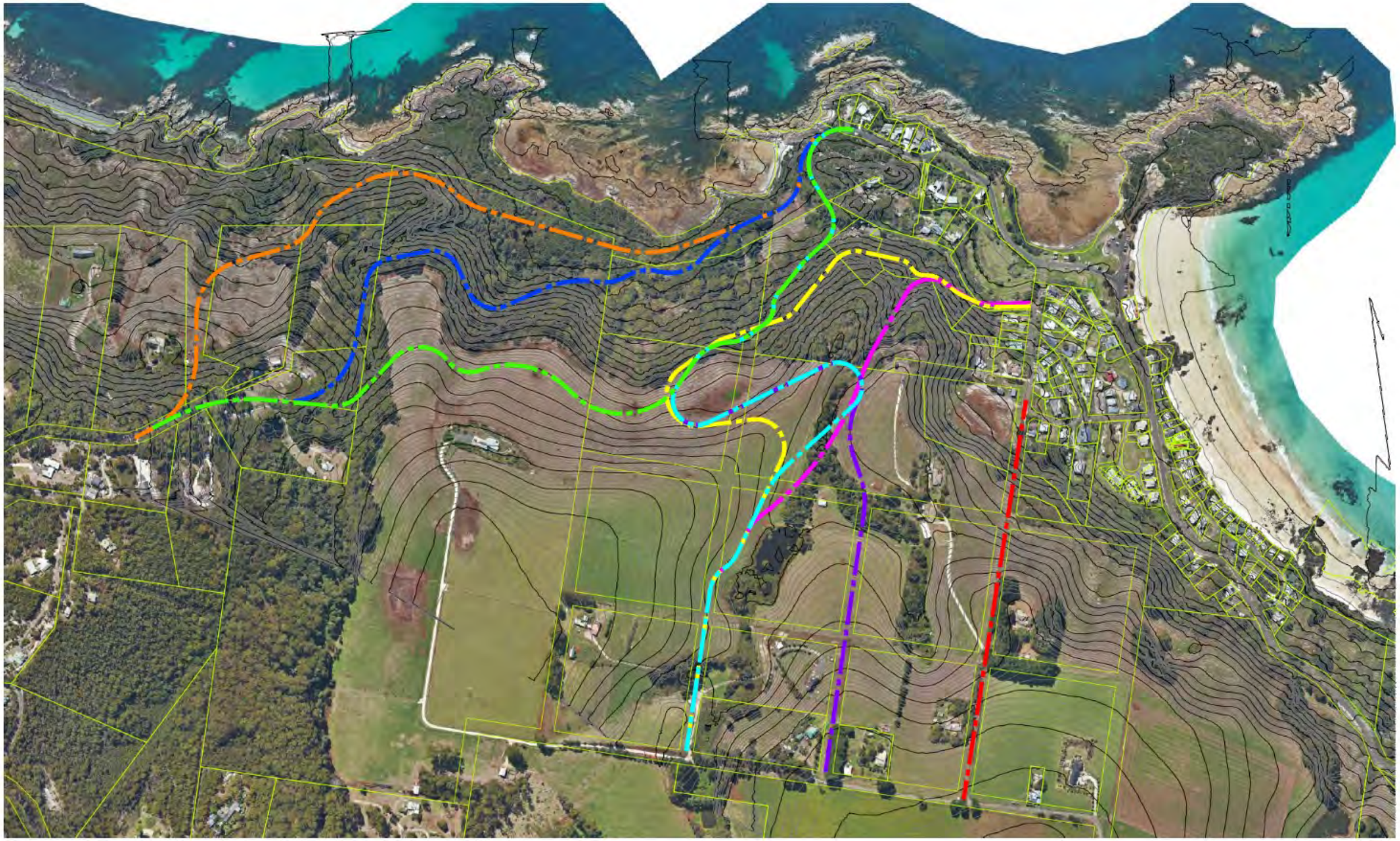
Option	Alignment	Review Comment
Option 1	Straight extension of Moore Street to connect to Pokes Road	Fully contained within existing reserved road with 15% average gradient. Two closely spaced sections with gradient >35% with length 75 m and 40 m. Significant cut required to achieve maximum gradient of 15% resulting in significant cost and visual impact due to road and batters. Not recommended to progress.
Option 2	Extension of Banksia Park Road through 39 Strawberry Lane to connect to end of Port Road	Road alignment followed contours along side of escarpment for gradual descent (up to 15%) to 20 metre contour. Some sections cross slope exceeds 1:3 requiring cut and benching into side of hill. Recommended to progress.

Option	Alignment	Review Comment
Option 3	Off Banksia Park Road, through 41 Banksia Park Road to connect to end of Port Road	Road alignment diverts through 41 Banksia Park Road to avoid steep gradients contained within Crown Land. Very steep initial gradient from Banksia Park Road through Crown Land. Descent along hillside to reach 20 m contour in front of the cliff face with average gradient ~10%. Cross slope exceeds 1:2 nominally requiring significant cut and benching into side of hill. Not recommended to progress.
Option 4	Off Moore Street, via 5 Moore Street and 1 Moore Street to connect to existing reserved road (west of dam)	Extends end of Port Road around rock with steep ascent from 20 m to 60 m along west side of hill (up to 15%). Alignment passes through Class A proclaimed land slip zone. Cross slope generally less than 1:3 with some steeper sections (up to 1:2). Recommended to progress.
Option 5	Off Moore Street, via 5 Moore Street and 1 Moore Street to connect to existing reserved road (east of dam)	Extends end of Port Road around rock with steep ascent from 20 m to 60 m along west side of hill (up to 15%). Alignment passes through Class A proclaimed land slip zone. Cross slope generally less than 1:3 with some steeper sections (up to 1:2). Recommended to progress.
Option 6	Off Moore Street, via 5 Moore Street and 1 Moore Street to connect to existing reserved road (west of dam)	Road alignment travels alongside existing creek with average gradient up to 30% from 70 m to 30 m elevation (on straight) with tight radius turn (40 m) at bottom of steep section with cross slope on front of hill exceeding 1:2. Alignment passes through Class A proclaimed land slip zone. Not recommended to progress.
Option 7	Off Moore Street, via 5 Moore Street, 3 Moore Street and 1 Moore Street to connect to existing reserved road (west of dam)	Road alignment bisects 3 Moore Street with existing residence located in north corner of property. Gradual ascent up north and west side of hill with average gradient 7-8%. Cross slope on front of hill exceeds 1:2. Potential alternative via reserved road (east of dam). Alignment passes through Class A proclaimed land slip zone. Not recommended to progress.

Option	Alignment	Review Comment
Option 8	Extension of Banksia Par Road through 39 Strawberry Lane to connect to end of Port Road	Gradual descent from 80 m to 70 m elevation through 39 Strawberry Lane with average 15% gradient along west side of hill (60 m to 20 m). Cross slope generally less than 1:3 with some steeper sections (up to 1:2). Alignment passes through Class A proclaimed land slip zone. Not recommended to progress.

In collaboration with Council's project representative, the potential access road corridor routes identified by both parties were reviewed, including consideration of the initial assessment provided in Table 1, with the routes shortlisted for further investigations being Options 2, 4 and 5.

The routes identified are corridors only and not exact routes. Further investigations and engineering assessment of the corridors would be required to refine the alignments to a feasible route which addresses the desired requirements of a road, which is beyond the scope of this desktop assessment.



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SCALE 1:5000 AT ORIGINAL SIZE

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LEGEND
OPTION 1
OPTION 2
OPTION 3
OPTION 4
OPTION 5
OPTION 6
OPTION 7
OPTION 8

GHD

WARATAH-WYNYARD COUNCIL
BOAT HARBOUR BEACH
ACCESS ROAD - STAGE 1
PRELIMINARY ALIGNMENT OPTIONS

Job Number 32-18518
Revision A
Date JULY 2017
Figure 2

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3. Preliminary Studies

Preliminary land use planning, heritage, geotechnical, environmental and engineering desktop studies were undertaken for each of the three, short-listed road alignments (Options 2, 4 and 5). The studies were undertaken based on available information including the following:

- *Waratah-Wynyard Interim Planning Scheme 2013*
- Aboriginal Heritage Tasmania
- Local Heritage Code (Planning Scheme)
- Tasmanian Heritage Register
- Commonwealth Heritage List
- National Heritage List
- Mineral Resources Tasmania (MRT) Digital Geological Atlas 1:25,000 Series Wynyard
- Natural Values Atlas
- *Environment Protection and Biodiversity Conservation Act 1999* (EPBCA) Protected Matters Search Tool
- Waratah-Wynyard Council aerial photography
- Waratah-Wynyard Council LiDAR elevation data

A series of maps and other documents have been prepared to aid the desktop studies. These are provided in appendices to this report and include the following:

Appendix A	Landslide Map Series Wynyard
Appendix B	Natural Values Atlas Report
Appendix C	Protected Matters Search Tool Report
Appendix D	Planning and Environmental Maps
Appendix E	Natural Surface Gradients
Appendix F	Aboriginal Heritage Desktop Assessment

The findings of the desktop studies for each alignment option are outlined in Table 2.

Table 2 Preliminary Desktop Studies

Discipline		Option 2	Option 4	Option 5
Planning *Waratah-Wynyard Interim Planning Scheme 2013*	Planning Scheme Zoning: • Rural Living Zone (13) • Rural Resource Zone (26) • Environmental Management Zone (29): – *[This land is under the authority of DPIPWE and consultation with Crown Land Services is required.* – *It must be shown that the road is of critical importance for the municipal or regional community.* – *DPIPWE must consent to the proposal and advise that the use is in accordance with any applicable reserve management plan or prescribed statutory conservation outcome.]*	The proposal must minimise likelihood for adverse impact on amenity for residential use on adjacent land in the Rural Living Zone. This Option proposes the least amount of fettering of existing and potential rural resource uses, which is a slightly better outcome for assessment against the Rural Resource Zone standards. Option 2 requires more land within the Environmental Management Zone.	The site area is not within a Rural Living Zone. Options 4 and 5 propose more fettering of existing and potential rural resource uses than Option 2. Options 4 and 5 require less works within the Environmental Management Zone, which may be viewed more favourably by DPIPWE.	The site area is not within a Rural Living Zone. Options 4 and 5 propose more fettering of existing and potential rural resource uses than Option 2. Options 4 and 5 require less works within the Environmental Management Zone, which may be viewed more favourably by DPIPWE.
	Planning Scheme Codes: • Clearing and Conversion of Vegetation Code (E3) • Change in Ground Level Code (E4) • Hazard Management Code (E6) • Water and Waterways Code (E10)	More clearance of native vegetation is required under this Option. However there is less clearance within land subject to landslides. Mapped as subject to less landslide risk. The road crosses a watercourse once at 40 Banksia Park Road. Works within 30 m of high water mark of shoreline may also be applicable where the proposal meets Port Road.	Less clearance required for Options 4 and 5. However, the clearance occurs almost wholly within areas mapped as subject to landslides. Mapped as subject to more landslide risk, including Proclaimed Landslip A and B. See Geotechnical Review below. The road crosses a watercourse twice. Works within 30 m of high water mark of shoreline may also be applicable where the proposal meets Port Road.	Less clearance required for Options 4 and 5. However, the clearance occurs almost wholly within areas mapped as subject to landslides. Mapped as subject to more landslide risk, including Proclaimed Landslip A and B. See Geotechnical Review below. The road crosses a watercourse four times. Works within 30 m of high water mark of shoreline may also be applicable where the proposal meets Port Road.
Heritage	Aboriginal Heritage Tasmania	There are a number of recorded Aboriginal heritage sites along the coast, at the northern section of the study area affecting all three Options (see Appendix F). Once the actual footprint of any proposed road and associated works is known, the design should be provided to AHT for a more detailed Desktop Assessment. An Aboriginal heritage investigation may be required.	There are a number of recorded Aboriginal heritage sites along the coast, at the northern section of the study area affecting all three Options (see Appendix F). Once the actual footprint of any proposed road and associated works is known, the design should be provided to AHT for a more detailed Desktop Assessment. An Aboriginal heritage investigation may be required.	There are a number of recorded Aboriginal heritage sites along the coast, at the northern section of the study area affecting all three Options (see Appendix F). Once the actual footprint of any proposed road and associated works is known, the design should be provided to AHT for a more detailed Desktop Assessment. An Aboriginal heritage investigation may be required.
	Local Heritage Code	No Listing	No Listing	No Listing
	Tasmania Heritage Register	No Listing	No Listing	No Listing
	Commonwealth Heritage List	No Listing	No Listing	No Listing
	National Heritage List	No Listing	No Listing	No Listing

Discipline		Option 2	Option 4	Option 5
Geotechnical	Landslide hazard:	CH250 - CH450: Moderate susceptibility source area for shallow slide and flow (see Appendix A Figure 4). CH525 – CH650: Flow runout susceptibility area (see Appendix A Figure 4). CH300 – CH450: Runout area of a reported deep-seated landslide of unknown activity (see Appendix A Figure 3). Exposure to landslide hazard has been assessed as low	CH200 – CH700: Landslide proclaim Zone A CH700 – CH1400: Landslide proclaim Zone B. CH300 – CH800: Low to high susceptibility source area for shallow slide and flow (see Appendix A Figure 4). CH350 – CH450: Reported deep-seated landslide of unknown activity and mapped spring, (see Appendix A Figure 3). CH500 – CH550: Reported deep-seated landslide of unknown activity and mapped spring, (see Appendix A Figure 3). CH850 – CH1350: Low to moderate susceptibility source area for shallow slide and flow (see Appendix A Figure 4). CH850 – CH1000: Low to moderate susceptibility source area for shallow slide and flow (see Appendix A Figure 4). CH1200 – CH1350: Low susceptibility source area (see Appendix A Figure 4). Exposure to landslide hazard has been assessed as high	CH200 – CH700: Landslide proclaim Zone A. CH700 – CH1400: Landslide proclaim Zone B. CH300 – CH800: Low to high susceptibility source area for shallow slide and flow (see Appendix A Figure 4). CH350 – CH450: Reported deep-seated landslide of unknown activity and mapped spring (Appendix A Figure 3). CH500 – CH550: Reported deep-seated landslide of unknown activity and mapped spring, (see Appendix A Figure 3). CH850 – CH1350: Low to moderate susceptibility source area for shallow slide and flow (see Appendix A Figure 4). CH850 – CH1000: Low to moderate susceptibility source area for shallow slide and flow (see Appendix A Figure 4). CH1200 – CH1350: Low susceptibility source area (see Appendix A Figure 4). Exposure to landslide hazard has been assessed as high
	Expected ground conditions	Predominantly within the Rocky Cape Group aged quartzite with thin siltstone beds with the exception of a section between CH200 – CH475 where the map indicates the presence of Quaternary aged basalt Talus (see Figure 6 of Appendix A). Most of the proposed alignment is within quartzite with thin siltstone beds.	Predominantly within the deeply weathered basal (cohesive soils) with the exception of a section between CH0 – CH 500, where the geology map indicates the presence of the Rocky Cape Group aged quartzite with thin siltstone beds (see Figure 6 of Appendix A). Approximately half of the proposed alignment is within cohesive soil and the other half within quartzite with thin siltstone beds.	Predominantly within the deeply weathered basal (cohesive soils) with the exception of a section between CH0 – CH 500, where the geology map indicates the presence of the Rocky Cape Group aged quartzite with thin siltstone beds (see Figure 6 of Appendix A). Approximately half of the proposed alignment is within cohesive soil and the other half within quartzite with thin siltstone beds.
	Scope of geotechnical investigations required to assess route feasibility	A section of the proposed alignment is within the runout of a reported landslide, as such, the geotechnical investigation should aim to identify the following: • Landslide material boundaries (landslide sliding surface, extension and geometry). • Landslide movement rates and; • Groundwater level and groundwater fluctuations between seasons. In order to achieve this, it is considered necessary to drill up to 4 boreholes and the installation of 4 piezometers and 4 inclinometer on the identified	Proposed alignment is within a reported landslide area, as such the geotechnical investigation should aim to identify the following: • Landslide boundaries (landslide sliding surface, extension and geometry). • Landslide movement rates and; • Groundwater level and groundwater fluctuations between seasons. In order to achieve this, it is considered necessary to drill up to 4 boreholes and the installation of 4 piezometers and 4 inclinometer on the identified landslide areas and up to 20 test pit on the rest of	Proposed alignment is within a reported landslide area, as such the geotechnical investigation should aim to identify the following: • Landslide boundaries (landslide sliding surface, extension and geometry). • Landslide movement rates and; • Groundwater level and groundwater fluctuations between seasons. In order to achieve this, it is considered necessary to drill up to 4 boreholes and the installation of 4 piezometers and 4 inclinometer on the identified landslide areas and up to 20 test pit on the rest of

Discipline		Option 2	Option 4	Option 5
		landslide area and up to 18 test pits to collect samples for pavement design. Alternatively, the alignment could be adjusted to avoid the landslide section limiting the geotechnical investigation to the test pits.	the alignment to collect samples for pavement design.	the alignment to collect samples for pavement design.
Environmental	TASVEG Community	This option predominantly intersects DOB (*Eucalyptus obliqua* dry forest) and a small area of FAG (agricultural land)	This option predominantly traverses agricultural land (FAG) and a small patch of *Melaleuca ericifolia* swamp forest (NME) and *Eucalyptus obliqua* dry forest (DOB)	This option predominantly traverses agricultural land (FAG) and a small patch of *Melaleuca ericifolia* swamp forest (NME) and *Eucalyptus obliqua* dry forest (DOB)
	Threatened Vegetation Communities	This option does not intersect threatened vegetation communities	Intersects threatened vegetation community *Melaleuca ericifolia* swamp forest (NME)	Intersects threatened vegetation community *Melaleuca ericifolia* swamp forest (NME)
	Threatened flora	There are several threatened species records within 500 meters of the alignment. Suitable habitat exists for other threatened flora species identified as potentially occurring in the NVA and PMST.	There are several threatened species records within 500 meters of the alignment. Limited suitable habitat exists for other threatened flora species identified as potentially occurring in the NVA and PMST.	There are several threatened species records within 500 meters of the alignment. Limited suitable habitat exists for other threatened flora species identified as potentially occurring in the NVA and PMST.
	Threatened fauna	There are several threatened species records within 500 meters of the alignment. Suitable habitat exists for other threatened fauna species identified as potential occurring in the NVA and PMST	There are several threatened species records within 500 meters of the alignment. Limited suitable habitat exists for other threatened fauna species identified as potential occurring in the NVA and PMST.	There are several threatened species records within 500 meters of the alignment. Limited suitable habitat exists for other threatened fauna species identified as potential occurring in the NVA and PMST.
Engineering	Longitudinal gradients	Maximum longitudinal gradient of 15% and vertical curves within acceptable bounds are likely to be achievable subject to consideration of natural surface cross slope, and earthworks / benching as required to facilitate road construction. Steepest section is located within 200 – 300 m of the tie-in to the existing Banksia Park Road due to change in elevation between the end of Banksia Park Road and the top of the coastal escarpment behind Boat Harbour Beach. Connection to Banksia Park Road involves a creek crossing which may require significant fill on grade.	Maximum longitudinal gradient of 15% and vertical curves within acceptable bounds are likely to be achievable subject to consideration of natural surface cross slope, and earthworks / benching as required to facilitate road construction. Steepest section is located within 200 – 600 m of the tie-in to the existing Port Road as the road climbs the coastal escarpment. The option includes two creek crossings south of the escarpment.	Maximum longitudinal gradient of 15% and vertical curves within acceptable bounds are likely to be achievable subject to consideration of natural surface cross slope, and earthworks / benching as required to facilitate road construction. Steepest section is located within 200 – 600 m of the tie-in to the existing Port Road as the road climbs the coastal escarpment. The option includes four creek crossings south of the escarpment.
	Natural surface cross slope	Natural surface cross slope exceeding 1:3 (33.3%) is present on alignment Option 2 along the face of the coastal escarpment. The total distance where natural surface cross slope exceeds 1:3 is approximately 350 m. The steep natural cross slope is likely to make construction challenging and expensive,	Natural surface cross slope exceeding 1:3 (33.3%) is present on alignment Option 4 along the face of the coastal escarpment. The total distance where natural surface cross slope exceeds 1:3 is approximately 300 m. The steep natural cross slope is likely to make construction challenging and expensive,	Natural surface cross slope exceeding 1:3 (33.3%) is present on alignment Option 5 along the face of the coastal escarpment. The total distance where natural surface cross slope exceeds 1:3 is approximately 300 m. The steep natural cross slope is likely to make construction challenging and expensive,

Discipline	Option 2	Option 4	Option 5
Horizontal alignment	particularly in areas of rock and/or high landslip hazard classification. Horizontal alignment is likely to include several tight turns with curve radius 40-60 m as required to follow the terrain around coastal escarpment on grade. Many horizontal curves are coincident with steep gradients and/or short vertical curves.	particularly in areas of rock and/or high landslip hazard classification. Horizontal alignment is likely to included several tight turns with curve radius 40-60 m as required to follow the terrain across the coastal escarpment on grade and to achieve an appropriate gradient connecting to Strawberry Lane. Many horizontal curves are coincident with steep gradients and/or short vertical curves.	particularly in areas of rock and/or high landslip hazard classification. Horizontal alignment is likely to include several tight turns with curve radius 40-60 m as required to follow the terrain across the coastal escarpment on grade. Many horizontal curves are coincident with steep gradients and/or short vertical curves.

3.1 Discussion

3.1.1 Land Use Planning

The land use planning review is based on the *Waratah-Wynyard Interim Planning Scheme 2013* (the Scheme) only. The Scheme will become the Tasmanian Planning Scheme once the Local Provisions Schedule (LPS) for the municipal area comes into effect. While an exact date is not known, the future zoning and applicable provisions may change in the early part of 2018.

Zoning and planning overlays are provided in Appendix D.

Option 2 appears to have the most environmental impacts and relies on more DPIPWE land within the Environmental Management zone. A planning application must therefore demonstrate that the road is of critical importance for the municipal or regional community and must be accompanied by Crown (DPIPWE) consent. Environmental (Flora and Fauna) assessments will also be required. Other assessment criteria involve the protection of residential and scenic amenity, minimal fettering of rural resource land and acceptable landslide risk.

Options 4 and 5 are subject to significant landslide overlays and would be subject to the findings of a geotechnical assessment provided in Table 2. The benefits to these Options is that less vegetation clearance is required and less works will occur within the Environmental Management Zone. The alignment of the roads (particularly Option 4) with existing road reserves perpendicular to Strawberry Lane is also a benefit.

3.1.2 Heritage

European Heritage

A search of the Tasmanian Heritage Register, the Commonwealth Heritage List, the National Heritage List and the Local Heritage Code (planning scheme) has been undertaken. There are no European heritage listed places within the study area.

Aboriginal Heritage

An application was sent to Aboriginal Heritage Tasmania (AHT) requesting a Desktop Assessment of the broad study area. A shape file enclosing a triangular area incorporating all route options was provided to AHT for their assessment. At this stage, no specific details of the project or footprints of the proposed roads have been provided to AHT. The results of the Desktop Assessment show that there are a number of Aboriginal heritage sites recorded within or in close proximity to the study area, including some stone quarries, rock shelters, shell middens and artefact scatters. The recorded Aboriginal heritage sites occur along the coast of Western Bay and Boat Harbour Beach, with one site adjacent to the northern end of Port Road affecting all Options and one site within close proximity to the northern section of Options 2.

The AHT Desktop Assessment results and associated map showing the study area and locations of known Aboriginal heritage sites is included at Appendix F.

Once more details in terms of the footprint of the road and associated works are known, AHT should be contacted again so that they can make an assessment of the exact proposed footprint. They may then require an Aboriginal heritage investigation to be undertaken.

3.1.3 Geotechnical Desktop Review

The area of interest is located approximately 10 km west of Wynyard CBD. In general, the area comprises a plateau which rises to nearly 122 m above sea level and with slopes between 25° - 40° on the lower areas.

Based on the published Mineral Resources Tasmania (MRT) Digital Geological Atlas 1:25,000 Series Wynyard map #3846, the northern portion of the site is underlain by Precambrian Rocky Cape Group aged quartzite with thin siltstone beds overlain in some areas by Quaternary aged landslide deposits predominantly derived from weathered basalt.

The southern portion is underlain by Tertiary aged deeply weathered basalt.

The options overlapped on the local geology map can been seen in Figure 6 of Appendix A.

The geotechnical desktop review is based on the available information including maps published by Mineral Resources Tasmania (MRT). Detailed geotechnical investigations have not been undertaken at this stage of the project.

3.1.4 Environmental

The desktop assessment considered the road alignment Options 2, 4 and 5. Searches of the Natural Values Atlas (Appendix B) and *Environment Protection and Biodiversity Conservation Act 1999* (EPBCA) Protected Matters Search Tool (Appendix C) were undertaken to determine predicted and previous records of flora and fauna values in the vicinity of the road alignment options. Environmental overlays are presented in Appendix D.

The desktop searches identified that the following vegetation communities are predicted to occur within 500 meters of the proposed road alignment:

- *Melaleuca ericifolia* swamp forest (NME) threatened
- *Eucalyptus obliqua* dry forest (DOB)
- Coastal scrub (SSC)
- Leptospermum scrub (SLW)
- Water (OAQ)
- Urban areas (FUR) and
- Agricultural land (FAG)

Option 2 predominantly traverses the native vegetation community *Eucalyptus obliqua* dry forest (DOB) with the exception of a small area of agricultural land (FAG) located at the northern end of the alignment.

Options 4 and 5 predominantly traverse agricultural land, although they do intersect a small patch of the threatened vegetation community *Melaleuca ericifolia* swamp forest (NME) and the native vegetation community *Eucalyptus obliqua* dry forest.

The Natural Values Atlas and EPBCA Protected Matters Search Tool also identified a range of flora and fauna species listed under the Tasmanian *Threatened Species Protection Act 1995* (TSPA) and Commonwealth EPBCA which occur and are predicted to occur within the proposed road alignments. Several threatened flora and fauna species have been recorded within 500 meters of the road alignment options:

- Spotted-tailed quoll (*Dasyurus maculatus* subsp. *maculatus*)
- Swift parrot (*Lathamus discolour)*
- Tasmanian devil (*Sarcophilus harrisii*)
- Shortspike midge-orchid (*Corunastylis brachystachya*) and
- Large gnat-orchid (*Cyrtostylis robusta*)

The low numbers of records of species is considered to be a result of low survey effort in the area, as opposed to an absence or suitability of habitat. The native vegetation communities that

exist within the proposed alignment options are likely to provide suitable habitat for threatened flora and fauna species.

There are several nest locations for raptors within 5000 metres of the study area identified by the Natural Values Atlas. All nest locations are a minimum of 500 metres from the proposed road alignments.

It is considered there is a high risk that ecological values of significance related to vegetation communities may be impacted by the construction of either of the road alignments. *However, desktop results indicate options 4 or 5 would be preferable to option 2 from an ecological impact perspective*. It is recommended that a field survey is undertaken for the preferred option to address the following:

- Confirm TASVEG mapping is accurate and that identified threatened vegetation types identified via this desktop study are consistent with community floristics, minimum size thresholds and quality to meet criteria specified in the relevant state and federal legislation for each particular community in question.
- Confirm absence or presence of threatened flora within the study area
- Determine threatened fauna habitat values within the study area such as hollow bearing trees that may occur in the forest vegetation communities

The outcomes of the field survey will provide the Council with further information on environmental approvals that may be required for the preferred option.

3.1.5 Engineering

A limited engineering review of longitudinal gradients, natural surface cross-slope, horizontal alignment was undertaken based on the alignment options identified in the initial stage of the project, and aerial photography and LiDAR elevation data provided by Waratah-Wynyard Council for the area. A map showing natural surface gradients is presented in Appendix E.

Due to site complexities, it is difficult to provide an order of cost magnitude for construction of the proposed routes. Further investigations and design work would be required to provide an order of magnitude cost.

4. Conclusions

This report has outlined the findings of an initial route options review and several preliminary desktop studies undertaken for the three, shortlisted alignments from the initial review. The aim of this stage of the project was to identify a preferred alignment for further investigations.

A high-level weighted assessment of the findings of the desktop studies is presented in Table 3 below. The weighted assessment considered the potential issues which may be encountered by each route, as outlined in Section 3, and applies a simple weighting to each based on the assessed potential impact of the issue using the following criteria.

Potential Impact Weighting Criteria

1. No issues
2. Low cost/low impact
3. Moderate cost/moderate impact
4. High cost/high impact
5. Extreme cost/extreme impact

Table 3 Weighted Assessment of Desktop Studies Findings

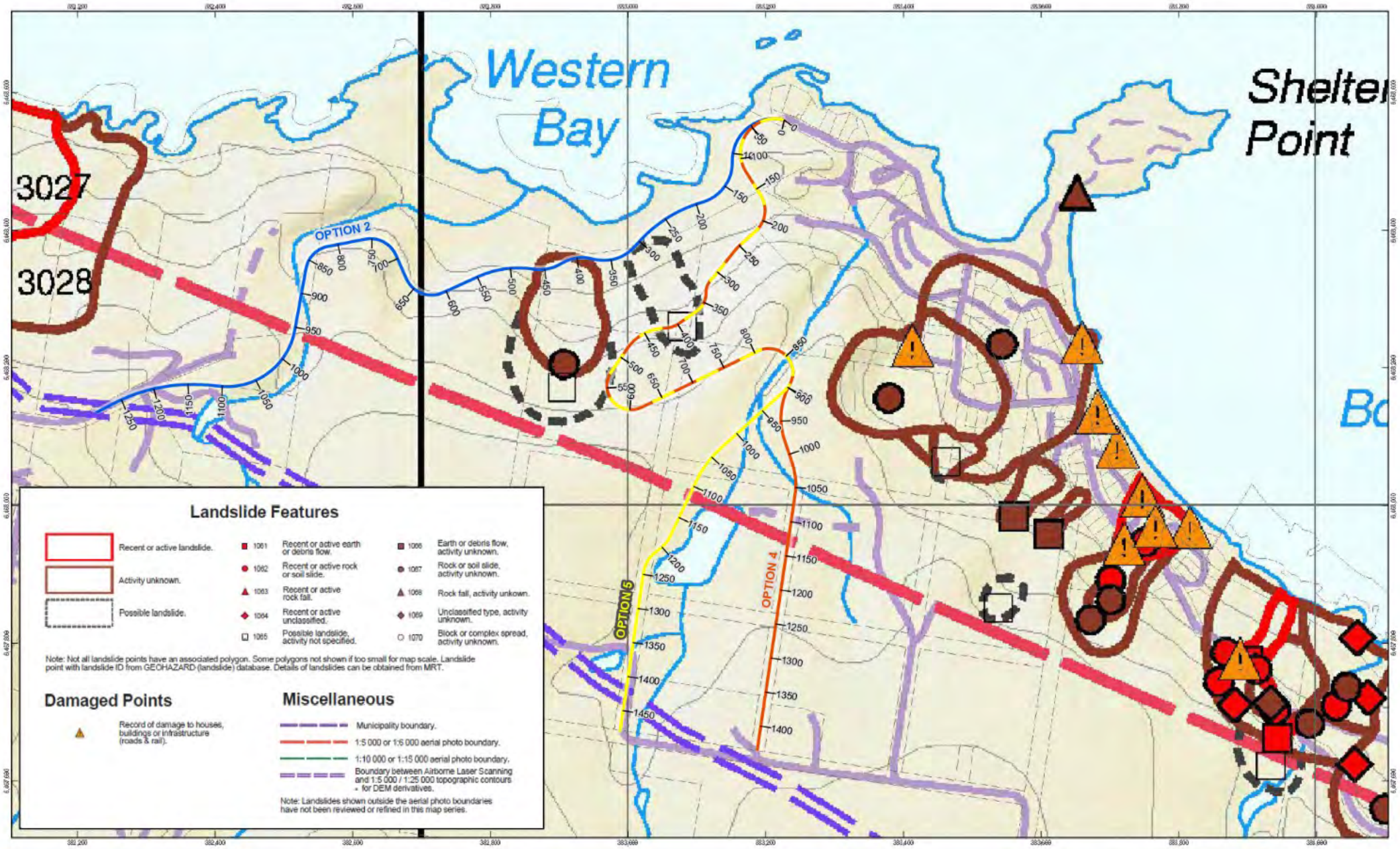
	Option 2	Option 4	Option 5
Planning	2	4	4
Heritage	3	3	3
Geotechnical	3	4	4
Environmental	4	3	3
Engineering	5	4	4
Overall	***17***	***18***	***18***

Based on the high level weighted assessment presented in Table 3, the Option 2 alignment is assessed as having the fewest potential issues, albeit marginally from the other two routes. Given the high level desktop nature of the route assessment, further investigations may identify one of the other options listed above, a minor variation or an alternative route altogether, as the preferred route.

Notwithstanding the above, this preliminary assessment has confirmed that there are potentially a large number of constraints associated with construction a road in this area with high cost implications.

Appendices

Appendix A – Landslide Map Series Wynyard



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Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 55

N

LEGEND
Preliminary Alignment Options
Option 2
Option 4
Option 5
Road
Cadastral parcel

Waratah-Wynyard Council
Boat Harbour Beach Access Road Stage 1

Job Number 32-18518
Revision A
Date 28 Jul 2017

MRT Landslide Inventory

Figure 1

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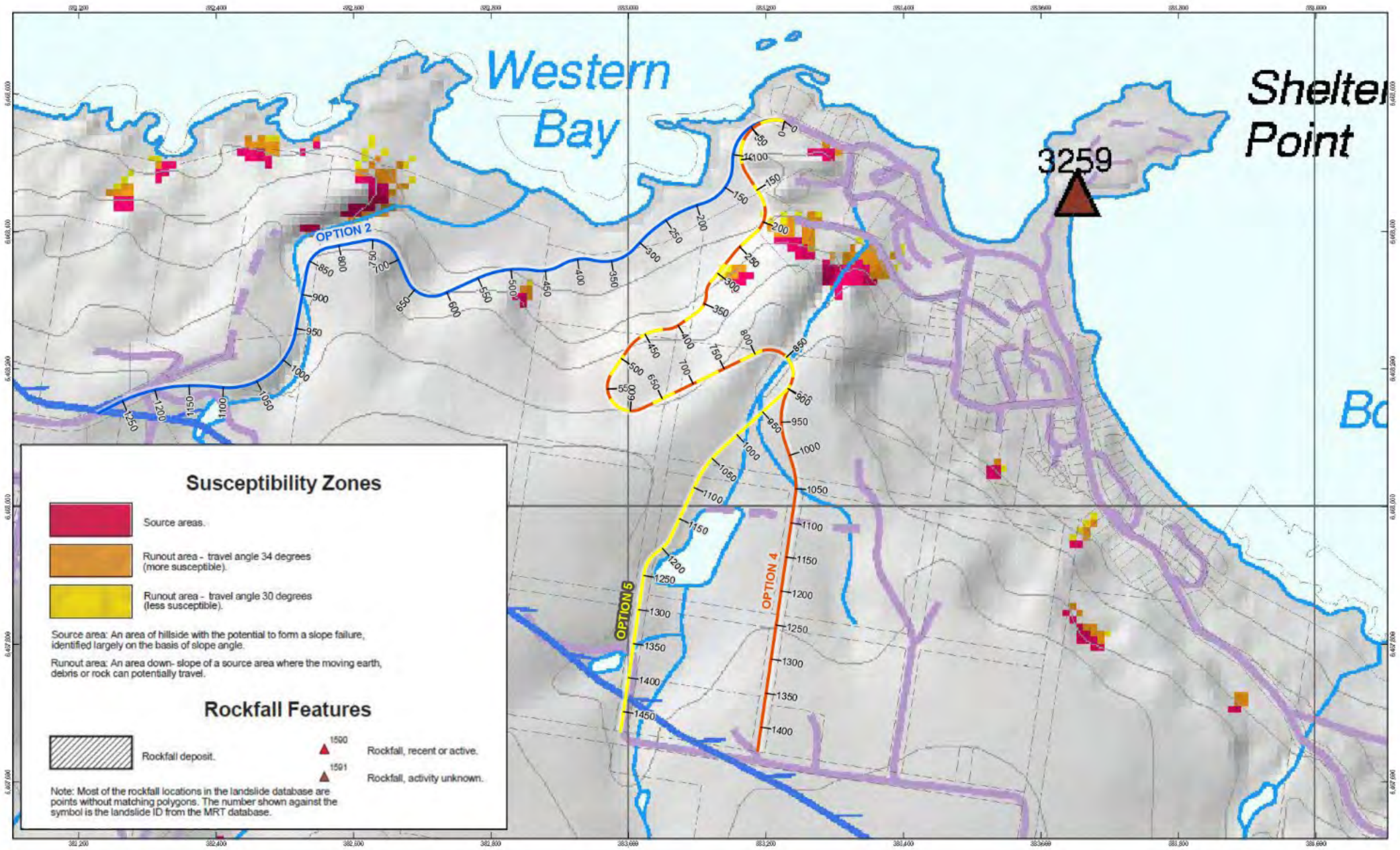
Data source: DRPWE, MRT, Waratah-Wynyard Council, GHD. Created by: jforegan

2 Salamanca Square Hobart TAS 7000 Australia T 61 3 6210 0600 F 61 3 6210 0601 E hbamail@ghd.com W www.ghd.com



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Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 55

N

LEGEND
Preliminary Alignment Options
Option 2
Option 4
Option 5
Road
Cadastral parcel

Waratah-Wynyard Council
Boat Harbour Beach Access Road Stage 1

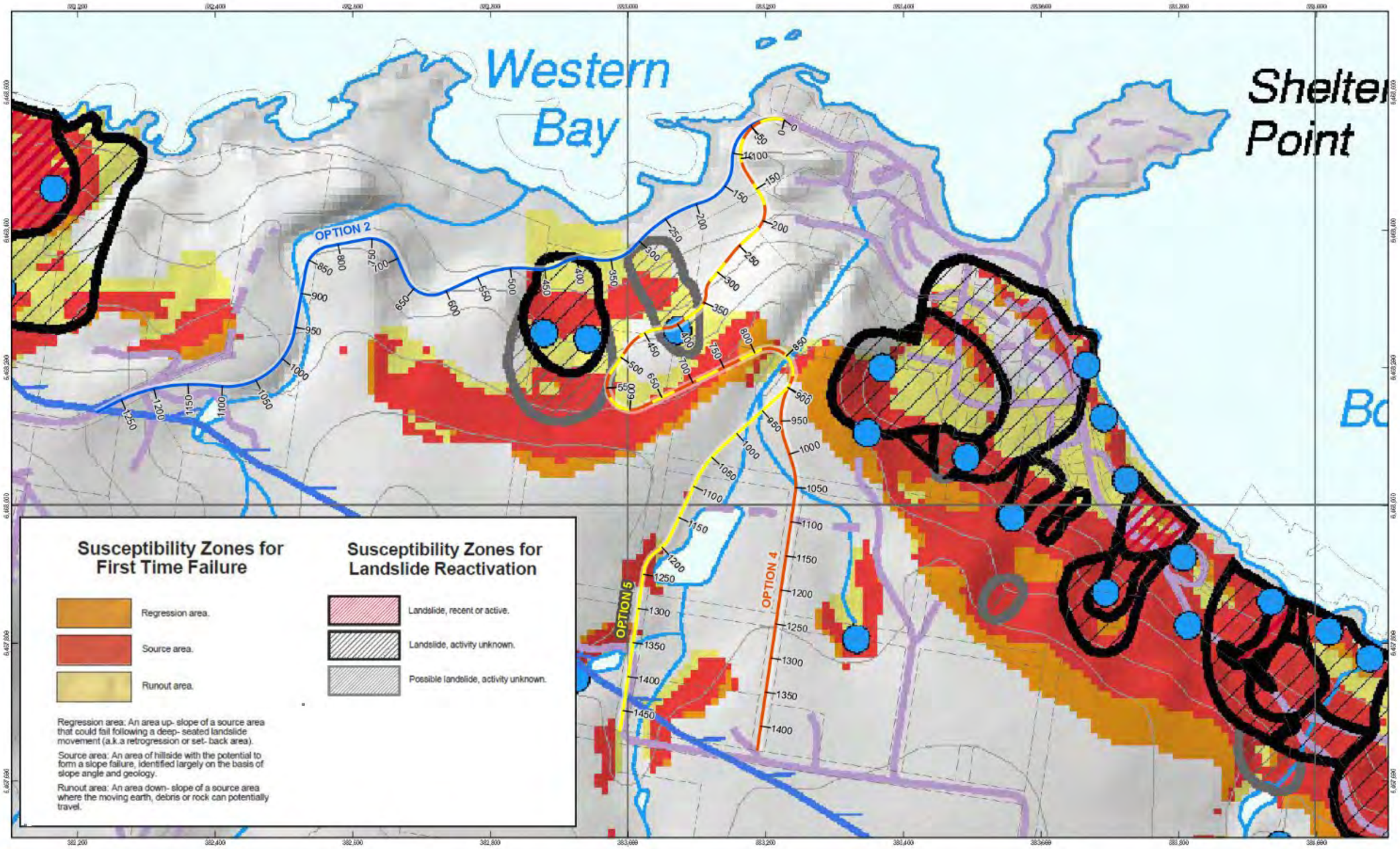
Job Number 32-18518
Revision A
Date 28 Jul 2017

MRT Rockfall Susceptibility

Figure 2

Data source: DPIPWE, MRT, Waratah-Wynyard Council, GHD. Created by: jforegan

2 Salamanca Square Hobart TAS 7000 Australia T 61 3 6210 0800 F 61 3 6210 0801 E hbamail@ghd.com W www.ghd.com



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Grid: GDA 1994 MGA Zone 55

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LEGEND
Preliminary Alignment Options
Option 2
Option 4
Option 5
Road
Cadastral parcel

Waratah-Wynyard Council
Boat Harbour Beach Access Road Stage 1

Job Number 32-18518
Revision A
Date 28 Jul 2017

MRT Deep-seated Landslide Susceptibility

Figure 3

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Data source: DRPWE, MRT, Waratah-Wynyard Council, GHD. Created by: jforegan

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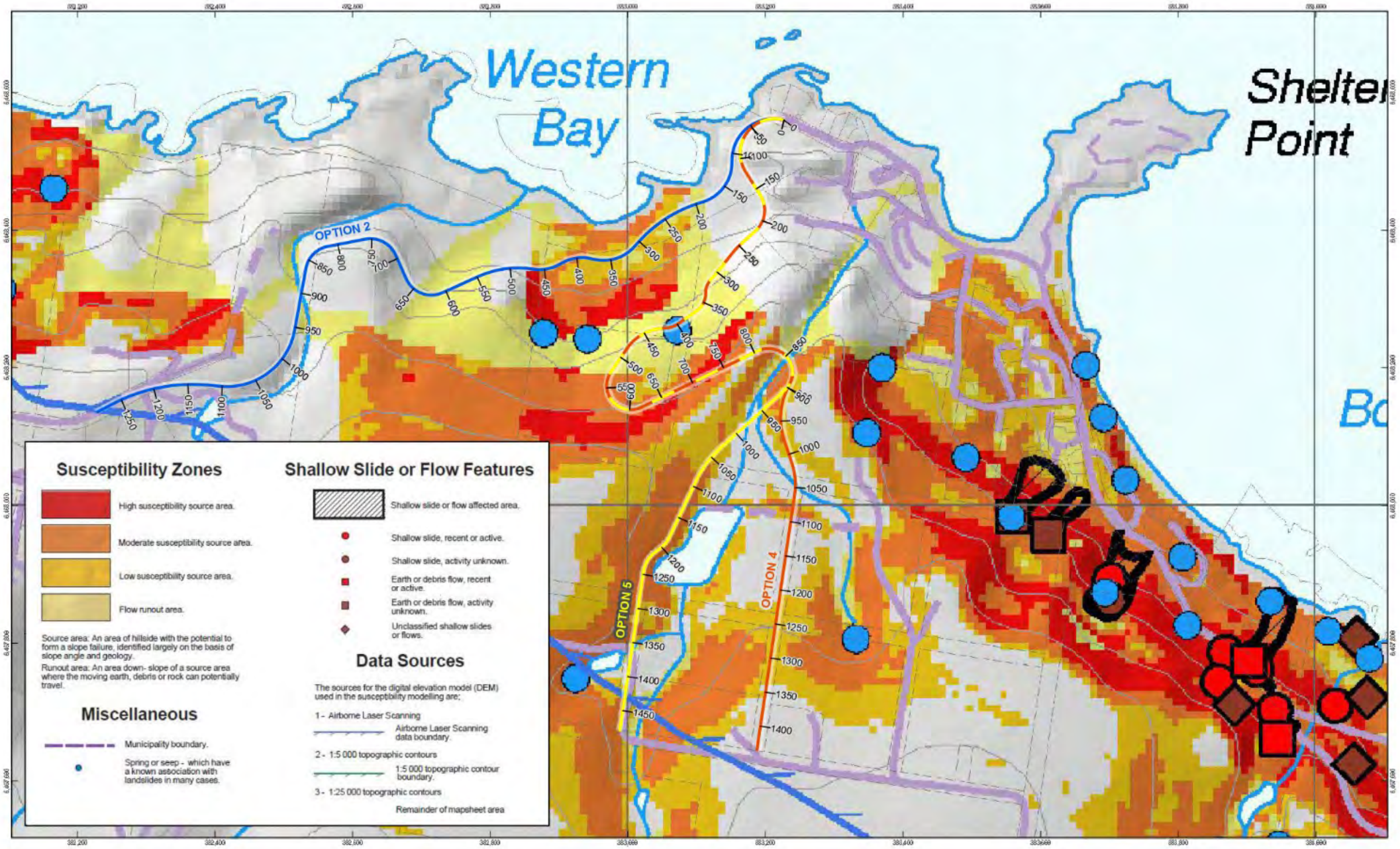

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Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 55

LEGEND
Preliminary Alignment Options
Option 2
Option 4
Option 5
Road
Cadastral parcel

Waratah-Wynyard Council
Boat Harbour Beach Access Road Stage 1

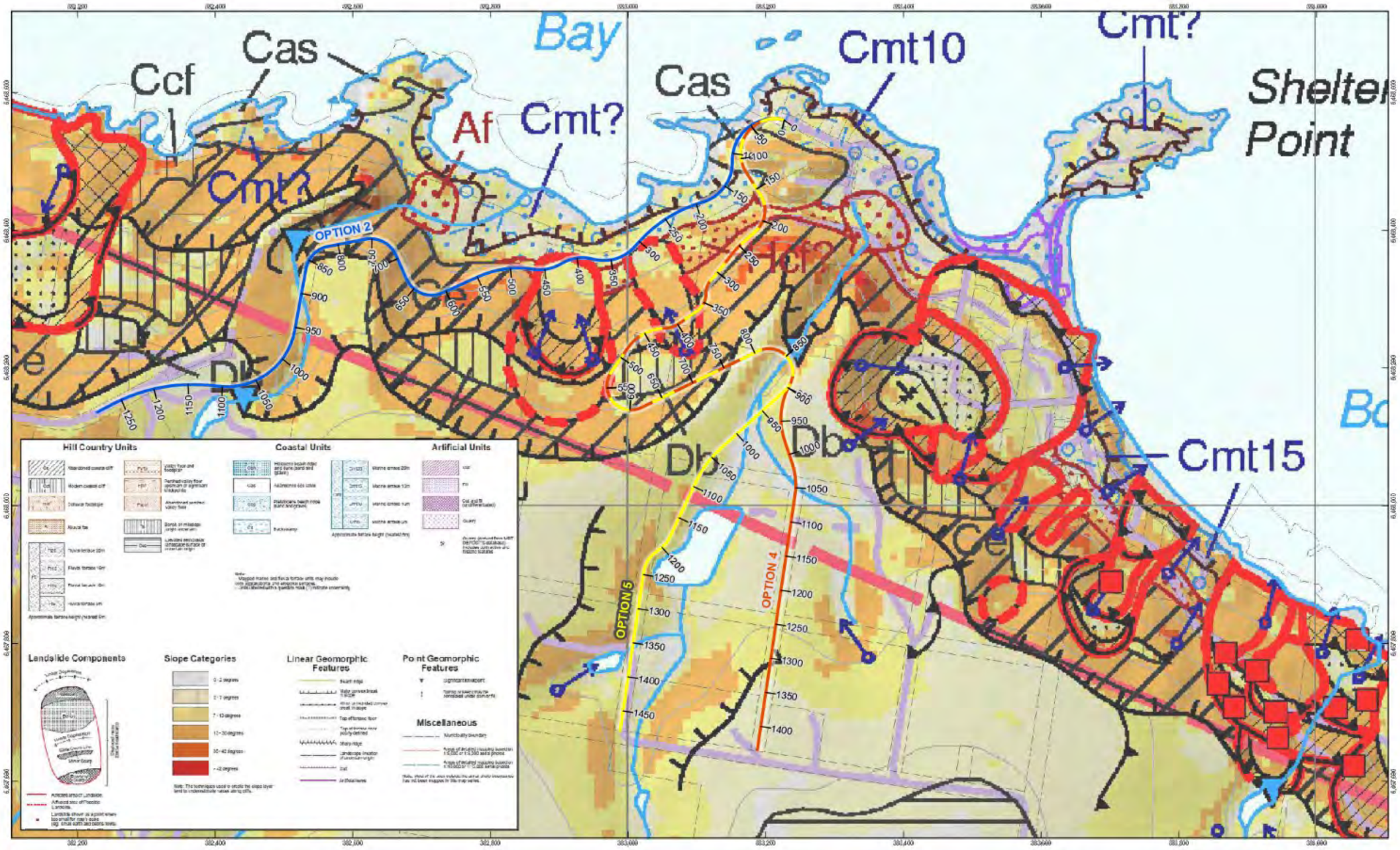
Job Number 32-18518
Revision A
Date 28 Jul 2017

MRT Shallow Slide and Flow Susceptibility

Figure 4

2 Salamanca Square Hobart TAS 7000 Australia T 61 3 6210 0600 F 61 3 6210 0601 E hbamail@ghd.com W www.ghd.com

Data source: DPIPWE, MRT, Waratah-Wynyard Council, GHD. Created by: jforegan



Paper Size A3
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Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 55

N

LEGEND
Preliminary Alignment Options
Option 2
Option 4
Option 5
Road
Cadastral parcel

Waratah-Wynyard Council
Boat Harbour Beach Access Road Stage 1

Job Number 32-18518
Revision A
Date 28 Jul 2017

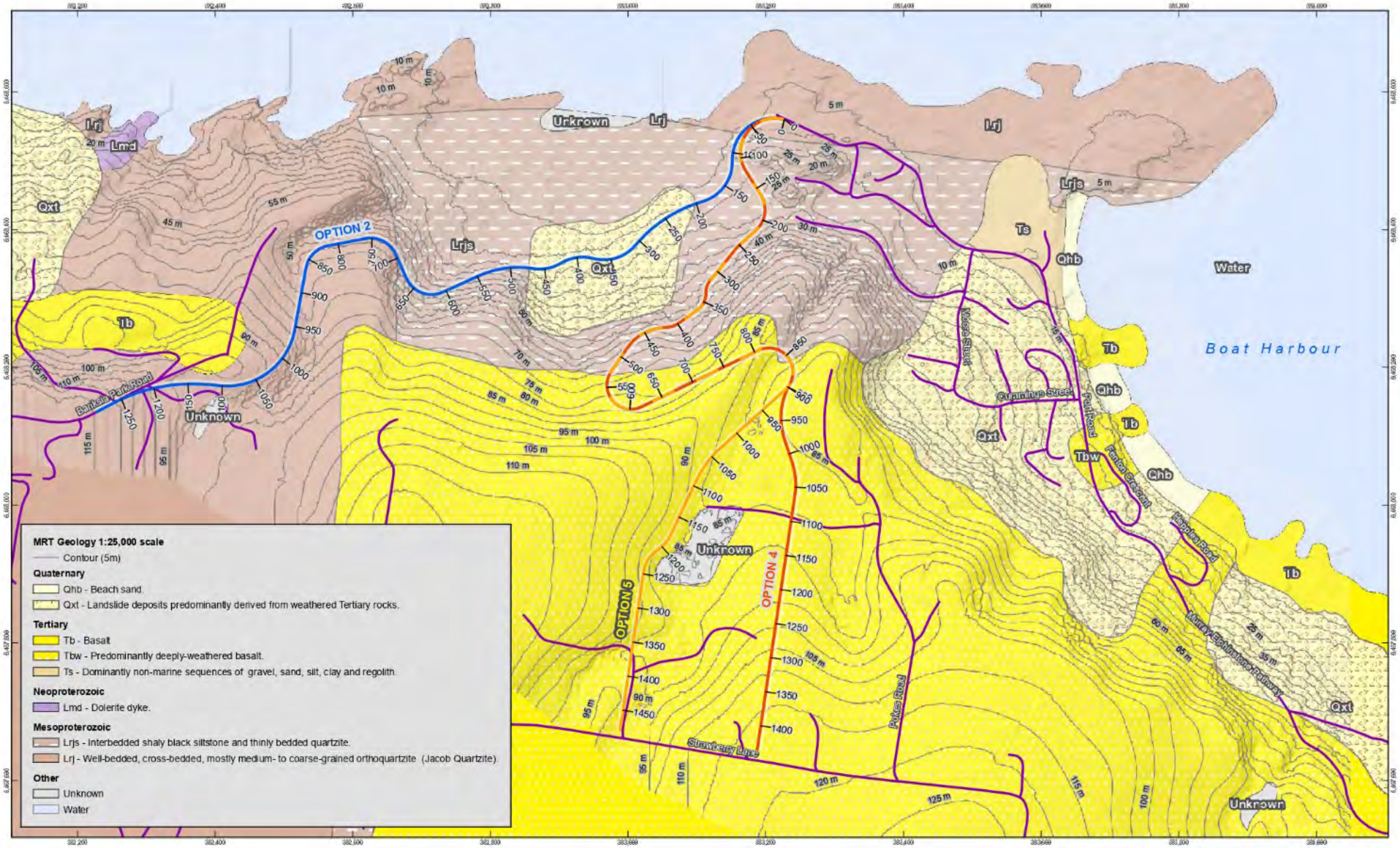
MRT Geomorphology

Figure 5

G:\32\18518\GIS\Maps\MXD\32518518_GROTSCH_F19-05_GeoMph_RevA.mxd

Data source: DPIPWE, MRT, Waratah-Wynyard Council, GHD. Created by: jforegan

2 Salamanca Square Hobart TAS 7000 Australia T 61 3 6210 0600 F 61 3 6210 0601 E hbamail@ghd.com W www.ghd.com



Paper Size A3
0 25 50 100 150 200
Metres
Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 55

N

LEGEND
Preliminary Alignment Options
Option 2
Option 4
Option 5
Road
Contour (5m)
Cadastral parcel

Waratah-Wynyard Council
Boat Harbour Beach Access Road Stage 1

Job Number 32-18518
Revision A
Date 28 Jul 2017

MRT Geology

Figure 6

G:\32\18518\GIS\Maps\MXD\32-18518_GEOTECH_FIG-06_Geology_Rev A.mxd

Data source: DPIPWE, MRT, Waratah-Wynyard Council, GHD. Created by: jforegan

2 Salamanca Square Hobart TAS 7000 Australia T 61 3 6210 0600 F 61 3 6210 0601 E hbamail@ghd.com W www.ghd.com

Appendix B – Natural Values Atlas Report

Natural Values Atlas Report

Authoritative, comprehensive information on Tasmania's natural values.

Reference: Boat Harbour
Requested For: Environment group
Report Type: Summary Report
Timestamp: 12:25:09 PM Friday 28 July 2017

Threatened Flora: buffers Min: 500m Max: 5000m
Threatened Fauna: buffers Min: 500m Max: 5000m
Raptors: buffers Min: 500m Max: 5000m
Tasmanian Weed Management Act Weeds: buffers Min: 500m Max: 5000m
Priority Weeds: buffers Min: 500m Max: 5000m
Geoconservation: buffer 1000m
Acid Sulfate Soils: buffer 1000m
TASVEG: buffer 1000m
Threatened Communities: buffer 1000m
Fire History: buffer 1000m
Tasmanian Reserve Estate: buffer 1000m
Biosecurity Risks: buffer 1000m

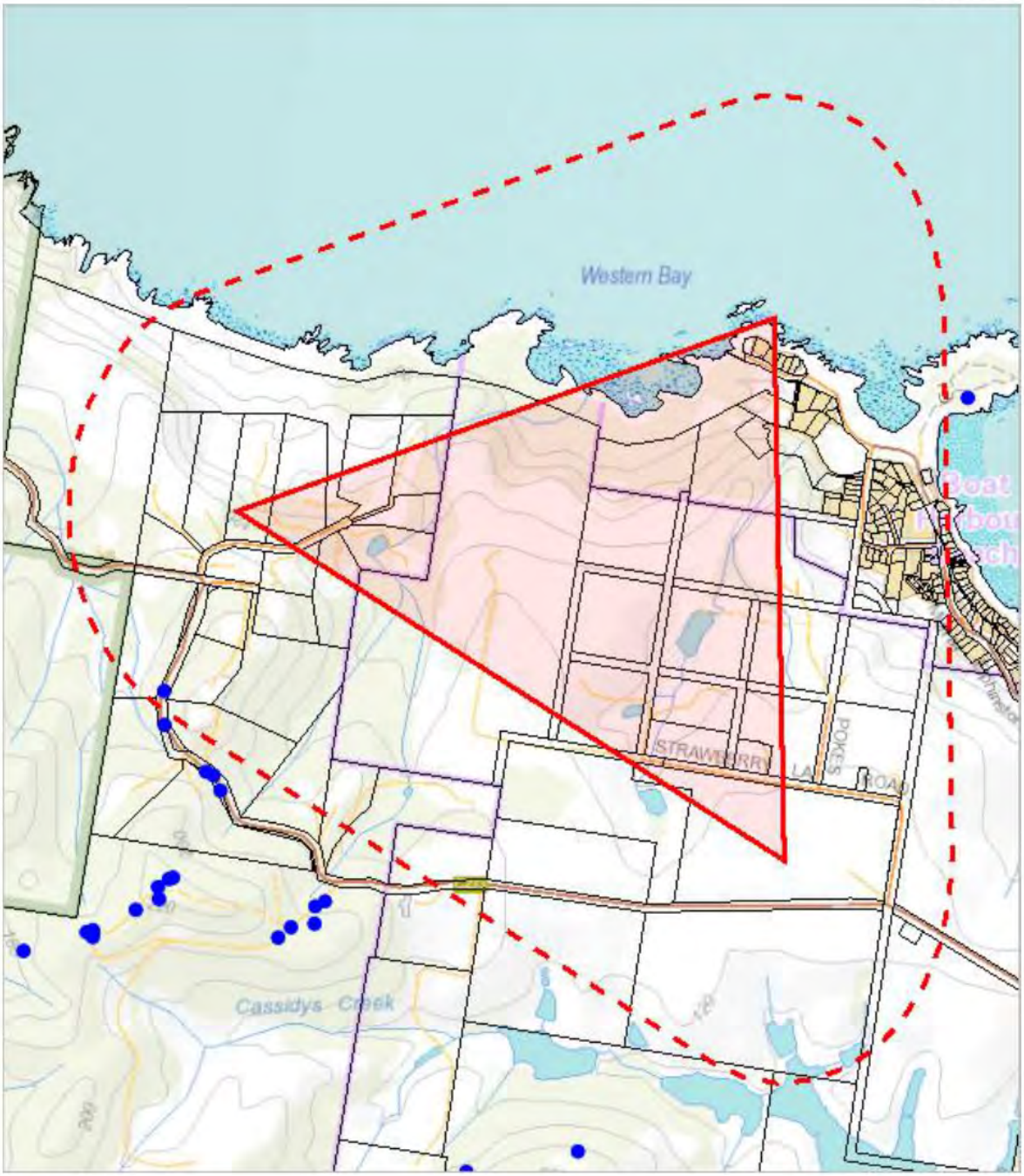
The centroid for this query GDA94: **382888.0, 5468101.0** falls within:

Property: 2535834

Department *of* Primary Industries, Parks, Water *and* Environment
Page 1 of 48

Threatened flora within 500 metres

383856, 5469363



381528, 5466714

Please note that some layers may not display at all requested map scales

Threatened flora within 500 metres

Legend: Verified and Unverified observations

- Point Verified
- Point Unverified
- Line Verified
- Line Unverified
- Polygon Verified
- Polygon Unverified

Legend: Cadastral Parcels

Threatened flora within 500 metres

Verified Records

Species	Common Name	SS	NS	Bio	Observation Count	Last Recorded
Corunastylis brachystachya	shortspike midge-orchid	e	EN	e	2	17-May-2015
Cyrtostylis robusta	large gnat-orchid	r		n	1	01-Sep-2004

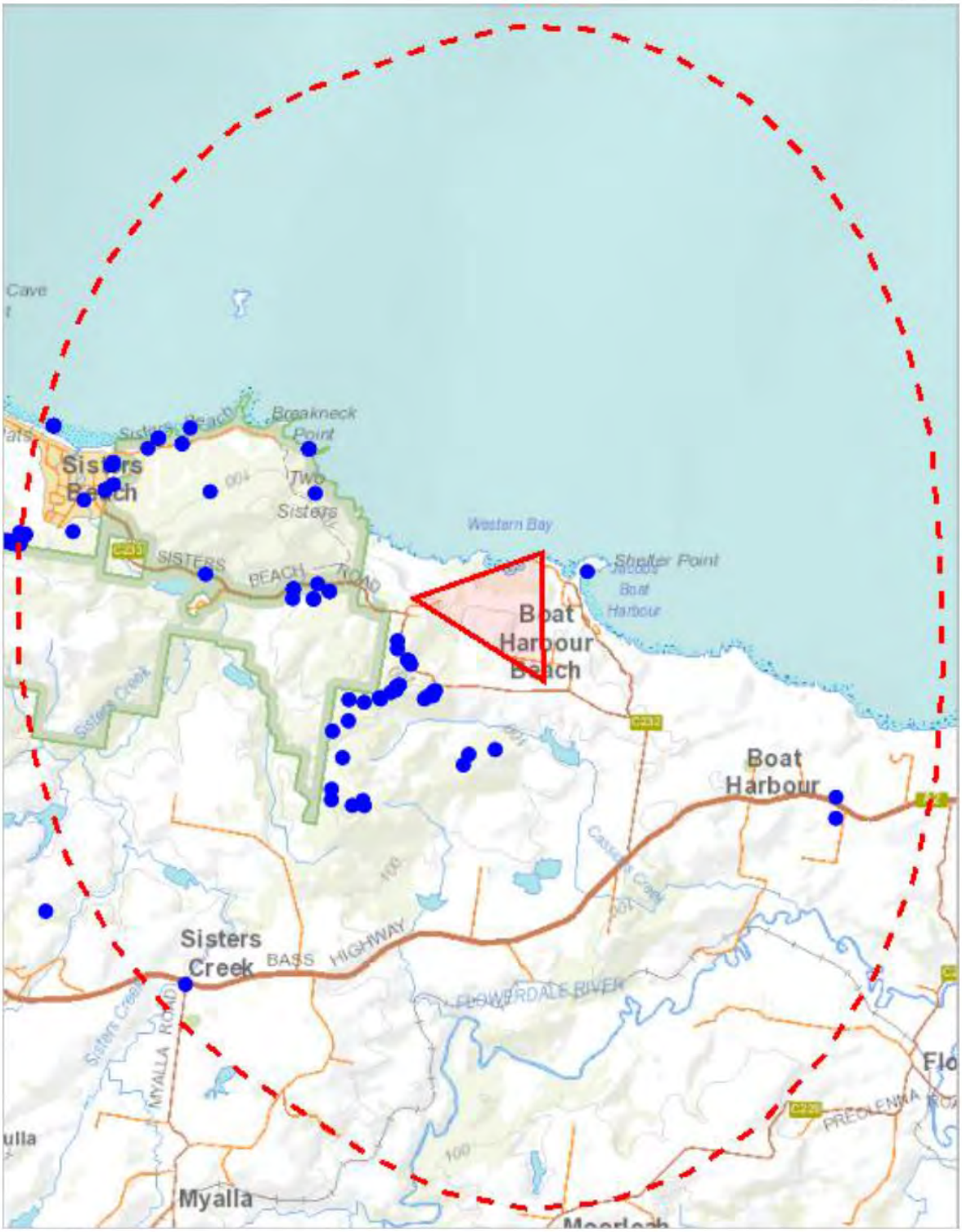
Unverified Records

No unverified records were found!

For more information about threatened species, please Threatened Species Enquiries.
Telephone: (03) 6165 4340
Email: ThreatenedSpecies.Enquiries@dpipwe.tas.gov.au
Address: GPO Box 44, Hobart, Tasmania, Australia, 7000

Threatened flora within 5000 metres

387335, 5473906



378056, 5462164

Please note that some layers may not display at all requested map scales

Threatened flora within 5000 metres

Legend: Verified and Unverified observations

- Point Verified
- Point Unverified
- Line Verified
- Line Unverified
- Polygon Verified
- Polygon Unverified

Legend: Cadastral Parcels

Department *of* Primary Industries, Parks, Water *and* Environment
Page 6 of 48

Threatened flora within 5000 metres

Verified Records

Species	Common Name	SS	NS	Bio	Observation Count	Last Recorded
Acacia ulicifolia	juniper wattle	r		n	1	01-Jan-1993
Banksia serrata	saw banksia	r		n	77	20-Feb-2013
Caladenia campbellii	thickstem fairy fingers	e	CR	e	1	03-Nov-1994
Caladenia patersonii	patersons spider-orchid	v		n	2	16-Oct-1988
Caladenia tonellii	robust fingers	e	CR	e	1	20-Nov-2000
Corunastylis brachystachya	shortspike midge-orchid	e	EN	e	4	17-May-2015
Corunastylis nuda	tiny midge-orchid	r		n	2	01-Jan-1971
Cyrtostylis robusta	large gnat-orchid	r		n	3	16-Sep-2006
Epilobium pallidiflorum	showy willowherb	r		n	1	30-Jun-2005
Leucochrysum albicans var. tricolor	grassland paperdaisy	e	EN	n	1	01-Nov-1890
Lotus australis	australian trefoil	r		n	2	16-Sep-2006
Orthoceras strictum	horned orchid	r		n	4	30-Jan-1991
Spyridium parvifolium var. parvifolium	coast dustymiller	r		n	1	23-Sep-1973
Tetratheca ciliata	northern pinkbells	r		n	5	23-Oct-2014
Thelymitra malvina	mauvetuft sun-orchid	e		n	11	23-Oct-2014

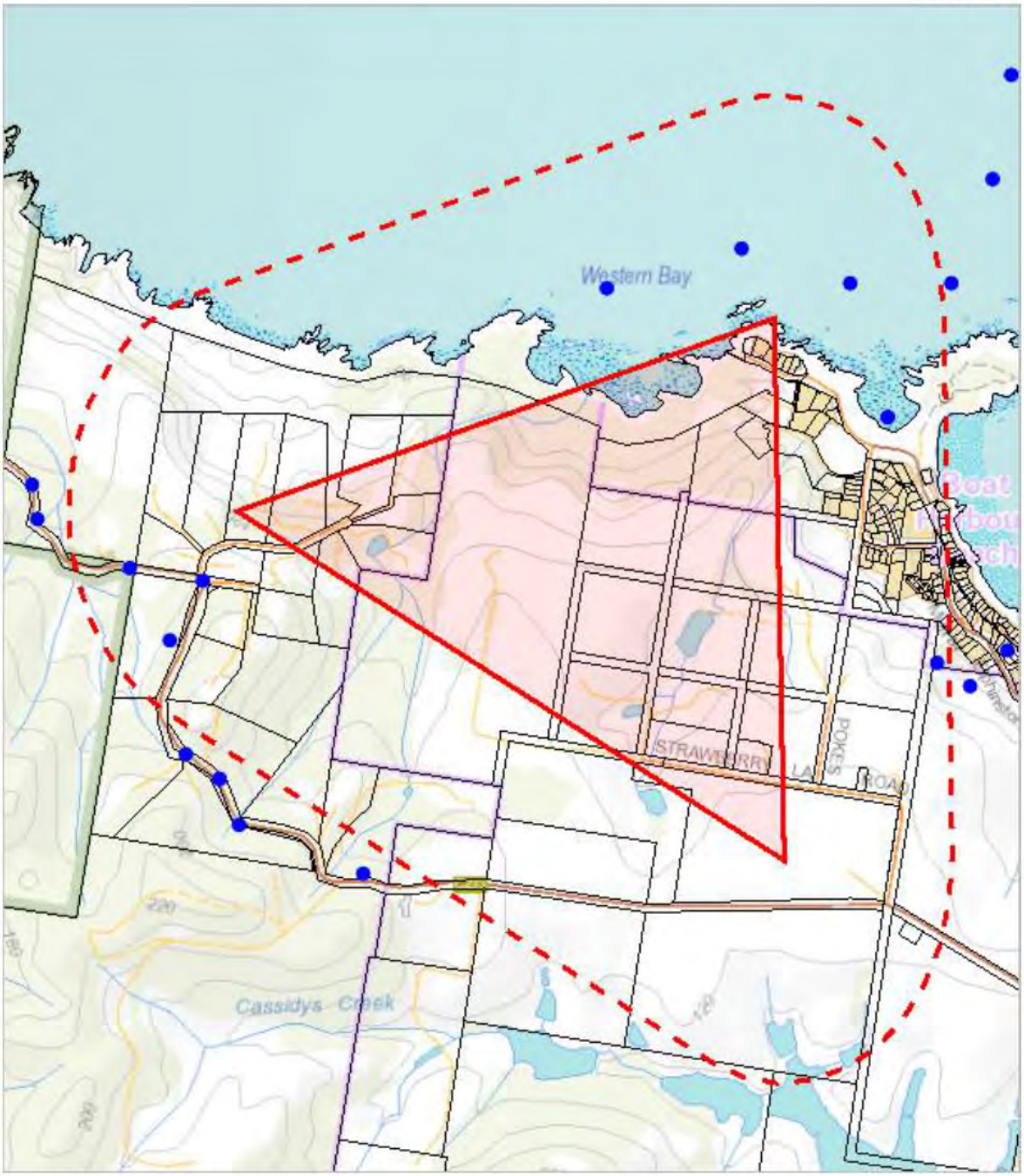
Unverified Records

No unverified records were found!

For more information about threatened species, please Threatened Species Enquiries.
Telephone: (03) 6165 4340
Email: ThreatenedSpecies.Enquiries@dpipwe.tas.gov.au
Address: GPO Box 44, Hobart, Tasmania, Australia, 7000

Threatened fauna within 500 metres

383856, 5469363



381528, 5466714

Please note that some layers may not display at all requested map scales

Threatened fauna within 500 metres

Legend: Verified and Unverified observations

- Point Verified
- Point Unverified
- Line Verified
- Line Unverified
- Polygon Verified
- Polygon Unverified

Legend: Cadastral Parcels

Threatened fauna within 500 metres

Verified Records

Species	Common Name	SS	NS	Bio	Observation Count	Last Recorded
Dasyurus maculatus subsp. maculatus	spotted-tailed quoll	r	VU	n	1	31-May-1966
Eubalaena australis	southern right whale	e	EN	m	6	29-Jul-2006
Lathamus discolor	swift parrot	e	CR	mbe	1	29-Mar-1887
Sarcophilus harrisii	tasmanian devil	e	EN	e	5	19-Nov-2016

Unverified Records

No unverified records were found!

Threatened fauna within 500 metres

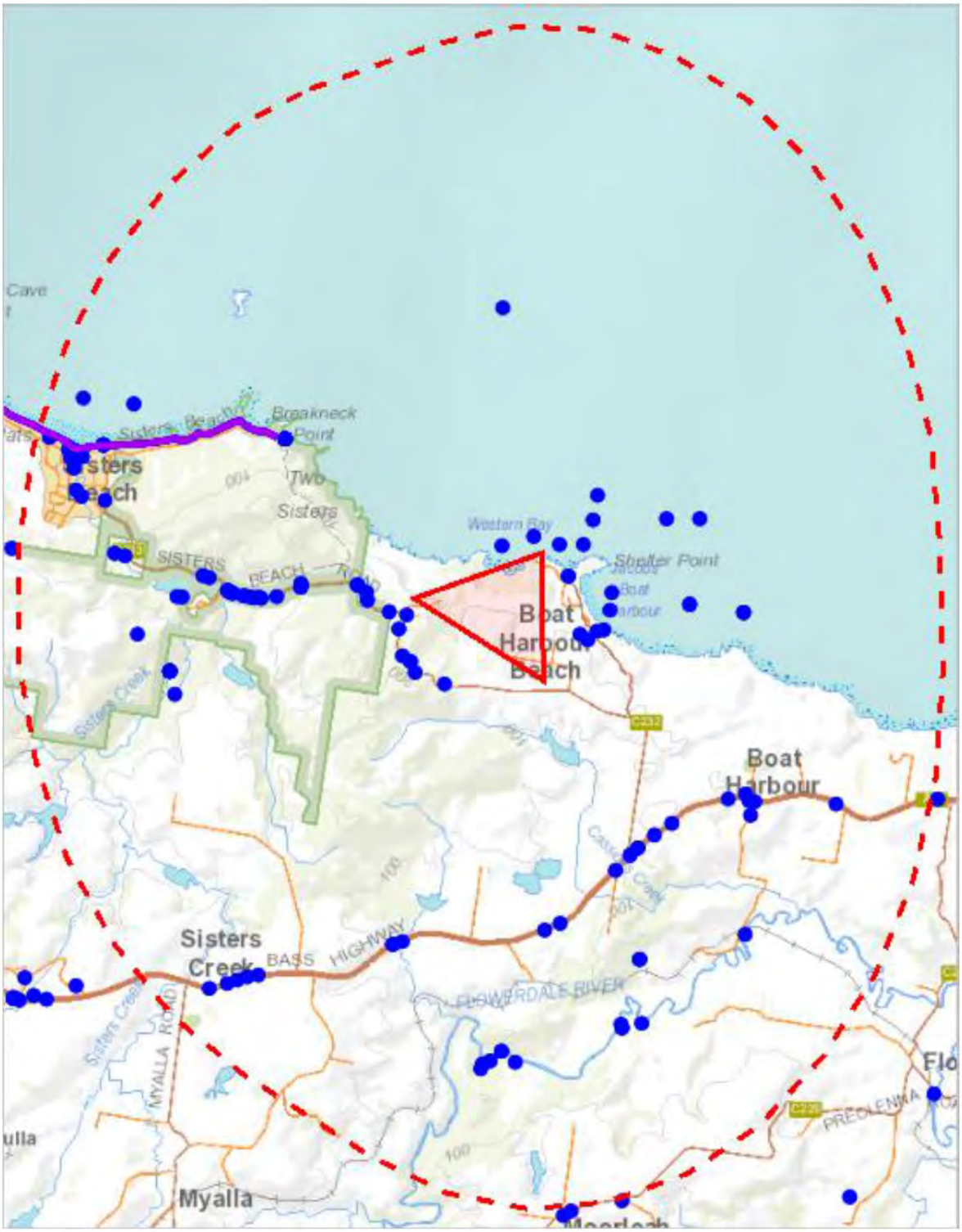
(based on Range Boundaries)

Species	Common Name	SS	NS	BO	Potential	Known	Core
Astacopsis gouldi	giant freshwater crayfish	v	VU	e	1	0	0
Litoria raniformis	green and gold frog	v	VU	n	1	0	0
Pseudemoia pagenstecheri	tussock skink	v		n	1	0	0
Dasyurus maculatus	spotted-tailed quoll	r	VU	n	1	0	0
Aquila audax subsp. fleayi	tasmanian wedge-tailed eagle	e	EN	e	1	0	0
Aquila audax	wedge-tailed eagle	pe	PEN	n	1	0	0
Limnodynastes peroni	striped marsh frog	e		n	1	0	0
Galaxiella pusilla	eastern dwarf galaxias	v	VU	n	5	0	0
Tyto novaehollandiae	masked owl	pe	PVU	n	1	0	1
Lathamus discolor	swift parrot	e	CR	mbe	1	0	0
Prototroctes maraena	australian grayling	v	VU	n	1	0	0
Accipiter novaehollandiae	grey goshawk	e		n	1	0	1
Sarcophilus harrisii	tasmanian devil	e	EN	e	1	0	0
Haliaeetus leucogaster	white-bellied sea-eagle	v		n	2	0	0
Alcedo azurea subsp. diemenensis	azure kingfisher or azure kingfisher (tasmanian)	e	EN	e	0	0	1

For more information about threatened species, please Threatened Species Enquiries.
Telephone: (03) 6165 4340
Email: ThreatenedSpecies.Enquiries@dpipwe.tas.gov.au
Address: GPO Box 44, Hobart, Tasmania, Australia, 7000

Threatened fauna within 5000 metres

387335, 5473906



378056, 5462164

Please note that some layers may not display at all requested map scales

Threatened fauna within 5000 metres

Legend: Verified and Unverified observations

- Point Verified
- Point Unverified
- Line Verified
- Line Unverified
- Polygon Verified
- Polygon Unverified

Legend: Cadastral Parcels

Threatened fauna within 5000 metres

Verified Records

Species	Common Name	SS	NS	Bio	Observation Count	Last Recorded
Accipiter novaehollandiae	grey goshawk	e		n	2	30-Nov-1980
Alcedo azurea subsp. diemenensis	azure kingfisher or azure kingfisher (tasmanian)	e	EN	e	10	27-Aug-2008
Aquila audax	wedge-tailed eagle	pe	PEN	n	1	20-Mar-2014
Aquila audax subsp. fleayi	tasmanian wedge-tailed eagle	e	EN	e	10	15-Nov-2005
Astacopsis gouldi	giant freshwater crayfish	v	VU	e	17	10-Mar-2017
Dasyurus maculatus subsp. maculatus	spotted-tailed quoll	r	VU	n	2	01-Jan-1994
Eubalaena australis	southern right whale	e	EN	m	21	30-Oct-2011
Haliaeetus leucogaster	white-bellied sea-eagle	v		n	10	20-Mar-2014
Lathamus discolor	swift parrot	e	CR	mbe	6	20-Dec-1994
Megaptera novaeangliae	humpback whale	e	VU	m	4	29-Nov-2011
Mirounga leonina subsp. macquariensis	southern elephant seal	pe	PVU	n	2	12-Aug-1995
Perameles gunnii	eastern barred bandicoot		VU	n	20	26-Aug-2013
Sarcophilus harrisii	tasmanian devil	e	EN	e	48	03-Feb-2017
Thalassarche cauta	shy albatross	v	VU	n	1	31-Mar-2013
Thinornis rubricollis	hooded plover		VU	n	16	25-Mar-2016
Thylacinus cynocephalus	thylacine	x	EX	ex	1	01-Jan-1964
Tyto novaehollandiae	masked owl	pe	PVU	n	1	28-Feb-1981

Unverified Records

No unverified records were found!

Threatened fauna within 5000 metres

(based on Range Boundaries)

Species	Common Name	SS	NS	BO	Potential	Known	Core
Astacopsis gouldi	giant freshwater crayfish	v	VU	e	1	0	0
Litoria raniformis	green and gold frog	v	VU	n	1	0	0
Pseudemoia pagenstecheri	tussock skink	v		n	1	0	0
Dasyurus maculatus	spotted-tailed quoll	r	VU	n	1	0	0
Aquila audax subsp. fleayi	tasmanian wedge-tailed eagle	e	EN	e	1	0	0
Aquila audax	wedge-tailed eagle	pe	PEN	n	1	0	0
Limnodynastes peroni	striped marsh frog	e		n	1	0	0
Galaxiella pusilla	eastern dwarf galaxias	v	VU	n	12	0	0
Tyto novaehollandiae	masked owl	pe	PVU	n	1	0	1
Perameles gunnii	eastern barred bandicoot		VU	n	1	0	0
Lathamus discolor	swift parrot	e	CR	mbe	1	0	0
Prototroctes maraena	australian grayling	v	VU	n	1	0	0
Accipiter novaehollandiae	grey goshawk	e		n	1	0	1
Sarcophilus harrisii	tasmanian devil	e	EN	e	1	0	0
Haliaeetus leucogaster	white-bellied sea-eagle	v		n	2	0	0
Alcedo azurea subsp. diemenensis	azure kingfisher or azure kingfisher (tasmanian)	e	EN	e	0	0	1

For more information about threatened species, please Threatened Species Enquiries.
Telephone: (03) 6165 4340
Email: ThreatenedSpecies.Enquiries@dpipwe.tas.gov.au
Address: GPO Box 44, Hobart, Tasmania, Australia, 7000

***** No Raptor nests or sightings found within 500 metres. *****

Raptor nests and sightings within 5000 metres

387335, 5473906

378056, 5462164

Please note that some layers may not display at all requested map scales

Raptor nests and sightings within 5000 metres

Legend: Verified and Unverified observations

- Point Verified
- Point Unverified
- Line Verified
- Line Unverified
- Polygon Verified
- Polygon Unverified

Legend: Cadastral Parcels

Raptor nests and sightings within 5000 metres

Verified Records

Nest Id/Location Foreign Id	Species	Common Name	Obs Type	Observation Count	Last Recorded
1275	Falco peregrinus	peregrine falcon	Nest	1	12-Nov-2003
81	Haliaeetus leucogaster	white-bellied sea-eagle	Nest	1	01-Jan-1985
861	Aquila audax subsp. fleayi	tasmanian wedge-tailed eagle	Nest	7	15-Nov-2005
	Accipiter novaehollandiae	grey goshawk	Sighting	2	30-Nov-1980
	Aquila audax subsp. fleayi	tasmanian wedge-tailed eagle	Sighting	3	14-Feb-1980
	Falco longipennis	australian hobby	Sighting	1	28-Feb-1981
	Falco peregrinus	peregrine falcon	Sighting	1	30-Nov-1980
	Haliaeetus leucogaster	white-bellied sea-eagle	Sighting	8	31-May-1981
	Tyto novaehollandiae	masked owl	Sighting	1	28-Feb-1981

Unverified Records

No unverified records were found!

Raptor nests and sightings within 5000 metres

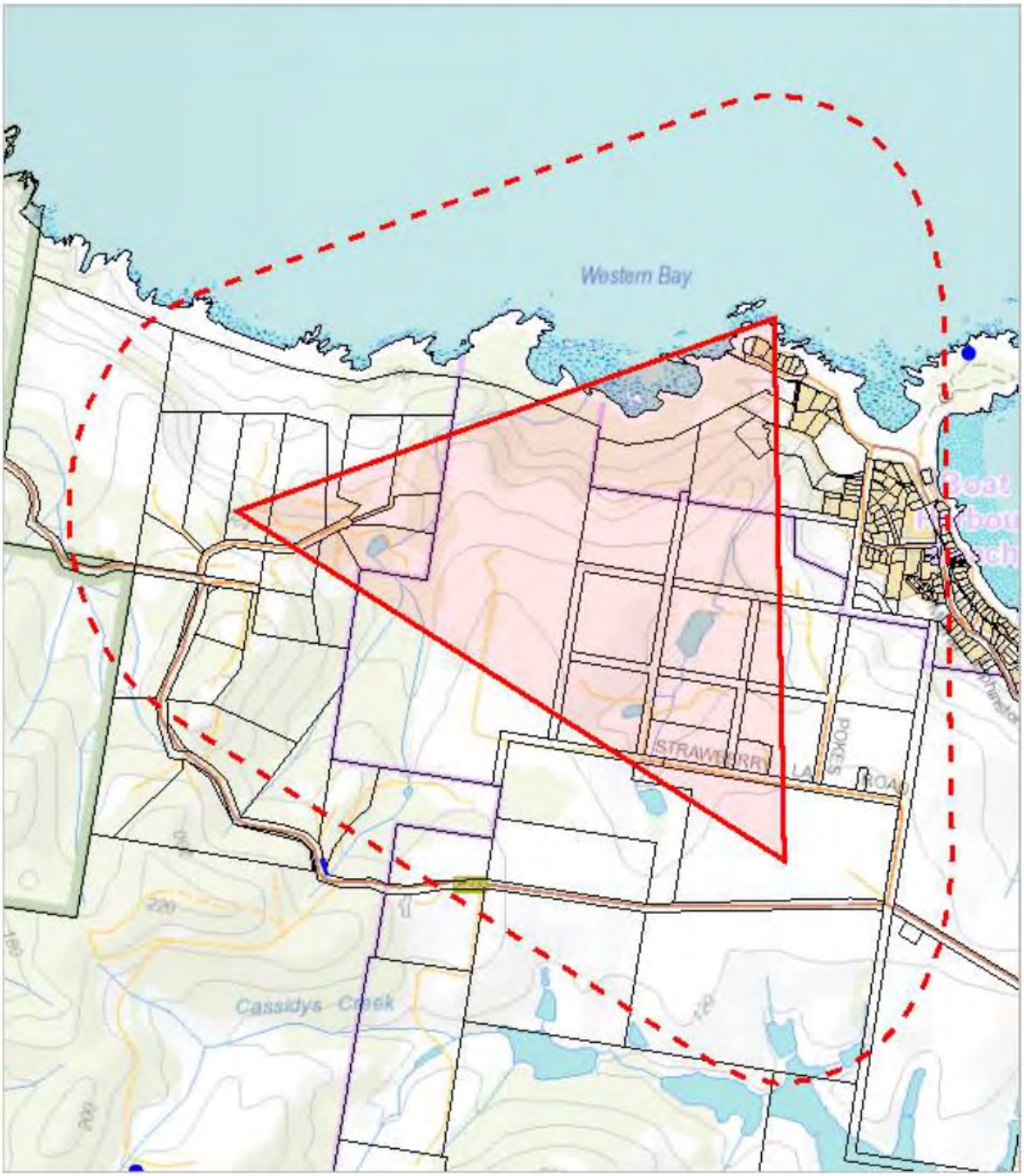
(based on Range Boundaries)

Species	Common Name	SS	NS	Potential	Known	Core
Aquila audax	wedge-tailed eagle	pe	PEN	1	0	0
Aquila audax subsp. fleayi	tasmanian wedge-tailed eagle	e	EN	1	0	0
Tyto novaehollandiae	masked owl	pe	PVU	1	0	1
Haliaeetus leucogaster	white-bellied sea-eagle	v		2	0	0
Accipiter novaehollandiae	grey goshawk	e		1	0	1

For more information about raptor nests, please contact Threatened Species Enquiries.
Telephone: (03) 6165 4340
Email: ThreatenedSpecies.Enquiries@dpipwe.tas.gov.au
Address: GPO Box 44, Hobart, Tasmania, Australia, 7000

Tas Management Act Weeds within 500 m

383856, 5469363



381528, 5466714

Please note that some layers may not display at all requested map scales

Tas Management Act Weeds within 500 m

Legend: Verified and Unverified observations

- Point Verified
- Point Unverified
- Line Verified
- Line Unverified
- Polygon Verified
- Polygon Unverified

Legend: Cadastral Parcels

Tas Management Act Weeds within 500 m

Verified Records

Species	Common Name	Observation Count	Last Recorded
Chrysanthemoides monilifera subsp. monilifera	boneseed	1	01-Jan-1992
Rubus fruticosus	blackberry	1	24-Feb-2012

Unverified Records

For more information about introduced weed species, please visit the following URL for contact details in your area:

http://dpipwe.tas.gov.au/invasive-species/weeds

Tas Management Act Weeds within 5000 m

387335, 5473906

378056, 5462164

Please note that some layers may not display at all requested map scales

Tas Management Act Weeds within 5000 m

Legend: Verified and Unverified observations

- Point Verified
- Point Unverified
- Line Verified
- Line Unverified
- Polygon Verified
- Polygon Unverified

Legend: Cadastral Parcels

Tas Management Act Weeds within 5000 m

Verified Records

Species	Common Name	Observation Count	Last Recorded
Chrysanthemoides monilifera subsp. monilifera	boneseed	2	25-Sep-2007
Cortaderia sp.	pampas grass	1	15-Jun-2009
Erica lusitanica	spanish heath	6	01-Mar-2017
Genista monspessulana	montpellier broom	5	25-Jul-2011
Hypericum perforatum subsp. veronense	perforated st johns-wort	1	02-Feb-2001
Rubus fruticosus	blackberry	18	09-Jan-2013
Ulex europaeus	gorse	1	08-Jan-1995

Unverified Records

For more information about introduced weed species, please visit the following URL for contact details in your area:

http://dpipwe.tas.gov.au/invasive-species/weeds

***** No Priority Weeds found within 500 metres *****

Priority Weeds within 5000 m

387335, 5473906

378056, 5462164

Please note that some layers may not display at all requested map scales

Department *of* Primary Industries, Parks, Water *and* Environment
Page 23 of 48

Priority Weeds within 5000 m

Legend: Verified and Unverified observations

- Point Verified
- Point Unverified
- Line Verified
- Line Unverified
- Polygon Verified
- Polygon Unverified

Legend: Cadastral Parcels

Priority Weeds within 5000 m

Verified Records

Species	Common Name	Observation Count	Last Recorded
Pittosporum undulatum	sweet pittosporum	1	01-Aug-1998

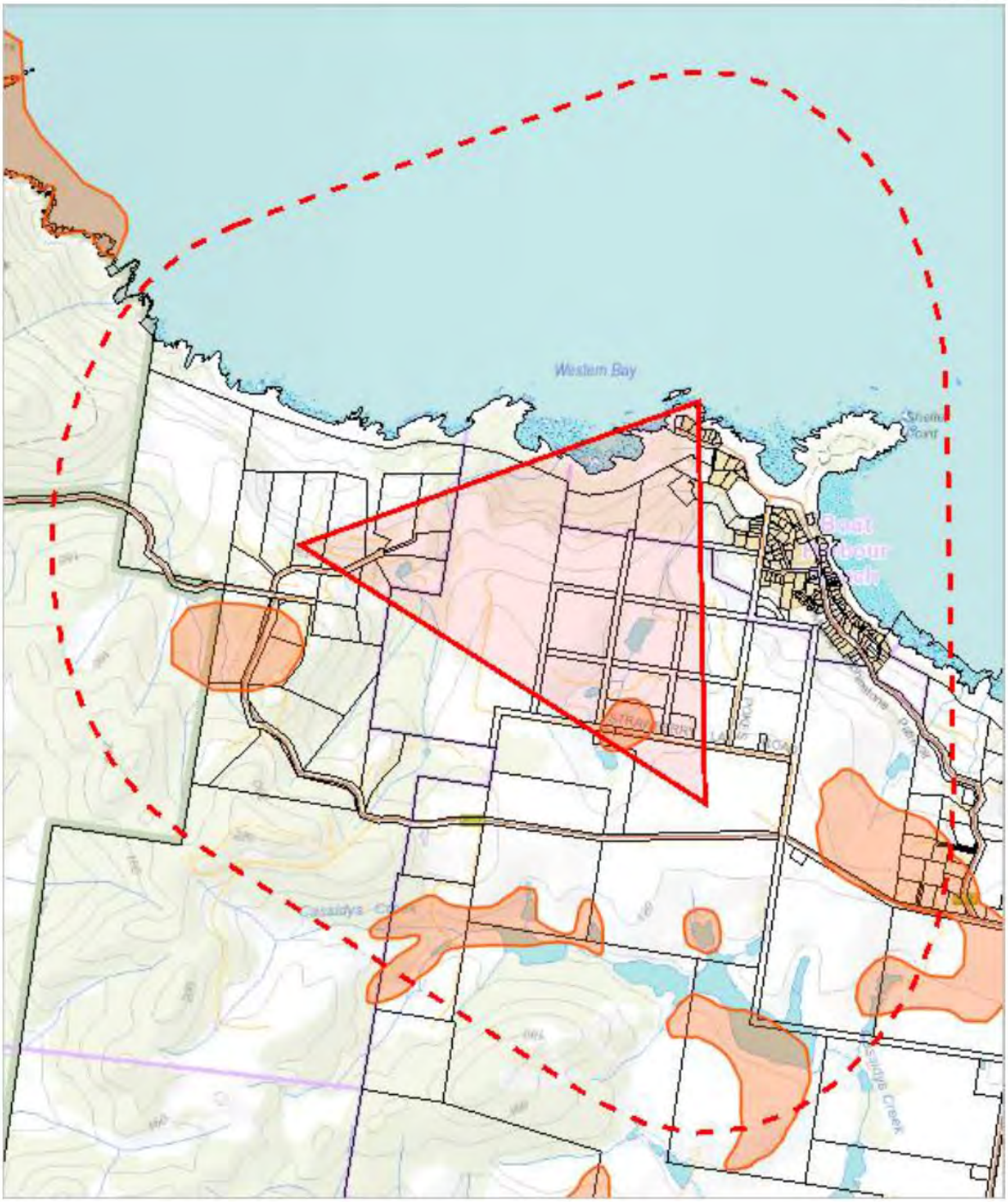
Unverified Records

For more information about introduced weed species, please visit the following URL for contact details in your area:

http://dpipwe.tas.gov.au/invasive-species/weeds

Geoconservation sites within 1000 metres

384243, 5469868



381142, 5466209

Please note that some layers may not display at all requested map scales

Geoconservation sites within 1000 metres

Legend: Geoconservation (NVA)

Legend: Cadastral Parcels

Geoconservation sites within 1000 metres

Id	Name	Statement of Significance	Geographical Significance	Status
3272	Cassidys Creek basalt sequence with megacrysts	These basalts are mineralogically and petrologically unusual in a Tasmanian context.	Region	Listed
2584	The Two Sisters Soils	Notable example of type	Region	Listed

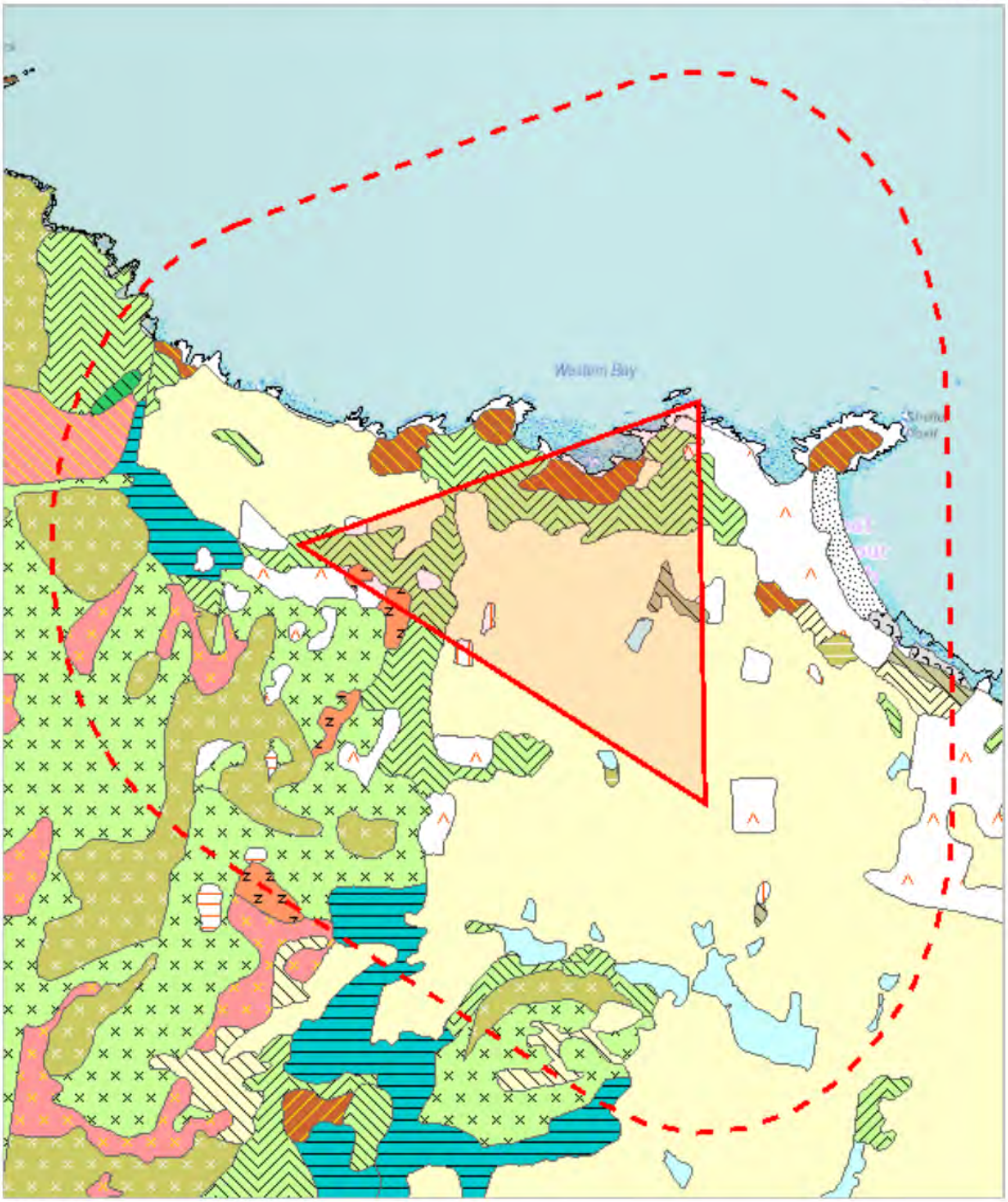
For more information about the Geoconservation Database, please visit the website: http://dpipwe.tas.gov.au/conservation/geoconservation
or contact the Geoconservation Officer:

Telephone: (03) 6165 4401
Email: Geoconservation.Enquiries@dpipwe.tas.gov.au
Address: GPO Box 44, Hobart, Tasmania, Australia, 7000

***** No Acid Sulfate Soils found within 1000 metres *****

TASVEG 3.0 Communities within 1000 metres

384243, 5469868



381142, 5466209

Please note that some layers may not display at all requested map scales

TASVEG 3.0 Communities within 1000 metres

Legend: TASVEG 3.0

- DAC - Eucalyptus amygdalina coastal forest and woodland
- DAD - Eucalyptus amygdalina forest and woodland on dolerite
- DAS - Eucalyptus amygdalina forest and woodland on sandstone
- DAM - Eucalyptus amygdalina forest on mudstone
- DAZ - Eucalyptus amygdalina inland forest and woodland on Cainozoic deposits
- DSC - Eucalyptus amygdalina - Eucalyptus obliqua damp sclerophyll forest
- DBA - Eucalyptus barberi forest and woodland
- DCO - Eucalyptus coccifera forest and woodland
- DCR - Eucalyptus cordata forest
- DDP - Eucalyptus dalrympleana - Eucalyptus pauciflora forest and woodland
- DDE - Eucalyptus delegatensis dry forest and woodland
- DGL - Eucalyptus globulus dry forest and woodland
- DGW - Eucalyptus gunnii woodland
- DMO - Eucalyptus morrisbyi forest and woodland
- DNI - Eucalyptus nitida dry forest and woodland
- DNF - Eucalyptus nitida Furneaux forest
- DOB - Eucalyptus obliqua dry forest
- DOV - Eucalyptus ovata forest and woodland
- DOW - Eucalyptus ovata heathy woodland
- DPO - Eucalyptus pauciflora forest and woodland not on dolerite
- DPD - Eucalyptus pauciflora forest and woodland on dolerite
- DPE - Eucalyptus perriniana forest and woodland
- DPU - Eucalyptus pulchella forest and woodland
- DRI - Eucalyptus risdonii forest and woodland
- DRO - Eucalyptus rodwayi forest and woodland
- DSO - Eucalyptus sieberi forest and woodland not on granite
- DSG - Eucalyptus sieberi forest and woodland on granite
- DTD - Eucalyptus tenuiramis forest and woodland on dolerite
- DTG - Eucalyptus tenuiramis forest and woodland on granite
- DTO - Eucalyptus tenuiramis forest and woodland on sediments
- DVF - Eucalyptus viminalis Furneaux forest and woodland
- DVG - Eucalyptus viminalis grassy forest and woodland
- DVC - Eucalyptus viminalis - Eucalyptus globulus coastal forest and woodland
- DKW - King Island Eucalypt woodland
- DMW - Midlands woodland complex
- WBR - Eucalyptus brookeriana wet forest
- WDA - Eucalyptus dalrympleana forest
- WDL - Eucalyptus delegatensis forest over Leptospermum
- WDR - Eucalyptus delegatensis forest over rainforest
- WDB - Eucalyptus delegatensis forest with broad-leaf shrubs
- WDU - Eucalyptus delegatensis wet forest (undifferentiated)
- WGK - Eucalyptus globulus King Island forest
- WGL - Eucalyptus globulus wet forest
- WNL - Eucalyptus nitida forest over Leptospermum
- WNR - Eucalyptus nitida forest over rainforest
- WNU - Eucalyptus nitida wet forest (undifferentiated)
- WOL - Eucalyptus obliqua forest over Leptospermum
- WOR - Eucalyptus obliqua forest over rainforest
- WOB - Eucalyptus obliqua forest with broad-leaf shrubs
- WOU - Eucalyptus obliqua wet forest (undifferentiated)
- WRE - Eucalyptus regnans forest
- WSU - Eucalyptus subcrenulata forest and woodland
- WVI - Eucalyptus viminalis wet forest
- RPF - Athrotaxis cupressoides - Nothofagus gunnii short rainforest
- RPW - Athrotaxis cupressoides open woodland
- RPP - Athrotaxis cupressoides rainforest
- RKF - Athrotaxis selaginoides - Nothofagus gunnii short rainforest
- RKP - Athrotaxis selaginoides rainforest
- RKS - Athrotaxis selaginoides subalpine scrub

Department *of* Primary Industries, Parks, Water *and* Environment

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TASVEG 3.0 Communities within 1000 metres

- RCO - Coastal rainforest
- RSH - Highland low rainforest and scrub
- RKX - Highland rainforest scrub with dead Athrotaxis selaginoides
- RHP - Lagarostrobos franklinii rainforest and scrub
- RMT - Nothofagus - Atherosperma rainforest
- RML - Nothofagus - Leptospermum short rainforest
- RMS - Nothofagus - Phyllocladus short rainforest
- RFS - Nothofagus gunnii rainforest and scrub
- RMU - Nothofagus rainforest (undifferentiated)
- RFE - Rainforest fernland
- NAD - Acacia dealbata forest
- NAR - Acacia melanoxylon forest on rises
- NAF - Acacia melanoxylon swamp forest
- NAL - Allocasuarina littoralis forest
- NAV - Allocasuarina verticillata forest
- NBS - Banksia serrata woodland
- NBA - Bursaria - Acacia woodland and scrub
- NCR - Callitris rhomboidea forest
- NLE - Leptospermum forest
- NLM - Leptospermum lanigerum - Melaleuca squarrosa swamp forest
- NLA - Leptospermum scoparium - Acacia mucronata forest
- NME - Melaleuca ericifolia swamp forest
- NLN - Subalpine Leptospermum nitidum woodland
- AHF - Fresh water aquatic herbland
- ASF - Freshwater aquatic sedgeland and rushland
- AHL - Lacustrine herbland
- AHS - Saline aquatic herbland
- ARS - Saline sedgeland/rushland
- AUS - Saltmarsh (undifferntiated)
- ASS - Succulent saline herbland
- AWU - Wetland (undifferentiated)
- SAL - Acacia longifolia coastal scrub
- SBM - Banksia marginata wet scrub
- SBR - Broad-leaf scrub
- SCH - Coastal heathland
- SSC - Coastal scrub
- SCA - Coastal scrub on alkaline sands
- SRE - Eastern riparian scrub
- SED - Eastern scrub on dolerite
- SCL - Heathland on calcareous substrates
- SKA - Kunzea ambigua regrowth scrub
- SLG - Leptospermum glaucescens heathland and scrub
- SLL - Leptospermum lanigerum scrub
- SLS - Leptospermum scoparium heathland and scrub
- SLW - Leptospermum scrub
- SRF - Leptospermum with rainforest scrub
- SMP - Melaleuca pustulata scrub
- SMM - Melaleuca squamea heathland
- SMR - Melaleuca squarrosa scrub
- SRH - Rookery halophytic herbland
- SSK - Scrub complex on King Island
- SSZ - Spray zone coastal complex
- SHS - Subalpine heathland
- SWR - Western regrowth complex
- SSW - Western subalpine scrub
- SWW - Western wet scrub
- SHW - Wet heathland
- HCH - Alpine coniferous heathland
- HCM - Cushion moorland
- HHE - Eastern alpine heathland
- HSE - Eastern alpine sedgeland

TASVEG 3.0 Communities within 1000 metres

- HUE - Eastern alpine vegetation (undifferentiated)
- HHW - Western alpine heathland
- HSW - Western alpine sedgeland/herbland
- MAP - Alkaline pans
- MBU - Buttongrass moorland (undifferentiated)
- MBS - Buttongrass moorland with emergent shrubs
- MBE - Eastern buttongrass moorland
- MGH - Highland grassy sedgeland
- MBP - Pure buttongrass moorland
- MRR - Restionaceae rushland
- MBR - Sparse buttongrass moorland on slopes
- MSP - Sphagnum peatland
- MDS - Subalpine Diplarrena latifolia rushland
- MBW - Western buttongrass moorland
- MSW - Western lowland sedgeland
- GHC - Coastal grass and herbfield
- GPH - Highland Poa grassland
- GCL - Lowland grassland complex
- GSL - Lowland grassy sedgeland
- GPL - Lowland Poa labillardierei grassland
- GTL - Lowland Themeda triandra grassland
- GRP - Rockplate grassland
- FAG - Agricultural land
- FUM - Extra-urban miscellaneous
- FMG - Marram grassland
- FPE - Permanent easements
- FPL - Plantations for silviculture
- FPF - Pteridium esculentum fernland
- FRG - Regenerating cleared land
- FSM - Spartina marshland
- FPU - Unverified plantations for silviculture
- FUR - Urban areas
- FWU - Weed infestation
- QCS - Coastal slope complex
- QCT- Coastal terrace mosaic
- QKB - Kelp beds
- QAM - Macquarie alpine mosaic
- QMI - Mire
- QST - Short tussock grassland/rushland with herbs
- QTT - Tall tussock grassland with megaherbs
- ORO - Lichen lithosere
- OSM - Sand, mud
- OAQ - Water, sea

Legend: Cadastral Parcels

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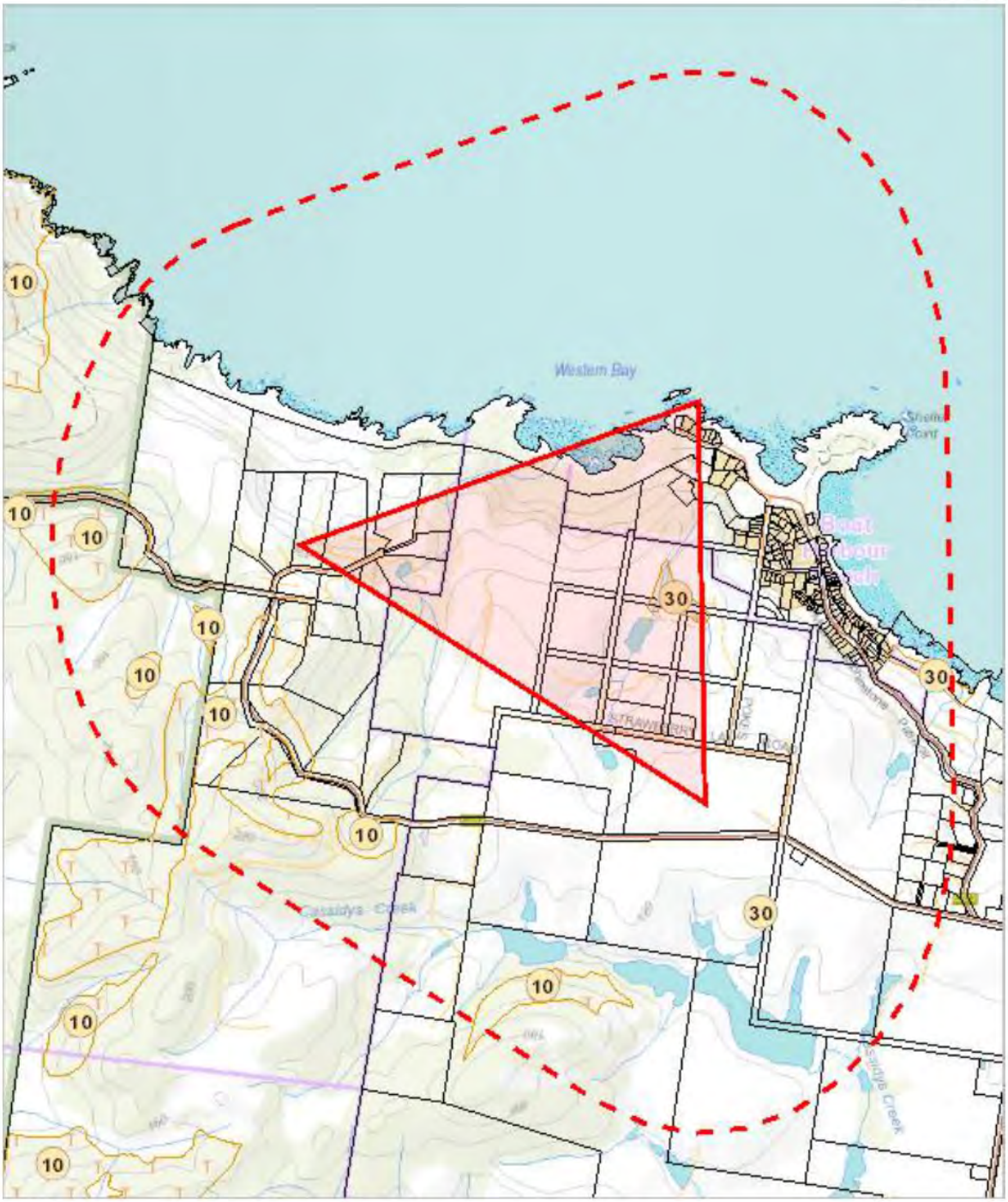
TASVEG 3.0 Communities within 1000 metres

Code	Community	Emergent Species
DNI	(DNI) Eucalyptus nitida dry forest and woodland	
DOB	(DOB) Eucalyptus obliqua dry forest	
DVG	(DVG) Eucalyptus viminalis grassy forest and woodland	
FAG	(FAG) Agricultural land	
FPU	(FPU) Unverified plantations for silviculture	
FRG	(FRG) Regenerating cleared land	
FUM	(FUM) Extra-urban miscellaneous	
FUR	(FUR) Urban areas	
FWU	(FWU) Weed infestation	
NAR	(NAR) Acacia melanoxylon forest on rises	
NBS	(NBS) Banksia serrata woodland	EN
NBS	(NBS) Banksia serrata woodland	
NME	(NME) Melaleuca ericifolia swamp forest	
OAQ	(OAQ) Water, sea	
ORO	(ORO) Lichen lithosere	
OSM	(OSM) Sand, mud	
SHW	(SHW) Wet heathland	
SLW	(SLW) Leptospermum scrub	
SSC	(SSC) Coastal scrub	
SWW	(SWW) Western wet scrub	
WOU	(WOU) Eucalyptus obliqua wet forest (undifferentiated)	

For more information contact: Coordinator, Tasmanian Vegetation Monitoring and Mapping Program.
Telephone: (03) 6165 4320
Email: TVMMPSupport@dpipwe.tas.gov.au
Address: GPO Box 44, Hobart, Tasmania, Australia, 7000

Threatened Communities (TNVC 2014) within 1000 metres

384243, 5469868



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Threatened Communities (TNVC 2014) within 1000 metres

Legend: Threatened Communities

- 1 - Alkaline pans
- 2 - Allocasuarina littoralis forest
- 3 - Athrotaxis cupressoides/Nothofagus gunnii short rainforest
- 4 - Athrotaxis cupressoides open woodland
- 5 - Athrotaxis cupressoides rainforest
- 6 - Athrotaxis selaginoides/Nothofagus gunni short rainforest
- 7 - Athrotaxis selaginoides rainforest
- 8 - Athrotaxis selaginoides subalpine scrub
- 9 - Banksia marginata wet scrub
- 10 - Banksia serrata woodland
- 11 - Callitris rhomboidea forest
- 13 - Cushion moorland
- 14 -Eucalyptus amygdalina forest and woodland on sandstone
- 15 - Eucalyptus amygdalina inland forest and woodland on cainozoic deposits
- 16 - Eucalyptus brookeriana wet forest
- 17 - Eucalyptus globulus dry forest and woodland
- 18 - Eucalyptus globulus King Island forest
- 19 - Eucalyptus morrisbyi forest and woodland
- 20 - Eucalyptus ovata forest and woodland
- 21 - Eucalyptus risdonii forest and woodland
- 22 - Eucalyptus tenuiramis forest and woodland on sediments
- 23 - Eucalyptus viminalis - Eucalyptus globulus coastal forest and woodland
- 24 - Eucalyptus viminalis Furneaux forest and woodland
- 25 - Eucalyptus viminalis wet forest
- 26 - Heathland on calcareous substrates
- 27 - Heathland scrub complex at Wingaroo
- 28 - Highland grassy sedgeland
- 29 - Highland Poa grassland
- 30 - Melaleuca ericifolia swamp forest
- 31 - Melaleuca pustulata scrub
- 32 - Notelaea - Pomaderris - Beyeria forest
- 33 - Rainforest fernland
- 34 - Riparian scrub
- 35 - Seabird rookery complex
- 36 - Sphagnum peatland
- 36A - Spray zone coastal complex
- 37 - Subalpine Diplarrena latifolia rushland
- 38 - Subalpine Leptospermum nitidum woodland
- 39 - Wetlands

Legend: Cadastral Parcels

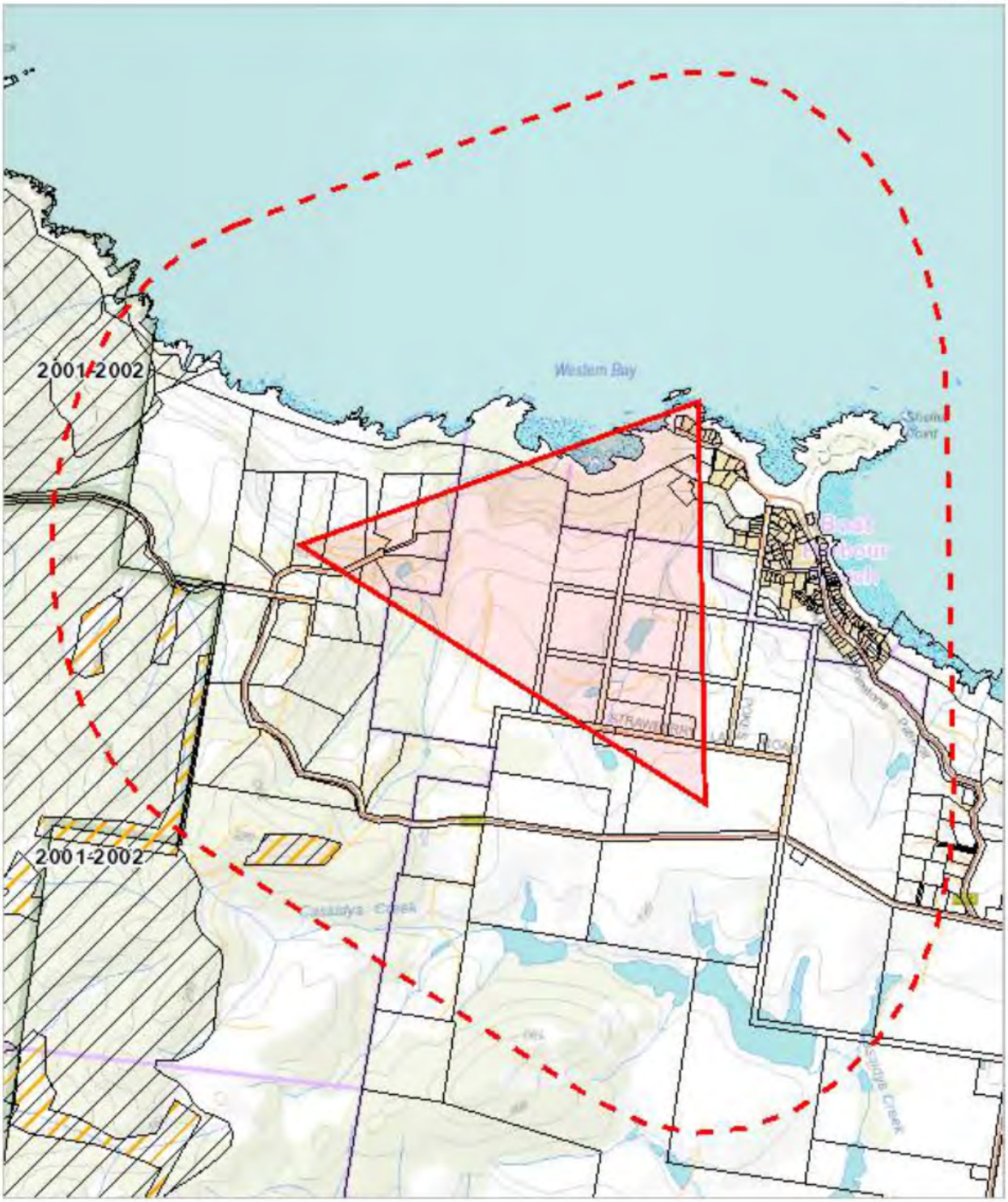
Threatened Communities (TNVC 2014) within 1000 metres

Scheduled Community Id	Scheduled Community Name
10	Banksia serrata woodland
30	Melaleuca ericifolia swamp forest

For more information contact: Coordinator, Tasmanian Vegetation Monitoring and Mapping Program.
Telephone: (03) 6165 4320
Email: TVMMPSupport@dpipwe.tas.gov.au
Address: GPO Box 44, Hobart, Tasmania, Australia, 7000

Fire History (All) within 1000 metres

384243, 5469868



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Fire History (All) within 1000 metres

Legend: Fire History All

- Bushfire-Unknown Category
- Completed Planned Burn
- Bushfire

Legend: Cadastral Parcels

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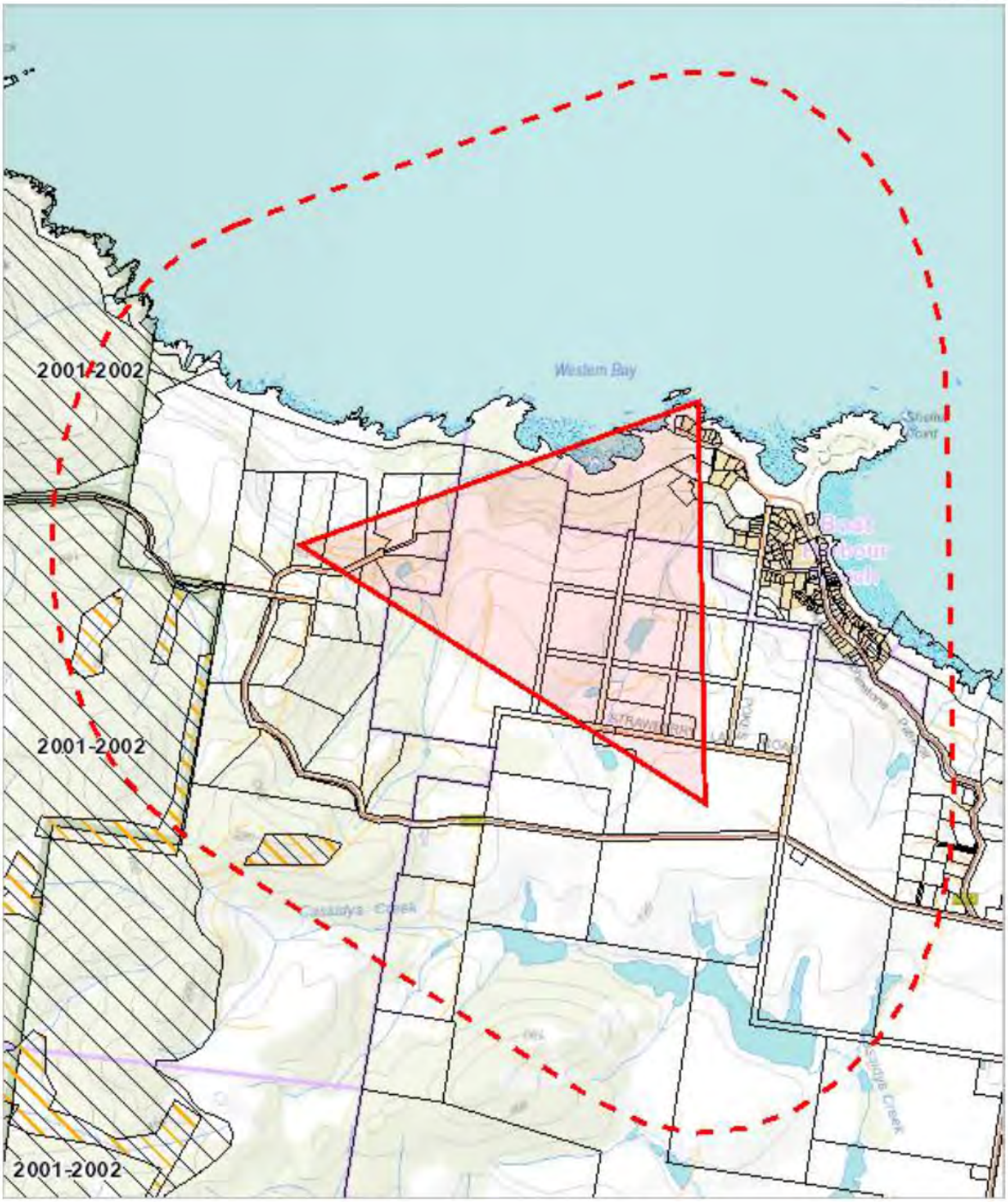
Fire History (All) within 1000 metres

Incident Number	Fire Name	Ignition Date	Fire Type	Ignition Cause	Fire Area (HA)
1001	Two Sisters, Rocky Cape NP	10-Apr-1984	Bushfire	Undetermined	9.71362363
1004	Sisters Beach 2	09-Mar-2002	Bushfire	Deliberate	243.6609002
1006	Sisters Beach 1	13-Feb-2002	Bushfire	Undetermined	271.70318711
RCKNP012APZ	Banksia Corner RCKNP012APZ	25-May-2015	Planned Burn	Planned Burn	44.34133782

For more information about Fire History, please contact the Manager Community Protection Planning, Tasmania Fire Service.
Telephone: 1800 000 699
Email: planning@fire.tas.gov.au
Address: cnr Argyle and Melville Streets, Hobart, Tasmania, Australia, 7000

Fire History (Last Burnt) within 1000 metres

384243, 5469868



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Please note that some layers may not display at all requested map scales

Fire History (Last Burnt) within 1000 metres

Legend: Fire History Last

- Bushfire-Unknown category
- Completed Planned Burn
- Bushfire

Legend: Cadastral Parcels

Department *of* Primary Industries, Parks, Water *and* Environment

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Fire History (Last Burnt) within 1000 metres

Incident Number	Fire Name	Ignition Date	Fire Type	Ignition Cause	Fire Area (HA)
1001	Two Sisters, Rocky Cape NP	10-Apr-1984	Bushfire	Undetermined	9.71362363
1004	Sisters Beach 2	09-Mar-2002	Bushfire	Deliberate	243.6609002
1006	Sisters Beach 1	13-Feb-2002	Bushfire	Undetermined	271.70318711
RCKNP012APZ	Banksia Corner RCKNP012APZ	25-May-2015	Planned Burn	Planned Burn	44.34133782

For more information about Fire History, please contact the Manager Community Protection Planning, Tasmania Fire Service.
Telephone: 1800 000 699
Email: planning@fire.tas.gov.au
Address: cnr Argyle and Melville Streets, Hobart, Tasmania, Australia, 7000

Reserves within 1000 metres

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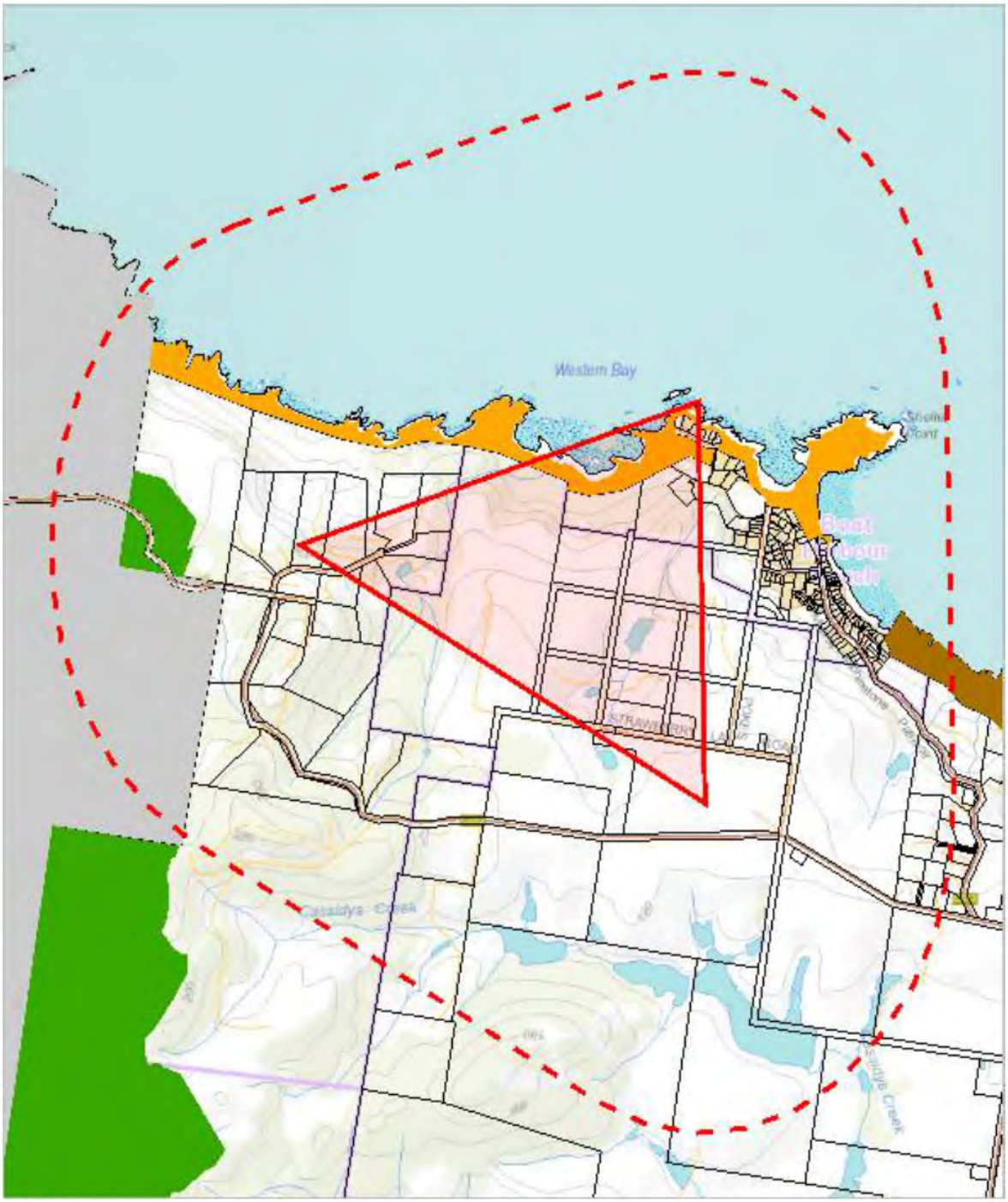

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Please note that some layers may not display at all requested map scales

Reserves within 1000 metres

Legend: Tasmanian Reserve Estate

- Conservation Area
- Game Reserve
- Historic Site
- Indigenous Protected Area
- National Park
- Nature Reserve
- Nature Recreation Area
- Regional Reserve
- State Reserve
- Wellington Park
- Public authority land within WHA
- Future Potential Production Forest
- Informal Reserve on State Forest or Forestry Tas. managed land
- Informal Reserve on other public land
- Conservation Covenant (NCA)
- Private Sanctuary
- Private land within WHA
- Management Agreement
- Management Agreement and Stewardship Agreement
- Stewardship Agreement
- Part 5 Agreement (Meander Dam Offset)
- Other Private Reserve

Legend: Cadastral Parcels

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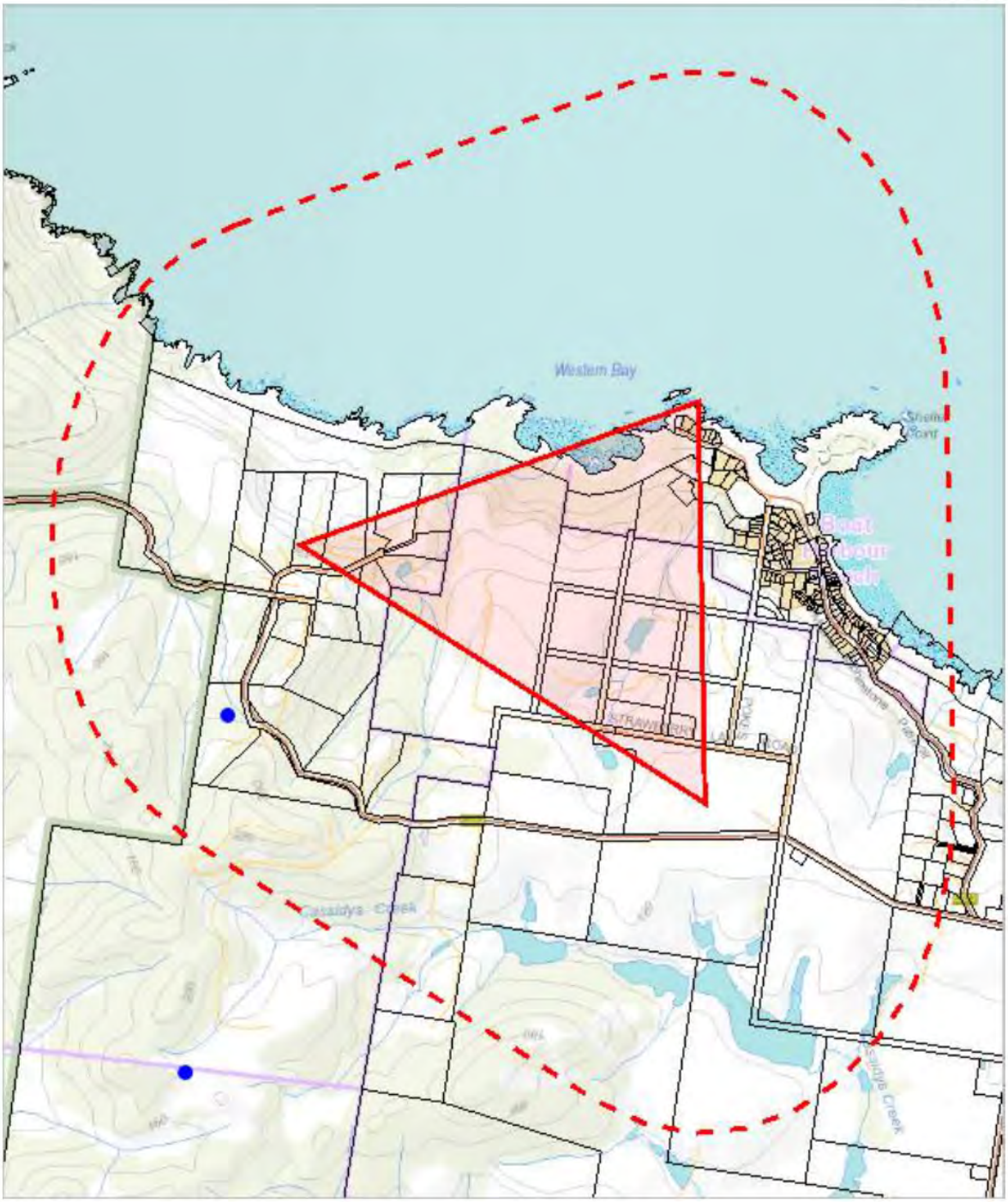
Reserves within 1000 metres

Name	Classification	Status	Area (HA)
Rocky Cape National Park	National Park	Dedicated Formal Reserve	0.001
Rocky Cape National Park	National Park	Dedicated Formal Reserve	0.003
Rocky Cape National Park	National Park	Dedicated Formal Reserve	0.16
Rocky Cape National Park	National Park	Dedicated Formal Reserve	0.195
Rocky Cape National Park	National Park	Dedicated Formal Reserve	0.199
Rocky Cape National Park	National Park	Dedicated Formal Reserve	290.5970000 0000004
Rocky Cape National Park	National Park	Dedicated Formal Reserve	2712.91
Table Cape Conservation Area	Conservation Area	Other Formal Reserve	0.001
Table Cape Conservation Area	Conservation Area	Other Formal Reserve	0.002
Table Cape Conservation Area	Conservation Area	Other Formal Reserve	0.003
Table Cape Conservation Area	Conservation Area	Other Formal Reserve	0.004
Table Cape Conservation Area	Conservation Area	Other Formal Reserve	0.011000000 000000001
Table Cape Conservation Area	Conservation Area	Other Formal Reserve	0.012
Table Cape Conservation Area	Conservation Area	Other Formal Reserve	0.016
Table Cape Conservation Area	Conservation Area	Other Formal Reserve	0.02
Table Cape Conservation Area	Conservation Area	Other Formal Reserve	2.989000000 0000003
Table Cape Conservation Area	Conservation Area	Other Formal Reserve	3.357
	Conservation Covenant (NCA)	Private Reserve (Perpetual)	1.265000000 0000001
	Conservation Covenant (NCA)	Private Reserve (Perpetual)	3.591
	Informal Reserve on other public land	Informal Reserve	17.15000000 0000002

For more information about the Tasmanian Reserve Estate, please contact the Sustainable Land Use and Information Management Branch.
Telephone: (03) 6777 2224
Email: LandManagement.Enquiries@dpipwe.tas.gov.au
Address: GPO Box 44, Hobart, Tasmania, Australia, 7000

Known biosecurity risks within 1000 meters

384243, 5469868



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Please note that some layers may not display at all requested map scales

Known biosecurity risks within 1000 meters

Legend: Biosecurity Risk Species

- Point Verified
- Point Unverified
- Line Verified
- Line Unverified
- Polygon Verified
- Polygon Unverified

Legend: Hygiene infrastructure

- Location Point Verified
- Location Point Unverified
- Location Line Verified
- Location Line Unverified
- Location Polygon Verified
- Location Polygon Unverified

Legend: Cadastral Parcels

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Known biosecurity risks within 1000 meters

Verified Species of biosecurity risk

Species Name	Common Name	Prescription	Observation Count	Last Recorded
Phytophthora cinnamomi	water mould or root rot		1	09-Jan-2001

Unverified Species of biosecurity risk

No unverified species of biosecurity risk found within 1000 metres

Generic Biosecurity Guidelines

The level and type of hygiene protocols required will vary depending on the tenure, activity and land use of the area. In all cases adhere to the land manager's biosecurity (hygiene) protocols. As a minimum always Check / Clean / Dry (Disinfect) clothing and equipment before trips and between sites within a trip as needed http://dpipwe.tas.gov.au/invasive-species/weeds/weed-hygiene/keeping-it-clean-a-tasmanian-field-hygiene-manual

On Reserved land, the more remote, infrequently visited and undisturbed areas require tighter biosecurity measures.

In addition, where susceptible species and communities are known to occur, tighter biosecurity measures are required.

Apply controls relevant to the area / activity:

- Don't access sites infested with pathogen or weed species unless absolutely necessary. If it is necessary to visit, adopt high level hygiene protocols.
- Consider not accessing non-infested sites containing known susceptible species / communities. If it is necessary to visit, adopt high level hygiene protocols.
- Don't undertake activities that might spread pest / pathogen / weed species such as deliberately moving soil or water between areas.
- Modify / restrict activities to reduce the chance of spreading pest / pathogen / weed species e.g. avoid periods when weeds are seeding, avoid clothing/equipment that excessively collects soil and plant material e.g. Velcro, excessive tread on boots.
- Plan routes to visit clean (uninfested) sites prior to dirty (infested) sites. Do not travel through infested areas when moving between sites.
- Minimise the movement of soil, water, plant material and hitchhiking wildlife between areas by using the Check / Clean / Dry (Disinfect when drying is not possible) procedure for all clothing, footwear, equipment, hand tools and vehicles http://dpipwe.tas.gov.au/invasive-species/weeds/weed-hygiene
- Neoprene and netting can take 48 hours to dry, use non-porous gear wherever possible.
- Use walking track boot wash stations where available.
- Keep a hygiene kit in the vehicle that includes a scrubbing brush, boot pick, and disinfectant http://dpipwe.tas.gov.au/invasive-species/weeds/weed-hygiene/keeping-it-clean-a-tasmanian-field-hygiene-manual
- Dispose of all freshwater away from natural water bodies e.g. do not empty water into streams or ponds.
- Dispose of used disinfectant ideally in town though a treatment or septic system. Always keep disinfectant well away from natural water systems.
- Securely contain any high risk pest / pathogen / weed species that must be collected and moved e.g. biological samples.

Hygiene Infrastructure

No known hygiene infrastructure found within 1000 metres

Appendix C – Protected Matters Search Tool Report

EPBC Act Protected Matters Report

This report provides general guidance on matters of national environmental significance and other matters protected by the EPBC Act in the area you have selected.

Information on the coverage of this report and qualifications on data supporting this report are contained in the caveat at the end of the report.

Information is available about Environment Assessments and the EPBC Act including significance guidelines, forms and application process details.

Report created: 28/07/17 13:07:31

This map may contain data which are ©Commonwealth of Australia (Geoscience Australia), ©PSMA 2010

Coordinates
Buffer: 1.0Km

Summary

Matters of National Environmental Significance

This part of the report summarises the matters of national environmental significance that may occur in, or may relate to, the area you nominated. Further information is available in the detail part of the report, which can be accessed by scrolling or following the links below. If you are proposing to undertake an activity that may have a significant impact on one or more matters of national environmental significance then you should consider the Administrative Guidelines on Significance.

World Heritage Properties:	None
National Heritage Places:	None
Wetlands of International Importance:	None
Great Barrier Reef Marine Park:	None
Commonwealth Marine Area:	None
Listed Threatened Ecological Communities:	1
Listed Threatened Species:	46
Listed Migratory Species:	30

Other Matters Protected by the EPBC Act

This part of the report summarises other matters protected under the Act that may relate to the area you nominated. Approval may be required for a proposed activity that significantly affects the environment on Commonwealth land, when the action is outside the Commonwealth land, or the environment anywhere when the action is taken on Commonwealth land. Approval may also be required for the Commonwealth or Commonwealth agencies proposing to take an action that is likely to have a significant impact on the environment anywhere.

The EPBC Act protects the environment on Commonwealth land, the environment from the actions taken on Commonwealth land, and the environment from actions taken by Commonwealth agencies. As heritage values of a place are part of the 'environment', these aspects of the EPBC Act protect the Commonwealth Heritage values of a Commonwealth Heritage place. Information on the new heritage laws can be found at http://www.environment.gov.au/heritage

A permit may be required for activities in or on a Commonwealth area that may affect a member of a listed threatened species or ecological community, a member of a listed migratory species, whales and other cetaceans, or a member of a listed marine species.

Commonwealth Land:	None
Commonwealth Heritage Places:	None
Listed Marine Species:	64
Whales and Other Cetaceans:	10
Critical Habitats:	None
Commonwealth Reserves Terrestrial:	None
Commonwealth Reserves Marine:	None

Extra Information

This part of the report provides information that may also be relevant to the area you have nominated.

State and Territory Reserves:	3
Regional Forest Agreements:	1
Invasive Species:	21
Nationally Important Wetlands:	None
Key Ecological Features (Marine)	None

Details

Matters of National Environmental Significance

Listed Threatened Ecological Communities [Resource Information]

For threatened ecological communities where the distribution is well known, maps are derived from recovery plans, State vegetation maps, remote sensing imagery and other sources. Where threatened ecological community distributions are less well known, existing vegetation maps and point location data are used to produce indicative distribution maps.

Name	Status	Type of Presence
Giant Kelp Marine Forests of South East Australia	Endangered	Community may occur within area

Listed Threatened Species [Resource Information]

Name	Status	Type of Presence
Birds		
Aquila audax fleayi Tasmanian Wedge-tailed Eagle, Wedge-tailed Eagle (Tasmanian) [64435]	Endangered	Breeding likely to occur within area
Botaurus poiciloptilus Australasian Bittern [1001]	Endangered	Species or species habitat may occur within area
Calidris canutus Red Knot, Knot [855]	Endangered	Species or species habitat may occur within area
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area
Ceyx azureus diemenensis Tasmanian Azure Kingfisher [25977]	Endangered	Species or species habitat known to occur within area
Diomedea antipodensis Antipodean Albatross [64458]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Diomedea antipodensis gibsoni Gibson's Albatross [82270]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Diomedea epomophora Southern Royal Albatross [89221]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Diomedea exulans Wandering Albatross [89223]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Diomedea sanfordi Northern Royal Albatross [64456]	Endangered	Foraging, feeding or related behaviour likely to occur within area
Fregetta grallaria grallaria White-bellied Storm-Petrel (Tasman Sea), White-bellied Storm-Petrel (Australasian) [64438]	Vulnerable	Species or species habitat likely to occur within area

Name	Status	Type of Presence
Lathamus discolor Swift Parrot [744]	Critically Endangered	Breeding likely to occur within area
Limosa lapponica baueri Bar-tailed Godwit (baueri), Western Alaskan Bar-tailed Godwit [86380]	Vulnerable	Species or species habitat may occur within area
Limosa lapponica menzbieri Northern Siberian Bar-tailed Godwit, Bar-tailed Godwit (menzbieri) [86432]	Critically Endangered	Species or species habitat may occur within area
Macronectes giganteus Southern Giant-Petrel, Southern Giant Petrel [1060]	Endangered	Foraging, feeding or related behaviour likely to occur within area
Macronectes halli Northern Giant Petrel [1061]	Vulnerable	Species or species habitat may occur within area
Numenius madagascariensis Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat may occur within area
Pachyptila turtur subantarctica Fairy Prion (southern) [64445]	Vulnerable	Species or species habitat known to occur within area
Phoebetria fusca Sooty Albatross [1075]	Vulnerable	Species or species habitat likely to occur within area
Pterodroma leucoptera leucoptera Gould's Petrel, Australian Gould's Petrel [26033]	Endangered	Species or species habitat may occur within area
Sternula nereis nereis Australian Fairy Tern [82950]	Vulnerable	Breeding likely to occur within area
Thalassarche bulleri Buller's Albatross, Pacific Albatross [64460]	Vulnerable	Species or species habitat may occur within area
Thalassarche bulleri platei Northern Buller's Albatross, Pacific Albatross [82273]	Vulnerable	Species or species habitat may occur within area
Thalassarche cauta cauta Shy Albatross, Tasmanian Shy Albatross [82345]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Thalassarche cauta steadi White-capped Albatross [82344]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Thalassarche chrysostoma Grey-headed Albatross [66491]	Endangered	Species or species habitat may occur within area
Thalassarche impavida Campbell Albatross, Campbell Black-browed Albatross [64459]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Thalassarche melanophris Black-browed Albatross [66472]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Thalassarche salvini Salvin's Albatross [64463]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Thinornis rubricollis rubricollis Hooded Plover (eastern) [66726]	Vulnerable	Species or species habitat likely to occur

Name	Status	Type of Presence within area
Tyto novaehollandiae castanops (Tasmanian population) Masked Owl (Tasmanian) [67051]	Vulnerable	Species or species habitat known to occur within area
Crustaceans		
Astacopsis gouldi Giant Freshwater Crayfish, Tasmanian Giant Freshwater Lobster [64415]	Vulnerable	Species or species habitat likely to occur within area
Fish		
Galaxiella pusilla Eastern Dwarf Galaxias, Dwarf Galaxias [56790]	Vulnerable	Species or species habitat may occur within area
Prototroctes maraena Australian Grayling [26179]	Vulnerable	Species or species habitat likely to occur within area
Mammals		
Balaenoptera musculus Blue Whale [36]	Endangered	Species or species habitat likely to occur within area
Dasyurus maculatus maculatus (Tasmanian population) Spotted-tail Quoll, Spot-tailed Quoll, Tiger Quoll (Tasmanian population) [75183]	Vulnerable	Species or species habitat known to occur within area
Dasyurus viverrinus Eastern Quoll, Luaner [333]	Endangered	Species or species habitat may occur within area
Eubalaena australis Southern Right Whale [40]	Endangered	Species or species habitat known to occur within area
Megaptera novaeangliae Humpback Whale [38]	Vulnerable	Species or species habitat known to occur within area
Perameles gunnii gunnii Eastern Barred Bandicoot (Tasmania) [66651]	Vulnerable	Species or species habitat known to occur within area
Sarcophilus harrisii Tasmanian Devil [299]	Endangered	Species or species habitat likely to occur within area
Plants		
Caladenia caudata Tailed Spider-orchid [17067]	Vulnerable	Species or species habitat likely to occur within area
Caladenia tonellii Robust Fingers [64861]	Critically Endangered	Species or species habitat may occur within area
Leucochrysum albicans var. tricolor Hoary Sunray, Grassland Paper-daisy [56204]	Endangered	Species or species habitat may occur within area
Reptiles		
Chelonia mydas Green Turtle [1765]	Vulnerable	Breeding likely to occur within area
Sharks		
Carcharodon carcharias White Shark, Great White Shark [64470]	Vulnerable	Species or species habitat known to occur within area

Listed Migratory Species		[Resource Information]
* Species is listed under a different scientific name on the EPBC Act - Threatened Species list.		
Name	Threatened	Type of Presence
Migratory Marine Birds		
Apus pacificus Fork-tailed Swift [678]		Species or species habitat likely to occur within area
Ardenna carneipes Flesh-footed Shearwater, Fleshy-footed Shearwater [82404]		Species or species habitat likely to occur within area
Diomedea epomophora Southern Royal Albatross [89221]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Diomedea exulans Wandering Albatross [89223]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Macronectes giganteus Southern Giant-Petrel, Southern Giant Petrel [1060]	Endangered	Foraging, feeding or related behaviour likely to occur within area
Macronectes halli Northern Giant Petrel [1061]	Vulnerable	Species or species habitat may occur within area
Phoebetria fusca Sooty Albatross [1075]	Vulnerable	Species or species habitat likely to occur within area
Sternula albifrons Little Tern [82849]		Species or species habitat may occur within area
Thalassarche bulleri Buller's Albatross, Pacific Albatross [64460]	Vulnerable	Species or species habitat may occur within area
Thalassarche cauta Tasmanian Shy Albatross [89224]	Vulnerable*	Foraging, feeding or related behaviour likely to occur within area
Thalassarche chrysostoma Grey-headed Albatross [66491]	Endangered	Species or species habitat may occur within area
Thalassarche melanophris Black-browed Albatross [66472]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Migratory Marine Species		
Balaena glacialis australis Southern Right Whale [75529]	Endangered*	Species or species habitat known to occur within area
Balaenoptera musculus Blue Whale [36]	Endangered	Species or species habitat likely to occur within area
Caperea marginata Pygmy Right Whale [39]		Foraging, feeding or related behaviour may occur within area
Carcharodon carcharias White Shark, Great White Shark [64470]	Vulnerable	Species or species habitat known to occur within area
Chelonia mydas Green Turtle [1765]	Vulnerable	Breeding likely to occur within area

Name	Threatened	Type of Presence
Lagenorhynchus obscurus Dusky Dolphin [43]		Species or species habitat may occur within area
Lamna nasus Porbeagle, Mackerel Shark [83288]		Species or species habitat likely to occur within area
Megaptera novaeangliae Humpback Whale [38]	Vulnerable	Species or species habitat known to occur within area
Migratory Terrestrial Species		
Hirundapus caudacutus White-throated Needletail [682]		Species or species habitat may occur within area
Myiagra cyanoleuca Satin Flycatcher [612]		Breeding known to occur within area
Migratory Wetlands Species		
Actitis hypoleucos Common Sandpiper [59309]		Species or species habitat known to occur within area
Calidris acuminata Sharp-tailed Sandpiper [874]		Species or species habitat may occur within area
Calidris canutus Red Knot, Knot [855]	Endangered	Species or species habitat may occur within area
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area
Calidris melanotos Pectoral Sandpiper [858]		Species or species habitat may occur within area
Gallinago hardwickii Latham's Snipe, Japanese Snipe [863]		Species or species habitat may occur within area
Limosa lapponica Bar-tailed Godwit [844]		Species or species habitat likely to occur within area
Numenius madagascariensis Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat may occur within area

Other Matters Protected by the EPBC Act

Listed Marine Species		[Resource Information]
* Species is listed under a different scientific name on the EPBC Act - Threatened Species list.		
Name	Threatened	Type of Presence
Birds		
Actitis hypoleucos Common Sandpiper [59309]		Species or species habitat known to occur within area
Apus pacificus Fork-talled Swift [678]		Species or species habitat likely to occur within area

Name	Threatened	Type of Presence
Ardea alba Great Egret, White Egret [59541]		Species or species habitat likely to occur within area
Ardea ibis Cattle Egret [59542]		Species or species habitat may occur within area
Calidris acuminata Sharp-tailed Sandpiper [874]		Species or species habitat may occur within area
Calidris canutus Red Knot, Knot [855]	Endangered	Species or species habitat may occur within area
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area
Calidris melanotos Pectoral Sandpiper [858]		Species or species habitat may occur within area
Diomedea antipodensis Antipodean Albatross [64458]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Diomedea epomophora Southern Royal Albatross [89221]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Diomedea exulans Wandering Albatross [89223]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Diomedea gibsoni Gibson's Albatross [64466]	Vulnerable*	Foraging, feeding or related behaviour likely to occur within area
Diomedea sanfordi Northern Royal Albatross [64456]	Endangered	Foraging, feeding or related behaviour likely to occur within area
Gallinago hardwickii Latham's Snipe, Japanese Snipe [863]		Species or species habitat may occur within area
Haliaeetus leucogaster White-bellied Sea-Eagle [943]		Species or species habitat known to occur within area
Hirundapus caudacutus White-throated Needletail [682]		Species or species habitat may occur within area
Lathamus discolor Swift Parrot [744]	Critically Endangered	Breeding likely to occur within area
Limosa lapponica Bar-tailed Godwit [844]		Species or species habitat likely to occur within area
Macronectes giganteus Southern Giant-Petrel, Southern Giant Petrel [1060]	Endangered	Foraging, feeding or related behaviour likely to occur within area
Macronectes halli Northern Giant Petrel [1061]	Vulnerable	Species or species habitat may occur within area
Myiagra cyanoleuca Satin Flycatcher [612]		Breeding known to occur

Name	Threatened	Type of Presence within area
Numenius madagascariensis Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat may occur within area
Pachyptila turtur Fairy Prion [1066]		Species or species habitat known to occur within area
Phoebetria fusca Sooty Albatross [1075]	Vulnerable	Species or species habitat likely to occur within area
Puffinus carneipes Flesh-footed Shearwater, Fleshy-footed Shearwater [1043]		Species or species habitat likely to occur within area
Sterna albifrons Little Tern [813]		Species or species habitat may occur within area
Thalassarche bulleri Buller's Albatross, Pacific Albatross [64460]	Vulnerable	Species or species habitat may occur within area
Thalassarche cauta Tasmanian Shy Albatross [89224]	Vulnerable*	Foraging, feeding or related behaviour likely to occur within area
Thalassarche chrysostoma Grey-headed Albatross [66491]	Endangered	Species or species habitat may occur within area
Thalassarche impavida Campbell Albatross, Campbell Black-browed Albatross [64459]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Thalassarche melanophris Black-browed Albatross [66472]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Thalassarche salvini Salvin's Albatross [64463]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Thalassarche sp. nov. Pacific Albatross [66511]	Vulnerable*	Species or species habitat may occur within area
Thalassarche steadi White-capped Albatross [64462]	Vulnerable*	Foraging, feeding or related behaviour likely to occur within area
Thinornis rubricollis Hooded Plover [59510]		Species or species habitat likely to occur within area
Thinornis rubricollis rubricollis Hooded Plover (eastern) [66726]	Vulnerable	Species or species habitat likely to occur within area
Fish		
Heraldia nocturna Upside-down Pipefish, Eastern Upside-down Pipefish, Eastern Upside-down Pipefish [66227]		Species or species habitat may occur within area
Hippocampus abdominalis Big-belly Seahorse, Eastern Potbelly Seahorse, New Zealand Potbelly Seahorse [66233]		Species or species habitat may occur within area
Hippocampus breviceps Short-head Seahorse, Short-snouted Seahorse [66235]		Species or species habitat may occur within

Name	Threatened	Type of Presence
		area
Histiogamphelus briggsii Crested Pipefish, Briggs' Crested Pipefish, Briggs' Pipefish [66242]		Species or species habitat may occur within area
Histiogamphelus cristatus Rhino Pipefish, Macleay's Crested Pipefish, Ring-back Pipefish [66243]		Species or species habitat may occur within area
Hypselognathus rostratus Knifesnout Pipefish, Knife-snouted Pipefish [66245]		Species or species habitat may occur within area
Kaupus costatus Deepbody Pipefish, Deep-bodied Pipefish [66246]		Species or species habitat may occur within area
Kimblaeus bassensis Trawl Pipefish, Bass Strait Pipefish [66247]		Species or species habitat may occur within area
Lissocampus caudalis Australian Smooth Pipefish, Smooth Pipefish [66249]		Species or species habitat may occur within area
Lissocampus runa Javelin Pipefish [66251]		Species or species habitat may occur within area
Maroubra perserrata Sawtooth Pipefish [66252]		Species or species habitat may occur within area
Mitotichthys semistriatus Halfbanded Pipefish [66261]		Species or species habitat may occur within area
Mitotichthys tuckeri Tucker's Pipefish [66262]		Species or species habitat may occur within area
Notiocampus ruber Red Pipefish [66265]		Species or species habitat may occur within area
Phyllopteryx taeniolatus Common Seadragon, Weedy Seadragon [66268]		Species or species habitat may occur within area
Pugnaso curtirostris Pugnose Pipefish, Pug-nosed Pipefish [66269]		Species or species habitat may occur within area
Solegnathus robustus Robust Pipehorse, Robust Spiny Pipehorse [66274]		Species or species habitat may occur within area
Solegnathus spinosissimus Spiny Pipehorse, Australian Spiny Pipehorse [66275]		Species or species habitat may occur within area
Stigmatopora argus Spotted Pipefish, Gulf Pipefish, Peacock Pipefish [66276]		Species or species habitat may occur within area
Stigmatopora nigra Widebody Pipefish, Wide-bodied Pipefish, Black Pipefish [66277]		Species or species habitat may occur within area
Stigmatopora olivacea a pipefish [74966]		Species or species habitat may occur within area

Name	Threatened	Type of Presence
Stipecampus cristatus Ringback Pipefish, Ring-backed Pipefish [66278]		Species or species habitat may occur within area
Urocampus carinirostris Hairy Pipefish [66282]		Species or species habitat may occur within area
Vanacampus phillipi Port Phillip Pipefish [66284]		Species or species habitat may occur within area
Vanacampus poecilolaemus Longsnout Pipefish, Australian Long-snout Pipefish, Long-snouted Pipefish [66285]		Species or species habitat may occur within area
Mammals		
Arctocephalus forsteri Long-nosed Fur-seal, New Zealand Fur-seal [20]		Species or species habitat may occur within area
Arctocephalus pusillus Australian Fur-seal, Australo-African Fur-seal [21]		Species or species habitat may occur within area
Reptiles		
Chelonia mydas Green Turtle [1765]	Vulnerable	Breeding likely to occur within area

Whales and other Cetaceans [Resource Information]

Name	Status	Type of Presence
Mammals		
Balaenoptera acutorostrata Minke Whale [33]		Species or species habitat may occur within area
Balaenoptera musculus Blue Whale [36]	Endangered	Species or species habitat likely to occur within area
Caperea marginata Pygmy Right Whale [39]		Foraging, feeding or related behaviour may occur within area
Delphinus delphis Common Dophin, Short-beaked Common Dolphin [60]		Species or species habitat may occur within area
Eubalaena australis Southern Right Whale [40]	Endangered	Species or species habitat known to occur within area
Globicephala macrorhynchus Short-finned Pilot Whale [62]		Species or species habitat may occur within area
Grampus griseus Risso's Dolphin, Grampus [64]		Species or species habitat may occur within area
Lagenorhynchus obscurus Dusky Dolphin [43]		Species or species habitat may occur within area
Megaptera novaeangliae Humpback Whale [38]	Vulnerable	Species or species habitat known to occur within area
Tursiops truncatus s. str. Bottlenose Dolphin [68417]		Species or species habitat may occur within area

Extra Information

State and Territory Reserves [Resource Information]

Name	State
Rocky Cape	TAS
Sisters Beach	TAS
Table Cape	TAS

Regional Forest Agreements [Resource Information]

Note that all areas with completed RFAs have been included.

Name	State
Tasmania RFA	Tasmania

Invasive Species [Resource Information]

Weeds reported here are the 20 species of national significance (WoNS), along with other introduced plants that are considered by the States and Territories to pose a particularly significant threat to biodiversity. The following feral animals are reported: Goat, Red Fox, Cat, Rabbit, Pig, Water Buffalo and Cane Toad. Maps from Landscape Health Project, National Land and Water Resouces Audit, 2001.

Name	Status	Type of Presence
Birds		
Alauda arvensis Skylark [656]		Species or species habitat likely to occur within area
Anas platyrhynchos Mallard [974]		Species or species habitat likely to occur within area
Carduelis carduelis European Goldfinch [403]		Species or species habitat likely to occur within area
Carduelis chloris European Greenfinch [404]		Species or species habitat likely to occur within area
Columba livia Rock Pigeon, Rock Dove, Domestic Pigeon [803]		Species or species habitat likely to occur within area
Passer domesticus House Sparrow [405]		Species or species habitat likely to occur within area
Sturnus vulgaris Common Starling [389]		Species or species habitat likely to occur within area
Turdus merula Common Blackbird, Eurasian Blackbird [596]		Species or species habitat likely to occur within area
Mammals		

Name	Status	Type of Presence
Felis catus Cat, House Cat, Domestic Cat [19]		Species or species habitat likely to occur within area
Lepus capensis Brown Hare [127]		Species or species habitat likely to occur within area
Mus musculus House Mouse [120]		Species or species habitat likely to occur within area
Oryctolagus cuniculus Rabbit, European Rabbit [128]		Species or species habitat likely to occur within area
Rattus rattus Black Rat, Ship Rat [84]		Species or species habitat likely to occur within area
Vulpes vulpes Red Fox, Fox [18]		Species or species habitat likely to occur within area
Plants		
Asparagus asparagoides Bridal Creeper, Bridal Veil Creeper, Smilax, Florist's Smilax, Smilax Asparagus [22473]		Species or species habitat likely to occur within area
Chrysanthemoides monilifera Bitou Bush, Boneseed [18983]		Species or species habitat may occur within area
Chrysanthemoides monilifera subsp. monilifera Boneseed [16905]		Species or species habitat likely to occur within area
Cytisus scoparius Broom, English Broom, Scotch Broom, Common Broom, Scottish Broom, Spanish Broom [5934]		Species or species habitat likely to occur within area
Rubus fruticosus aggregate Blackberry, European Blackberry [68406]		Species or species habitat likely to occur within area
Salix spp. except S.babylonica, S.x calodendron & S.x reichardtii Willows except Weeping Willow, Pussy Willow and Sterile Pussy Willow [68497]		Species or species habitat likely to occur within area
Ulex europaeus Gorse, Furze [7693]		Species or species habitat likely to occur within area

Caveat

The information presented in this report has been provided by a range of data sources as acknowledged at the end of the report.

This report is designed to assist in identifying the locations of places which may be relevant in determining obligations under the Environment Protection and Biodiversity Conservation Act 1999. It holds mapped locations of World and National Heritage properties, Wetlands of International and National Importance, Commonwealth and State/Territory reserves, listed threatened, migratory and marine species and listed threatened ecological communities. Mapping of Commonwealth land is not complete at this stage. Maps have been collated from a range of sources at various resolutions.

Not all species listed under the EPBC Act have been mapped (see below) and therefore a report is a general guide only. Where available data supports mapping, the type of presence that can be determined from the data is indicated in general terms. People using this information in making a referral may need to consider the qualifications below and may need to seek and consider other information sources.

For threatened ecological communities where the distribution is well known, maps are derived from recovery plans, State vegetation maps, remote sensing imagery and other sources. Where threatened ecological community distributions are less well known, existing vegetation maps and point location data are used to produce indicative distribution maps.

Threatened, migratory and marine species distributions have been derived through a variety of methods. Where distributions are well known and if time permits, maps are derived using either thematic spatial data (i.e. vegetation, soils, geology, elevation, aspect, terrain, etc) together with point locations and described habitat; or environmental modelling (MAXENT or BIOCLIM habitat modelling) using point locations and environmental data layers.

Where very little information is available for species or large number of maps are required in a short time-frame, maps are derived either from 0.04 or 0.02 decimal degree cells; by an automated process using polygon capture techniques (static two kilometre grid cells, alpha-hull and convex hull); or captured manually or by using topographic features (national park boundaries, islands, etc). In the early stages of the distribution mapping process (1999-early 2000s) distributions were defined by degree blocks, 100K or 250K map sheets to rapidly create distribution maps. More reliable distribution mapping methods are used to update these distributions as time permits.

Only selected species covered by the following provisions of the EPBC Act have been mapped:

- migratory and
- marine

The following species and ecological communities have not been mapped and do not appear in reports produced from this database:

- threatened species listed as extinct or considered as vagrants
- some species and ecological communities that have only recently been listed
- some terrestrial species that overfly the Commonwealth marine area
- migratory species that are very widespread, vagrant, or only occur in small numbers

The following groups have been mapped, but may not cover the complete distribution of the species:

- non-threatened seabirds which have only been mapped for recorded breeding sites
- seals which have only been mapped for breeding sites near the Australian continent

Such breeding sites may be important for the protection of the Commonwealth Marine environment.

Coordinates

-40.925875 145.612611,-40.925901 145.612611,-40.925901 145.612611,-40.932749 145.615666,-40.928443 145.601418,-40.925875 145.612611

Acknowledgements

This database has been compiled from a range of data sources. The department acknowledges the following custodians who have contributed valuable data and advice:

-Office of Environment and Heritage, New South Wales
-Department of Environment and Primary Industries, Victoria
-Department of Primary Industries, Parks, Water and Environment, Tasmania
-Department of Environment, Water and Natural Resources, South Australia
-Department of Land and Resource Management, Northern Territory
-Department of Environmental and Heritage Protection, Queensland
-Department of Parks and Wildlife, Western Australia
-Environment and Planning Directorate, ACT
-Birdlife Australia
-Australian Bird and Bat Banding Scheme
-Australian National Wildlife Collection
-Natural history museums of Australia
-Museum Victoria
-Australian Museum
-South Australian Museum
-Queensland Museum
-Online Zoological Collections of Australian Museums
-Queensland Herbarium
-National Herbarium of NSW
-Royal Botanic Gardens and National Herbarium of Victoria
-Tasmanian Herbarium
-State Herbarium of South Australia
-Northern Territory Herbarium
-Western Australian Herbarium
-Australian National Herbarium, Canberra
-University of New England
-Ocean Biogeographic Information System
-Australian Government, Department of Defence
Forestry Corporation, NSW
-Geoscience Australia
-CSIRO
-Australian Tropical Herbarium, Cairns
-eBird Australia
-Australian Government – Australian Antarctic Data Centre
-Museum and Art Gallery of the Northern Territory
-Australian Government National Environmental Science Program
-Australian Institute of Marine Science
-Reef Life Survey Australia
-American Museum of Natural History
-Queen Victoria Museum and Art Gallery, Inveresk, Tasmania
-Tasmanian Museum and Art Gallery, Hobart, Tasmania
-Other groups and individuals

The Department is extremely grateful to the many organisations and individuals who provided expert advice and information on numerous draft distributions.

Please feel free to provide feedback via the Contact Us page.

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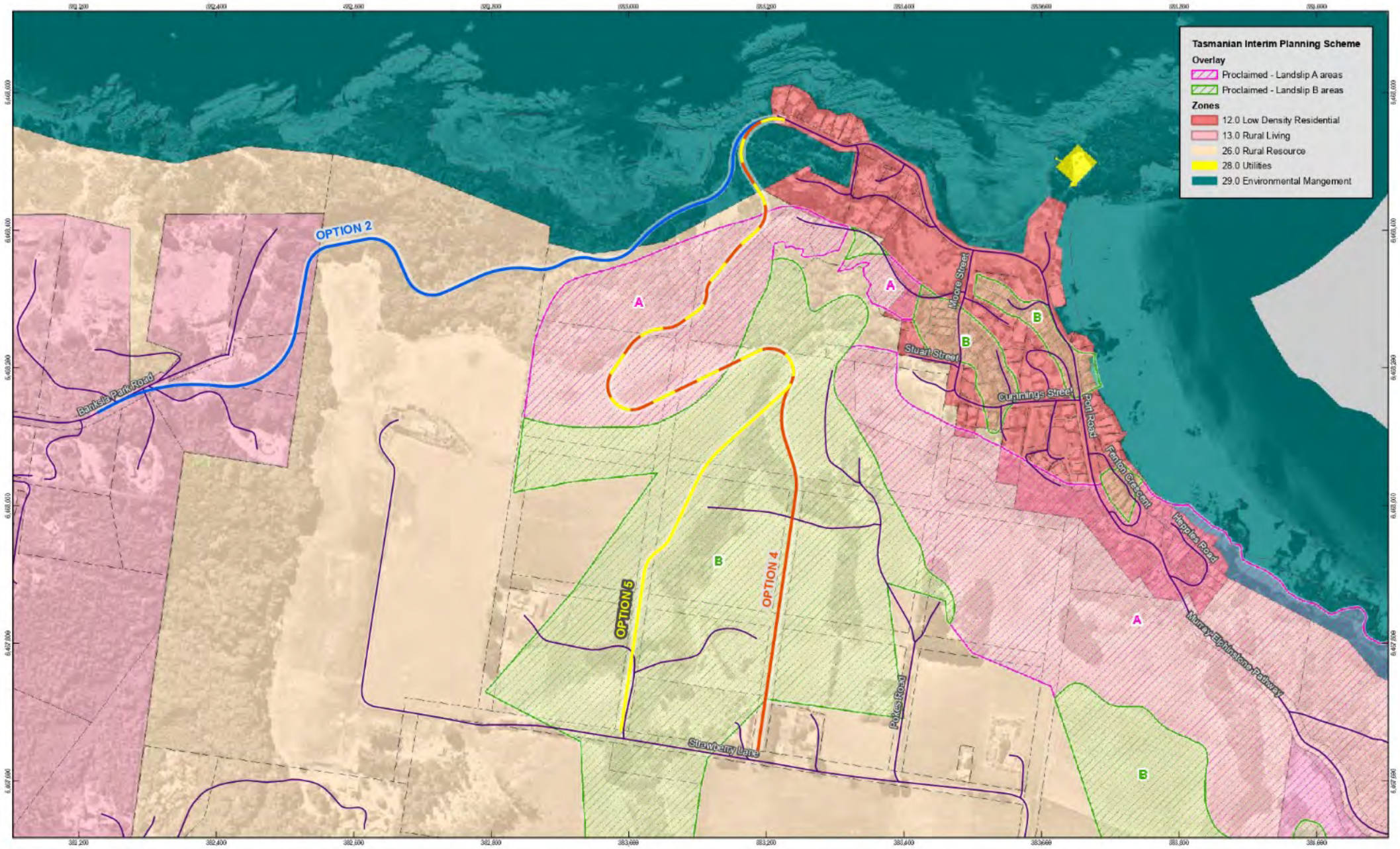
+61 2 6274 1111

Appendix D – Planning and Environmental Maps



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Metres
Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 55

N

LEGEND
Preliminary Alignment Options
Option 2
Option 4
Option 5
Road
Cadastral parcel

Waratah-Wynyard Council
Boat Harbour Beach Access Road Stage 1

Job Number 32-18518
Revision A
Date 28 Jul 2017

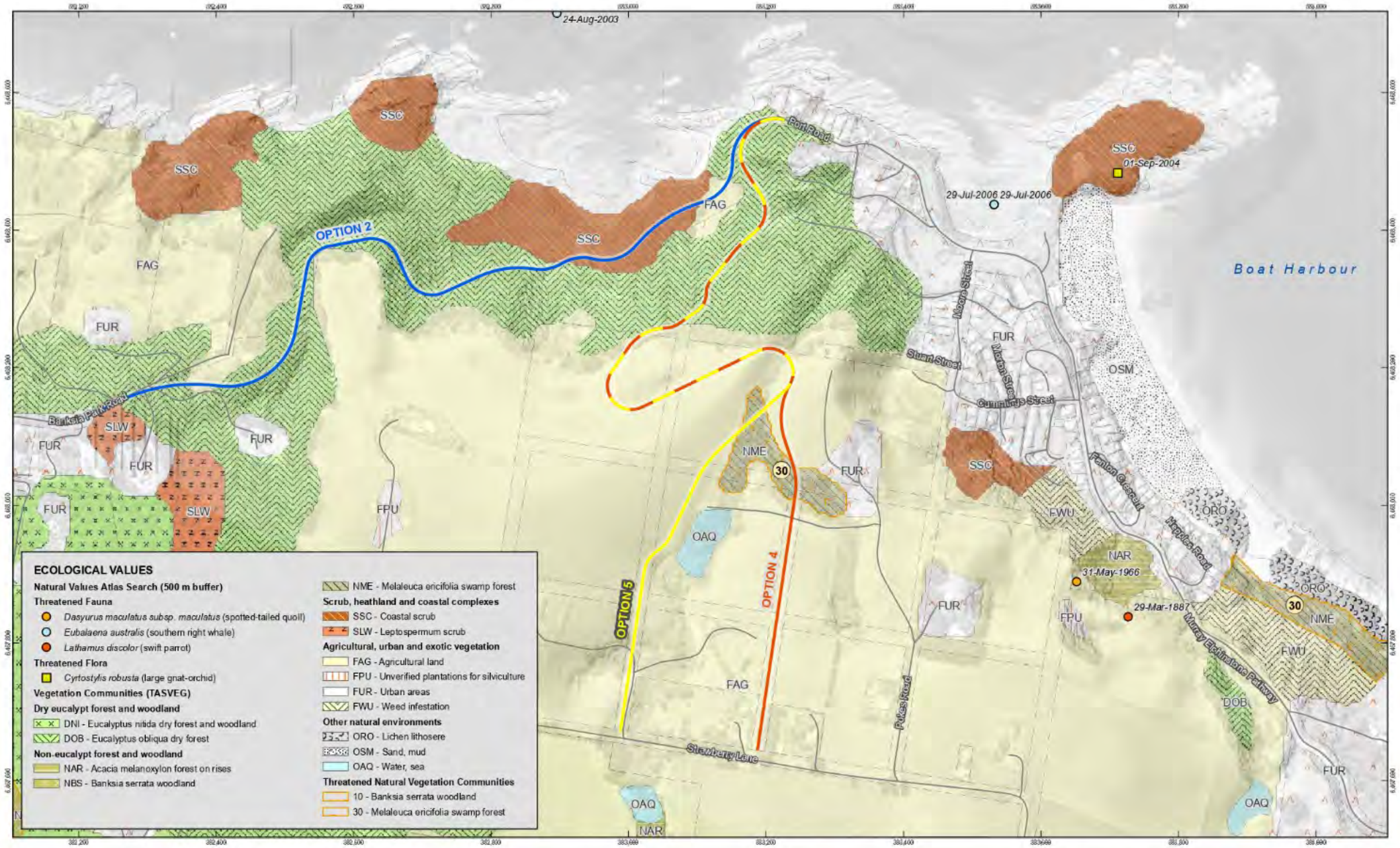
Planning

Figure 1

G:\32\18518\GIS\Maps\MXD\321851S_PLANNING_FIG-01_LandUse_RevA.mxd

Data source: DPIPWE; Waratah-Wynyard Council; GHD. Created by: jbroegan

2 Salamanca Square Hobart TAS 7000 Australia T 61 3 6210 0600 F 61 3 6210 0601 E hbamail@ghd.com W www.ghd.com



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Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 55

N

LEGEND
Preliminary Alignment Options
Option 2
Option 4
Option 5
Road
Cadastral parcel

Waratah-Wynyard Council
Boat Harbour Beach Access Road Stage 1

Job Number 32-18518
Revision A
Date 28 Jul 2017

Environmental

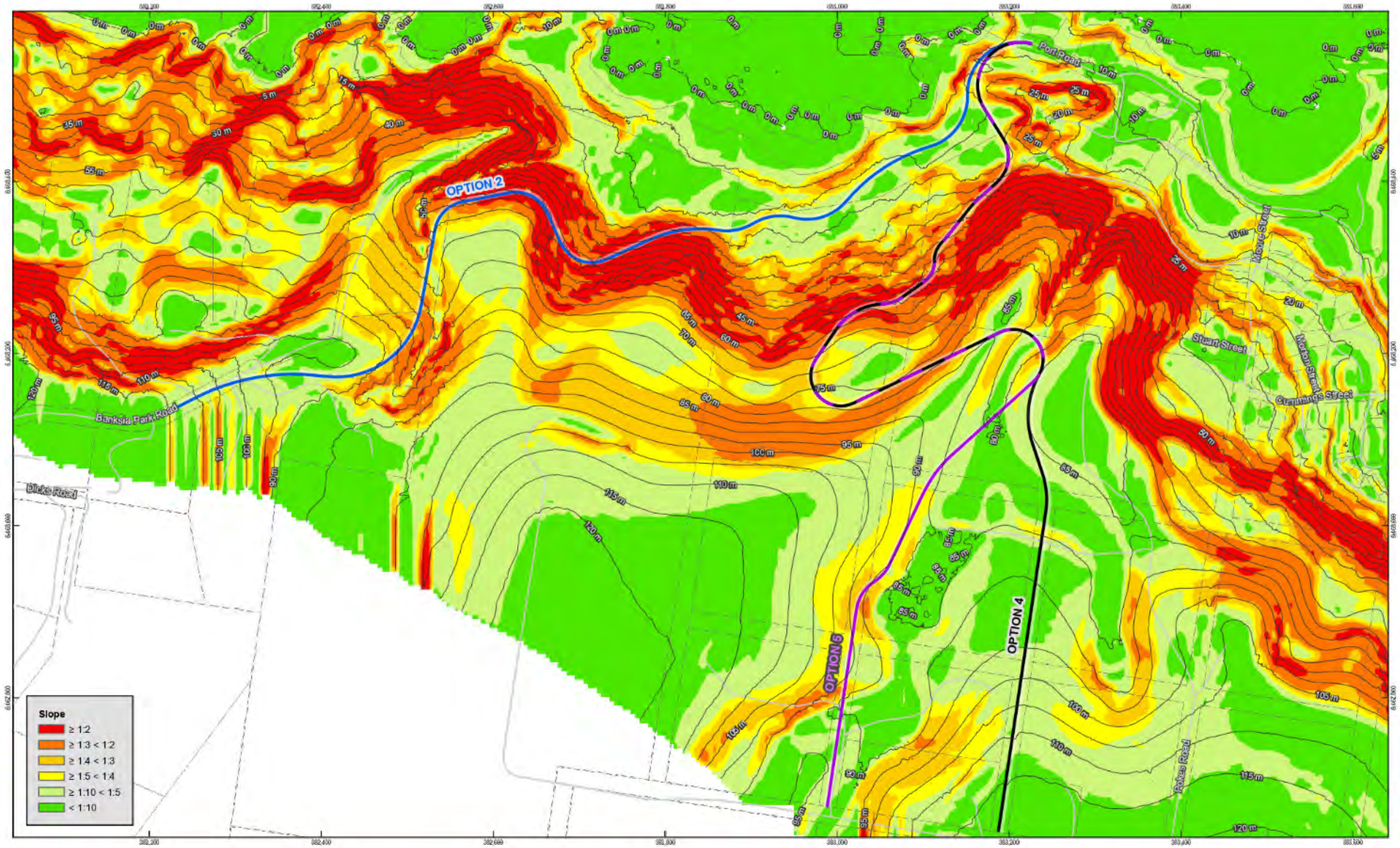
Figure 1

G:\32\18518\GIS\Maps\MXD\318518_ENVIRO_FIG-01_N\A_Rev\A.mxd

Data source: DPIPWE, NRT, Waratah-Wynyard Council, GHD. Created by: jforegan

2 Salamanca Square Hobart TAS 7000 Australia T 61 3 6210 0800 F 61 3 6210 0801 E hbamail@ghd.com W www.ghd.com

Appendix E – Natural Surface Gradients



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Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 55

N

LEGEND
Preliminary Alignment Options
Option 2
Option 4
Option 5
Road
Cadastral parcel

Waratah-Wynyard Council
Boat Harbour Beach Access Road Stage 1

Job Number 32-18518
Revision A
Date 01 Aug 2017

Slope

Figure 1

G:\32\18518\GIS\Maps\MXD\32518518_FIG-01_Slope_RevA.mxd

Data source: DPIPWE, NRT, Waratah-Wynyard Council, GHD. Created by: jbrogan

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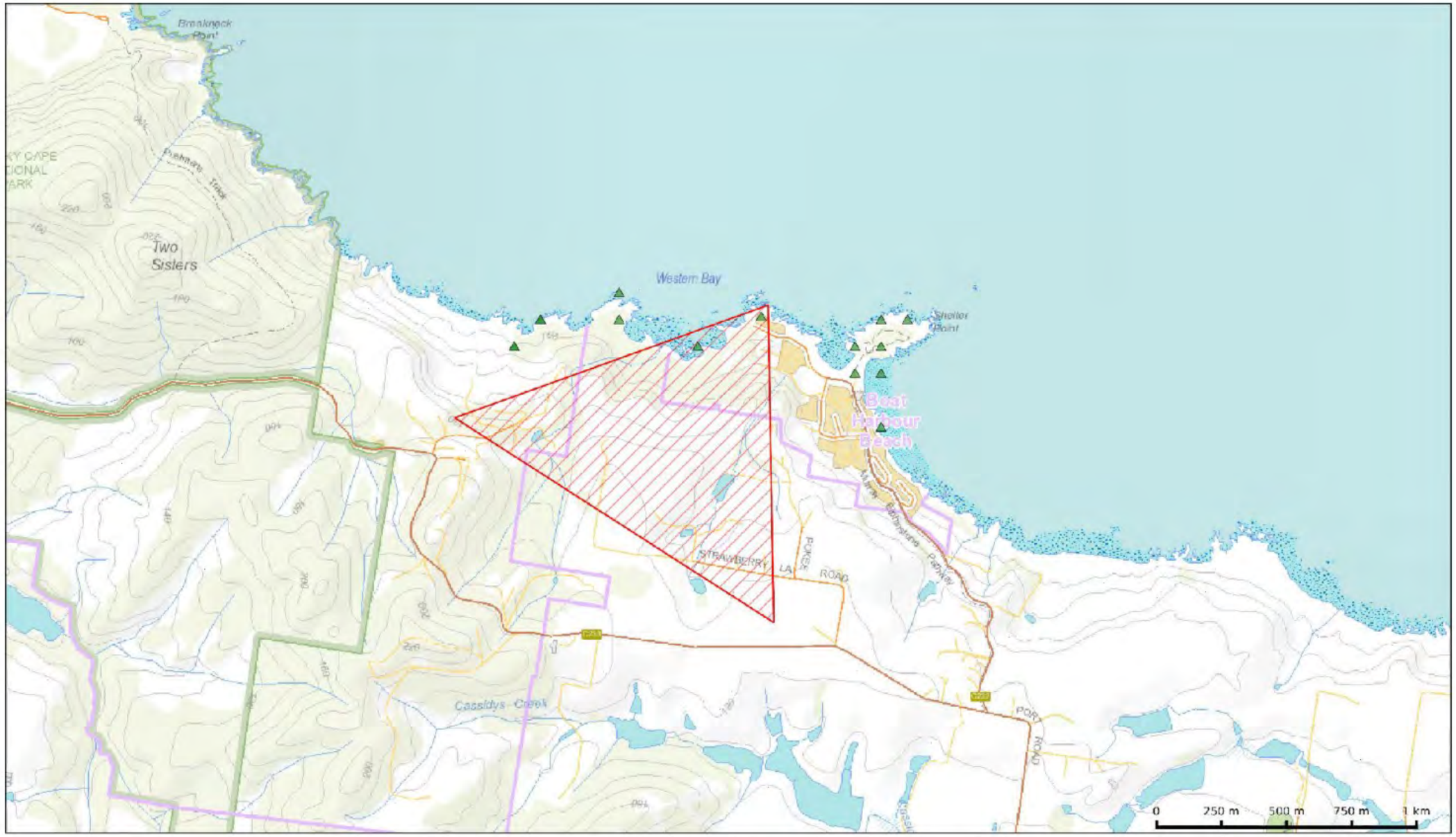
Appendix F – Aboriginal Heritage Desktop Assessment



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Legend:
- AH Item
- AH Instrument

N
GDA94 - Zone 55
1:14K

Waratah-Wynyard Council Infrastructure Review

Boat Harbour

GHD Pty Ltd
Created on 10/08/2017
Created by Adam Marshall

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3218518-51727/https://projects.ghd.com/oc/Tasmania/boatharbourbeachacce/Delivery/Documents/3218518-REP_Boat_Harbour_Beach_Access_Road_Preliminary_Assessment.docx

Document Status

Revision	Author	Reviewer		Approved for Issue		
		Name	Signatures	Name	Signature	Date
Draft A	M. Petrusma E. Salas E. Rushforth S. Hopgood	S. Wright A. Brownlie W. McMinn		S. Wright		

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CSE TASMANIA PTY LTD

Waratah Wynyard Council

Boat Harbour Access Review

PREPARED BY CHRIS MARTIN MIEAust, NPER3.

Senior Civil Engineer
CSE Tasmania Pty Ltd
Tasmanian Building Act Accreditation Number: CC4109 V.

DATE 11/10/19

INDEX

1 Introduction & Background

Boat Harbour is a small community renowned for its scenic attractions and as such it has become a sort after holiday destination. Numerous shacks have been developed over the years and the competing needs of Council mitigating its planning and ethical risk associated with development in a Landslide A zone and the landowners desire to develop and upgrade facilities, has been a source of contention.

This report looks at the issues of access to the community. During the 2016 landslides on Port Road there were several occasions where access was severely restricted (with no access at times) during the period the landslide actively threatened the road and during the period the rehabilitation works were underway.

As a result, some in the community wanted a review of alternate access routes into the community which by pass these known landslide zones.

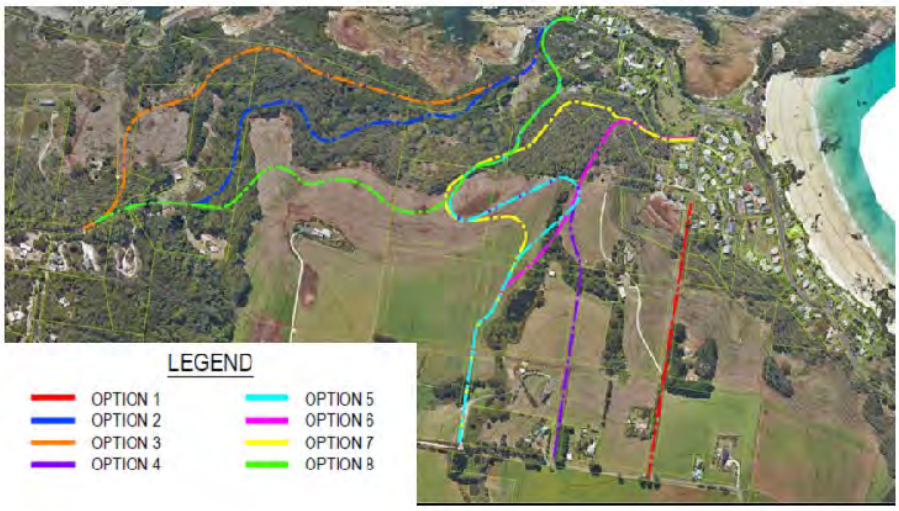
CSE Tasmania were involved in the repair of the landslides post 2016 and have been approached to further develop options presented by GHD in their report of August 2017 which undertook a desktop assessment of 8 routes.

CSE further proposed an additional short route and while assessing the routes on the ground in conjunction with Tasman Geotechnics determined a further option which removed many of the undesirable aspects of the routes proposed to date. Additionally, CSE Tasmania proposed a whole of problem assessment examining the risks to the current road from landslide activity and reviewing options for reducing the risk of landslide activity.

In consultation with Council CSE engaged Tasman Geotechnics to assist with expert geotechnical advice to review the road options and assess landslide risk assessments for the existing Port Road. Tasman Geotechnics reported separately on the landslide issues associated with Boat Harbour in their report titled Landslide Condition Repot Port Road, Boat Harbour (Ref TG18062/1 - 03report).

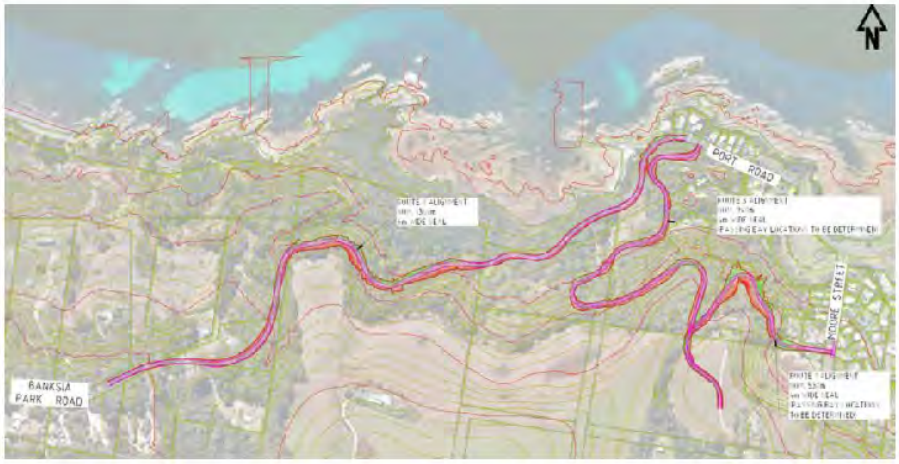
2 Alternate Route Options Assessment

GHD reviewed 8 options in their August 2017 report.



They concluded that the option 2 alignment had the fewest potential issues, albeit marginally from the remaining two options they had shortlisted, these being options 4 and 6.

Council requested CSE Tas Review Option 2 only which connected the west end of Port Road to Banksia Park Road. Assessment of this option was with a 6m wide sealed road with shoulders.



CSE Tasmania sort approval to look at a short option off Moore St which could be constructed as a 4m road with passing bays at regular intervals in accordance with Tas Fire Standards. The route could remain boom-gated

with key people in the community having keys to open the boom gate for emergency use only. The Moore St option could double as a pedestrian path to a Boat Harbour lookout.

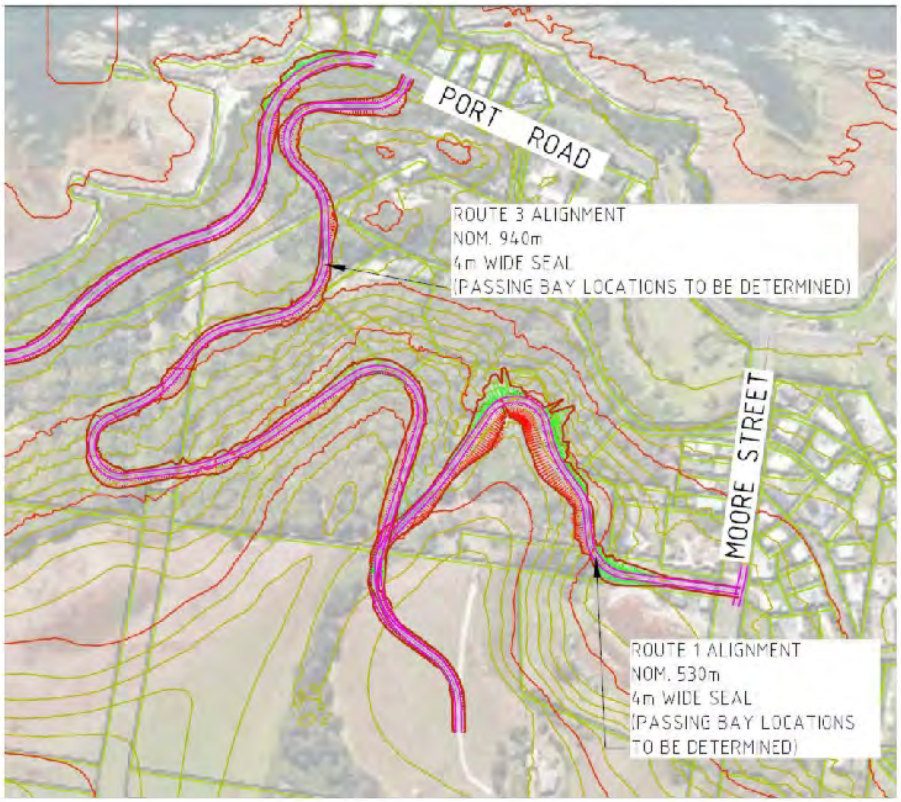
While assessing the options on the ground a third option became evident which avoided the significant construction issues of the earlier two. Construction issues were:-

Route 1 – off Moore ST to the Telstra Tower Access

- Impact on residents at Moore St when constructing the road along the road reservation.
- Construction on 40 degree quartzite rock side slopes.
- Visual impact to the community of the road would be significant.

Route 2 to Banksia Park Road

- Impact on Residents in Banksia Park Road
- Construction on significant side slopes through scree material which would present initial construction difficulties and ongoing maintenance issues.


PORT ROAD
ROUTE 3 ALIGNMENT
NOM. 940m
4m WIDE SEAL
(PASSING BAY LOCATIONS TO BE DETERMINED)
MOORE STREET
ROUTE 1 ALIGNMENT
NOM. 530m
4m WIDE SEAL
(PASSING BAY LOCATIONS
TO BE DETERMINED)

Route 3 was proposed as a 4m wide road to Tas Fire Standards with passing bays. It has a number of advantages:-

- Provides access to the land to the west which has an old shack on it
- Does not scar the landscape and will remain hidden behind vegetation
- Doubles as a fire trail which can be used to provide a fire break for fires approaching from the bushland west of Boat Harbour
- Has good grades with only a 350m long section having a grade of 16%
- Construction does not involve significant side slopes or unstable screes. All up length to reach the existing Telstra Tower access road is 940m

Tasman Geotechnics advises that this route crosses Landslip A (200m) and B (150m) zones however from the preliminary survey it would appear to be a viable route.

The current access to Boat Harbour crosses 750m of Landslip A Zone.

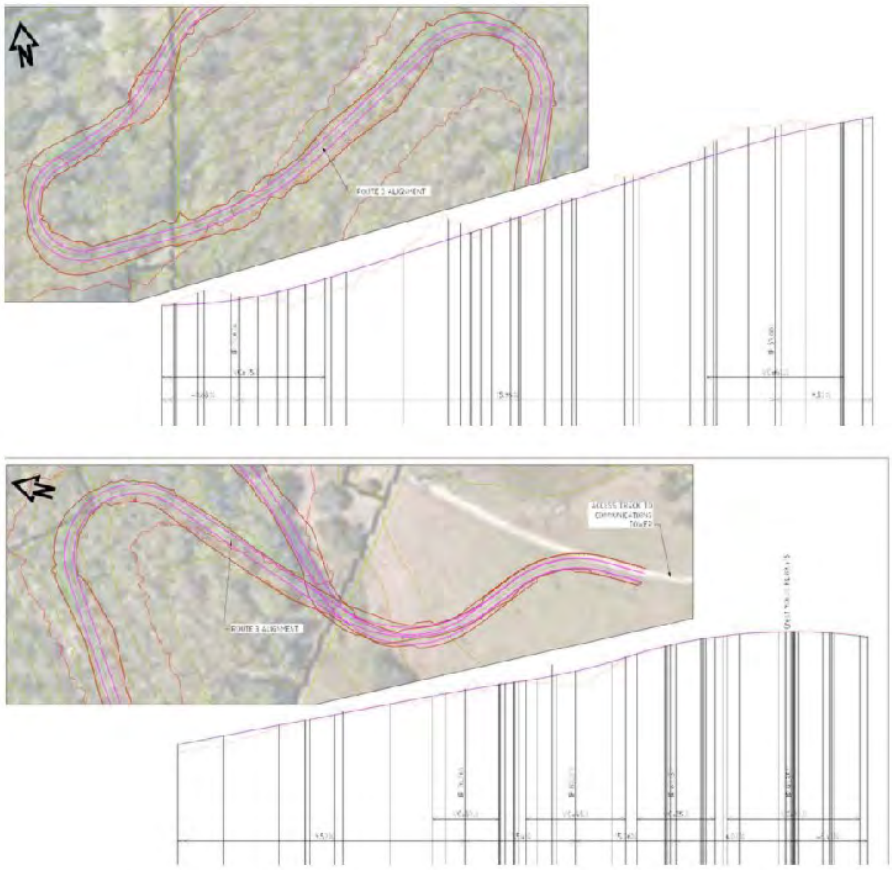
Preliminary construction estimates indicate a cost to construct in the order of $375,000. **(Refer Appendix 1).** This includes a provision of $32,000 to seal the first 700m of road.

This does not include any works to the Telstra Tower access road.

Negotiations would be needed with the landowners to determine arrangements for use of the existing track to the Telstra Tower.

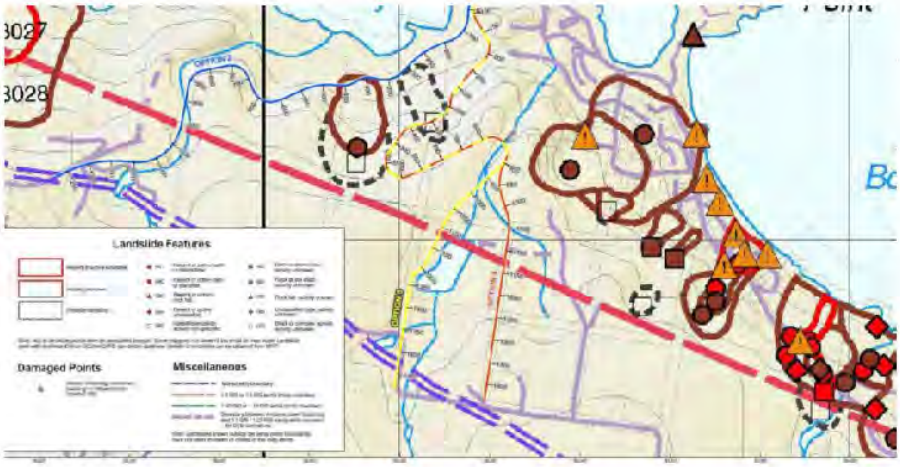
If the road is only to be used as an emergency access the impacts will be minimal.

Long sections and plan views are provided below for this route.


N
ROUTE 2 ALIGNMENT
N
ACCESS TRACK TO
ROUTE 3 ALIGNMENT

3 Existing Port Road Landslide Risk Assessment

GHD prepared the following excerpt from the Geological maps with an overlay of routes assessed in their August 2017 report.



In 2016 a period of prolonged rainfall caused a section of Port Road to slump. This was the authors first involvement with landslides in Boat Harbour other than a request to review and certify the retaining wall designed by others on 1 Hepples Road in 2014. The Author declined to provide any certification and subsequently the weakness of this wall contributed to the failures in 2016.

A brief overview of the failures experienced, and the method of rectification is provided below to demonstrate what happens when landslide risk issues are ignored.

3.1 1 Hepples Road Landslide 1

In the days prior to 26/7/2016 heavy rain fell washing debris into a culvert well upstream of the landslide area shown below. Water from the blocked culvert ran along Port Road to the overflow point across the road in the first zone of failure above 1 Hepples Road. The road had been constructed partly in solid ground and partly on unstable ground deposited from past surface landslides. Water logging from the rainfall and the water from the blocked culvert caused the failure to advance rapidly.

The method of rectification was to excavate all unstable material and rebuild from stable ground back up to road level.

26/7/2016 The landslide on day 1 – the berm was created in an attempt to divert water away from the slip.

26/7/2016 Retaining wall at the base of the slide had failed

27/7/2016 relocatable bedroom was removed to allow access and prevent damage.

27/7/2016

27/7/2016 A sliding joint in the culvert carrying spring water from upstream assisted in slowing the slide and keeping ground below more stable.

3/8/2016 construction of the retaining wall provided a solid base from which the road could be rebuilt.

5/8/2016 The rebuild consisted of gravel layers reinforced with Tensar Geogrid. Drainage against natural surface was provided to prevent hydraulic pressures at the new/old interface.

3.2 Landslide 2 – east of Landslide 1 on Port Road

This landslide had slowly progressed up to the rains of 2016 when it accelerated rapidly from the July 2016 rainfall events which lubricated the slip surface and saturated material making it heavier and softer. A period of about 2 months lapsed from the heavy rains to the point when road slippage triggered action.

Rebuild from stable ground at the base did not provide a cost-effective solution as stable ground was much deeper below the road level.

Excavation back into the hill was considered the best way to build the road on stable ground. A considerable amount of the hill needed to be excavated to get back to the stable ground.

13/9/2016

13/9/2016 Water running from the base of the landslide below the road.

25/10/2016 The slide progressed over about 40 days – works were underway with cutting into the hillside.

27/10/2016 A sealed pipe was provided at the base of the excavation with all springwater collected and piped into this pipeline.

22/11/2016 Vertiblock retaining wall being constructed.

3.3 Port Road Landslide Findings

Tasman Geotechnics and CSE Tasmania commenced with a site review in June 2018. During the review it became rapidly evident that the section of Port Road west of Hepples road is an active failure.

4/6/2018 guardfence pulled out on southern end as centre of the fence is sliding lower.

4/6/2018 a sewer line below the road may be adding to the issue if the seal has been broken between manhole and pipe.

It was noted on site that a grated pit at the low point was not operational.

Movement of the slide has likely caused the pipe failure.

Council advised that money was allocated to upgrade the drain across the road at this location and that the urgency of this rectification warranted a rapid response. This work has been completed in 2019.

It was known at the time that the area below this landslide has been sliding for some time. PDA Surveyors have been monitoring some points in Hepples Road since 2004. In 2018 Council approved the establishment of additional monitoring points to provide ongoing data on Port Road. All locations marked Star are newly installed points. Those marked B to G were installed in 2004 and historical movement data is available for these.

DATE: 5/31/2018		Δ to 2004		Δ to 14/09/2016	
Pt ID	Height	ΔE	ΔN	ΔE	ΔN
B	15.433	0.003	-0.003	0.003	-0.002
C	13.045	0.004	0.002	0.005	0.001
D	11.372	0.243	0.423	0.055	0.096
E	10.605	0.191	0.343	0.042	0.075

F	11.471	-	-	0.007	0.01
G	11.519	0.001	-0.001	0	0
SPJM	26.608			0.001	0.004

.

Points marked D and E are showing considerable movement since monitoring first began in 2004. These points are directly below the section of Port Road now observed to be moving.

Investigation uphill of the Nos 239 to 241 Port Road directly uphill of the road failure revealed natural springs which have existed for many years – as evidenced by the number of poly pipe lines feeding spring water to the shacks. The terrain in this area had soaks where above ground water was visible before it re-entered the ground flowing under Port Road lubricating the landslide. Large boulders from the rock faces above were evident in this zone further confirming that the area contained significant disturbance from past landslide activity.

4/6/2018 a sewer line below the road may be adding to the issue if the seal has been broken between manhole and pipe

4/6/2018 Water flows above ground centre of picture

4/6/2018 Water supply tanks feeding from the springs.

Further investigation uphill revealed the likely source of spring water lubricating the slip surface where the headscarp of the slip has subsided causing an impoundment of water. Evidence of active movement was also observed around this area.

4/6/2018 This sump slowly leaches water into the slide area.

4/6/2018 Closeup into the sump.

4/6/2018 The source of the rock boulders 100m below.

4/6/2018 Photographed from the slip zone at the top of the hill – directly above the wet areas discussed earlier in this report.

4/6/2018 Recent landslide activity.

4/6/2018 Large crack where the right-hand side rock face has rotated downhill of the left side rock face.

4/6/2018 Continuation of the same crack in the previous photograph.

4/6/2018 Disturbed ground evidence of landslide regression. The pine trees were planted to attempt to stabilize the landslide many years ago.

4/6/2018 Disturbed ground evidence of landslide regression.

3.4 Recommendation to assist in stabilizing existing Port Road Landslip

Water, saturated and soft ground are major factors contributing to the speed with which landslides and land regression advance. The presence of a sump at the top of the landslide, which slowly releases water into the slide area and flowing water above ground, which dissapears back into the ground above the residences on Port Road are key sources of water which are accelerating slippage.

It is recommended that these sourcse of water be piped into closed pipe systems which remove the water from the landslip zone.

A pipeline is proposed from the headscarp, at the top of the slip, through the area above 239 and 241 Port Road and into the culvert under Port Road. The route proposed is shown below. The owner of 239 Port Road is yet to be consulted about the preferred corridor for the pipeline. At the moment the location is shown down the already disturbed driveway. An easement along the boundary may be the standard location for such infrastructure.

The pipeline could remain above ground until it enters 239 Port Road where the owners are likely to require that it is burried. The above ground pipeline will require anchorage to prevent it pulling down hill. It is proposed that a steel cable be anchored into the rockface above the slippage area and that it be fed through alongside a HDPE above ground pipeline with anchorage between the steel cable and the pipeline at say 15m intervals.

4/6/2018 Driveway to 239 Port Road – a vacant block which may be a route for the pipeline from the top of the hill.

Subsequent to the 2018 inspections Council engaged CSE Tasmania to prepare drawings of the works required to collect the surface water at the springs and soak points and to pipe this clear of the slip zone.

Drawings are included as **Attachment 2.** Council staff have costed the works at between $100,000 and $125,000 and will progress with this work once access to the private land is finalized.

3.5 Other Monitoring Opportunities

Tasman Geotechnics have reviewed past reports and have confirmed the approach described above to remove water from the landslide zone and they advise that there are advantages in understanding the depth to the failure surface. This can be obtained via the installation of inclinometers. An estimate of cost of $90,000 was provided for 9 boreholes. This would give a greater understanding of the slides.

3.6 Other Risks located during the investigation

Locations where water can seep into slip zones were inspected along with the dam to the south east of the main landslide activity zone. This dam overtopped during the 2016 floods blocking the culvert with debris and then flowing along the road to the Hepples Road landslide zone.

Works to minimize the risk of failures to the road need to investigate matters that can cause rapid deterioration of road conditions beyond natural rainfall.

Location 1
The dam shown below is a geotechnical risk with no freeboard or defined spillway to channel water out of the dam in a controlled manner. It does not comply with current dam design spillway requirements.

Recommendation Location 1 – discuss with the landowner about installing a proper spillway on natural ground possibly the east bank of the dam. A 3m wide excavated channel approx. 400mm below current wall height may provide the required freeboard (a wall raise for part of the wall may do the same thing).

4/6/2018 The dam south west of the landslip activity has no freeboard with water finding its way over the top of the dam wall.

Location 2

The water that spills from the dam in location 1 flows through a culvert under Port Road. As mentioned above the culvert blockage during the 2016 floods exacerbated flooding and water logging of Port Road through to Hepples Road.

The inspection revealed that vegetation was again growing around this culvert with the conclusion that blocking may again occur in the future.

Recommendation Location 2 - Council establish a listing of key infrastructure that sits on defined problem areas which receive pro-active maintenance to ensure issues don't arise during large flood events. This location could benefit from additional vegetation clearing and installation of a culvert pre-screen which could be as simple as star pickets driven with a 30 degree slope 1 m upstream of the culvert with say 200mm spacing between the pickets. The pickets would ensure that debris was captured behind the sloping pickets instead of across the mouth of the culvert. Regular vegetation and pre screen clearing should be provided before each winter and following major flood events.

Location 3
Downstream of the Location 2 culvert entrance the road verge drops approx. 5m within 300mm of the edge of the road. Refer photo below.

Recommendation Location
Investigate shifting the road south to provide greater clearance to the edge. Install additional guideposts or guardfence.

4 Summary

Construction of an alternate road has been discussed in the past as a means of providing the community with an assurance that access will be maintained if a future landslide causes Port Road to fail.

The cost of such a road is considerable for a small community. The assessment provided a clear option which would be worthy of consideration if the merits of a second access were considered worth pursuing by Council. Preliminary estimates showed the cost of this Option 3 to be in the order of $375k (**Appendix 1** contains budget estimate) to build a road for emergency use. Further costs and legal arrangements with landowners would be needed to make the road a regular use road.

A case was put forward to investigate the costs of reducing the risk of failure to the existing Port Road rather than building another road.

There is an active landslide north of the Hepples Road Junction. This slide is causing slow slumping of the road and has been patched up in the past.

There have been two slides since 2016 that have resulted in substantial repair costs to the community. The repairs to these slides have been conducted in a manner which is expected to significantly reduce the risk of future road failures due to landslide in these areas.

There are significant water sources feeding the active landslide uphill of the road that should be drained and piped past the active zone. This will slow the slide. Monitoring points have been established to assess the rate of slide and these will hopefully demonstrate the benefit of any drainage works.

Drainage of the wet areas feeding the slide should increase the strength of the slip surface and slow the speed of slumping. An estimate of $100k to 125k has been provided by Council for works designed by CSE Tasmania to capture and pipe surface water (refer **Appendix 2** for drawings).

Removal of water uphill of Port Road should also slow the slide affecting Hepples Road and the residences on that road.

APPENDIX 1

COSTING FOR ROAD 3 CONSTRUCTION
(Port Road to Telstra Tower Access)

Part 1

Waratah Wynyard Council
Boat Harbour Second Access
1 July 2018
Preliminary Estimate Route 3

ALL PRICES GST EXCL

Total	**$312,124.40**
Contingency 2(	$62,424.88
Estimate	**$374,549.28**

1.0 - ESTABLISHMENT / OVERHEADS									**$17,000.00**
Item	**Description**	**Size**	**Type**	**Class**	**Depth**	**Quantity**	**Unit**	**Cost**	**Total**
	Site Mobilisation / Demobilisation - Covered in Devonshire Dr Item 1.1					1	Item	$17,000.00	$17,000.00

2.0 - EARTHWORKS									**$116,546.40**
Item	**Description**	**Size**	**Type**	**Class**	**Depth**	**Quantity**	**Unit**	**Cost**	**Total**
2.1	Remove existing topsoil to a nominal depth of 100mm					7560	m2	$3.30	$24,948.00
2.4	Excavate cut areas (Quantitiy includes box out of pavement area)								
	a) place and compact excavated material to fill areas on site					7504	m3	$12.10	$90,798.40
	c) dispose of surplus material off site					0	m3	$18.00	$0.00
2.5	Extra over Item 2.6 for excavation in rock **Provisional Quantity**					10	m3	$80.00	$800.00

3.0 - UTILITIES									**$35.00**
Item	**Description**	**Size**	**Type**	**Class**	**Depth**	**Quantity**	**Unit**	**Cost**	**Total**
3.1	Excavation of common trench to suit underground power and telecommunication services, provide appropriate bedding material and backfill with sand and removed materials following conduit installation by service authorities - **Provisional Item**					1	m	$35.00	$35.00
3.2	Extra over Item 3.1 for road crossings - **Provisional Item**					0	No	$1,500.00	$0.00

4.0 - STORMWATER									**$55,445.00**
Item	**Description**	**Size**	**Type**	**Class**	**Depth**	**Quantity**	**Unit**	**Cost**	**Total**
4.1	Form table drains	1.2m wide			400mm	744	m	$5.00	$3,720.00
4.3	Construct open drains as directed at stormwater outfalls - **Provisional Quantity**	Nom. 2.5m wide			200mm	0	m	$4.00	$0.00
4.4	Extra over Item 4.2 to provide rock pitching as required including provision of Class B geofabric as required - **Provisional Quantity**					200	m2	$48.00	$9,600.00
4.5	Supply and install stormwater culverts, including all excavation, pipe bedding and backfill as required								
	a) 375 Dia. Pipe	375	RCP	2		0	m	$165.00	$0.00
	b) 450 Dia. Pipe	450	RCP	2		125	m	$225.00	$28,125.00
4.6	Supply and install precast concrete headwalls								
	a) 375 Dia.	375	Conc			0	No	$600.00	$0.00
	b) 450 Dia.	450	Conc			20	No	$700.00	$14,000.00

7.0 - ROADS									**$107,448.00**
Item	**Description**	**Size**	**Type**	**Class**	**Depth**	**Quantity**	**Unit**	**Cost**	**Total**
7.1	Pavement testing (Provisional sum)					1	Item	$8,500.00	$8,500.00
7.2	Preparation of sub grade					7560	m2	$0.80	$6,048.00
7.3	Supply, place, compact sub base material			1	200mm	1000	m3	$40.00	$40,000.00
7.4	Supply, place, compact base material								
	a) to road areas - **Provisional Quantity**			A	100mm	500	m3	$40.00	$20,000.00
	b) to driveways - **Provisional Item**			A	220mm	10	m3	$90.00	$900.00
7.7	Supply and place two coat seal from chainage 0 to 700m				14 / 7mm	3200	m2	$10.00	$32,000.00

8.0 - TRAFFIC FACILITIES									**$4,100.00**
Item	**Description**	**Size**	**Type**	**Class**	**Depth**	**Quantity**	**Unit**	**Cost**	**Total**
8.6	Supply and install steel guide posts - **Provisional Quantity**					100	No	$35.00	$3,500.00
8.9	Provide sign posts including all excavation and concrete footings - **Provisional Item**					1	No	$600.00	$600.00

9.0 - REVEGETATION / LANDSCAPING									**$11,550.00**
Item	**Description**	**Size**	**Type**	**Class**	**Depth**	**Quantity**	**Unit**	**Cost**	**Total**
9.1	Spread existing topsoil to fill batter areas as required				100mm	3500	m2	$3.30	$11,550.00

APPENDIX 2

Port Road Landslip Prevention Drainage Plans 3406-32B G01, G02, C01 and C02 all (Rev 0)

CSE TASMANIA PTY LTD
civil • structural • environmental engineering

WARATAH WYNYARD COUNCIL
PORT ROAD LANDSLIP PREVENTION DRAINAGE

CSE Tasmania Ref: 3406-32 B

FEB 2019

LOCALITY PLAN
N.T.S.

SCHEDULE OF DRAWINGS

3406-32 B	G01 (Rev 0)	- LOCALITY PLAN & INDEX
3406-32 B	G02 (Rev 0)	- NOTES
3406-32 B	C01 (Rev 0)	- OVERALL SITE PLAN
3406-32 B	C02 (Rev 0)	- PIPE AND STAINLESS CABLE LONGSECTION AND DETAIL

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DO NOT SCALE | Original Size A3

CONSTRUCTION

Scale: AS SHOWN | Designed: CJM | Drawn: CJM | Accred. No: 0C0180RV | Approved: | Date:

No	Revision	Drawn	Date
0	ISSUED FOR CONSTRUCTION	.	12.02.19
A	ISSUED FOR REVIEW AND COMMENT	CJM	22.01.19

Client: WARATAH WYNYARD COUNCIL
Project: PORT ROAD LANDSLIP PREVENTION
Title: LOCALITY PLAN & INDEX
Drawing No: 3406-32 B G01 Revision: 0

NOTES (General, Earthworks & Landscaping)

GENERAL

1. W.W.C. - Waratah Wynyard Council
2. T.W. - TasWater
3. Original base survey - Lidar
4. Setout of boundaries to be provided by a licenced surveyor.
5. Level datum - AHD
6. Prior to any excavation, Contractor is to locate all existing underground services
7. Contractor to arrange provision of 'As Constructed' information. Survey co-ordinates to be recorded in GDA94 & AHD and provided in electronic and hard copy format in accordance with the requirements of T.W. Contact T.W. to obtain further details.
8. Service offsets as per TSD Standard Drawings

LANDSCAPING

9. All disturbed surfaces shall be revegetated and stabilised with stabilisation grass mix. (Refer Sheet C05 for specifications). or as noted>

NOTES (Roadworks & Drainage)

ROADWORKS

1. Service trenches under trafficked areas shall be backfilled with compacted pavement sub base material.
2. Refer to TSD's for the following:
   - Driveway Crossings
   - Footpaths
   - Pedestrian Access Ramps
   - Kerb Profiles

STORMWATER

4. Tops of manholes shall be finished to match adjacent finished surface levels and grades.
5. Pipe bedding and haunching - as per TSD.
6. 20mm crushed rock bedding to be used in stormwater trenches with sub-soil drains.
7. New pipework shall be:
   - As specified on stormwater long sections
   - Property Connections: 150mmϕ P.V.C. (SN8)
9. All pipes greater than 100mmϕ are to be rubber ring jointed and laid on a minimum of 75mm sand bedding extending to 150mm above the top of pipe.
10. All stormwater lot connections shall be brought nominally 100mm above surrounding surface and sealed with a glued end cap. Caps shall be painted green. Locations of connection points to be marked with star pickets.
11. Provide electromagnetic, metal impregnated tape in all non conductive pipe trenches. Ensure tape terminations are accessible.
12. Manhole benching:
    - Minimum height of half pipe diameter.
13. Side Entry pits to TSD-SW10 - Type 4 unless uno
14. Manhole, lids and surrounds:
    - Trafficked areas - Class D - 'Gatic' Heavy Duty
    - Non Trafficked areas - 'Gatic' Light Duty

NOTES (Sewer & Water)

SEWER

1. All sewer supply construction to:
   - Sewerage Supply Code of Australia (WSA 02-2002-2.3) - Part 3: Construction
2. New pipework shall be:
   - As specified on sewer long sections
   - Property Connections: 100 Dia. P.V.C. (SN10) RRJ and in accordance with SEW-1106 including boundary boxes as shown.
     Note - Inspection openings shall be 0.5m inside the property boundary not outside the boundary.
   - TasWater approved products are contained on the City West Water Website http://www.mrwa.com.au/Pages/Products.aspx
   - Inspected prior to backfill
3. Provide electromagnetic, metal impregnated tape in all non metallic pipe trenches. Ensure tape terminations are accessible.
4. All live connections by TW at developers cost.
5. Manholes benching:
   - Full depth of pipe diameter - as per WSA SEW-1302-V
6. Manholes, lids and surrounds:
   - Trafficked areas (most areas in road reserve) - Class D - 'Gatic' Heavy Duty
   - Non Trafficked areas - 'Gatic' Light Duty

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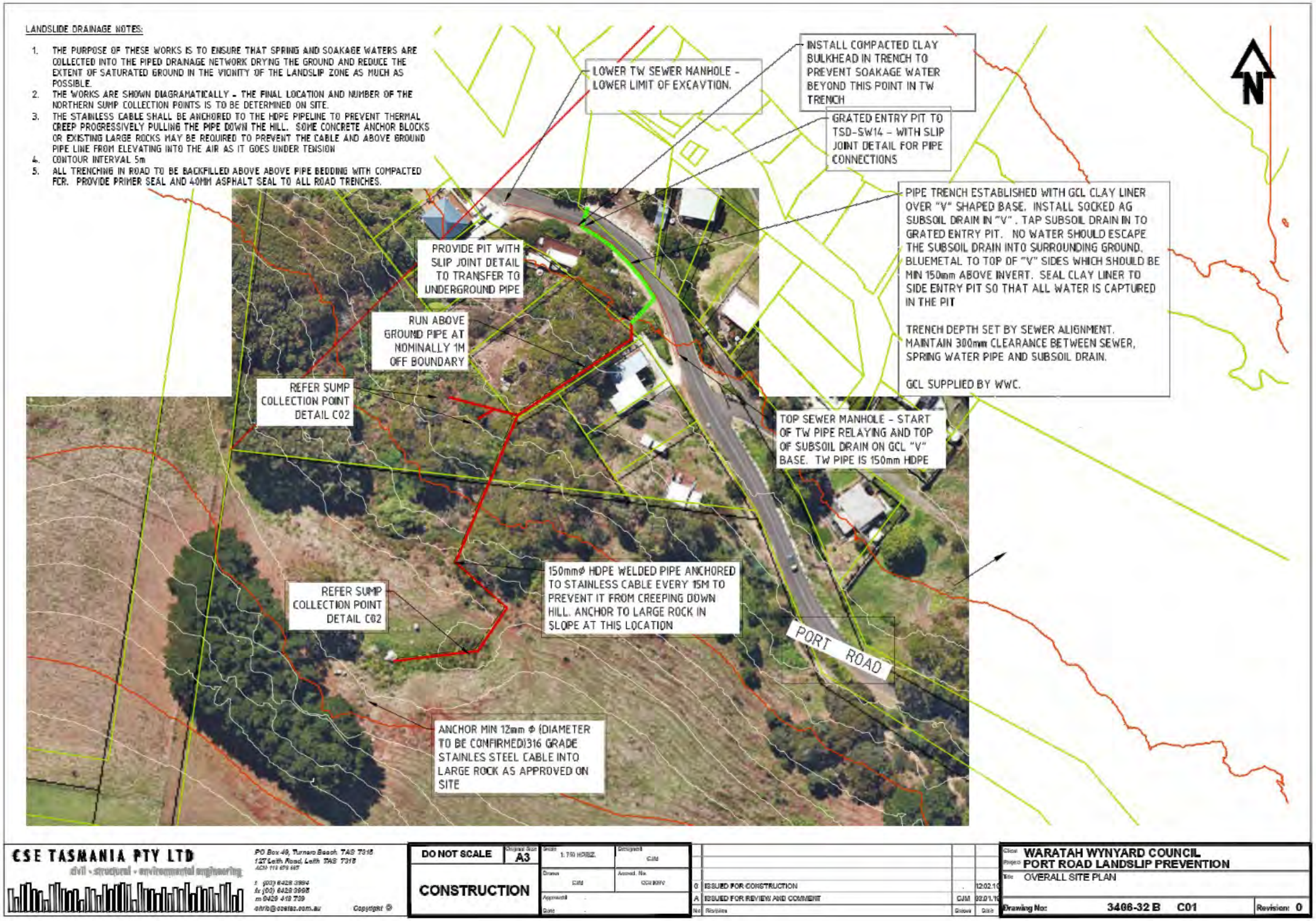
DO NOT SCALE | Original Size A3 | Scale N/A | Designed CJM | Drawn CJM | Accred. No. CC2180RV | Approved - | Date -

CONSTRUCTION

No	Revisions	Drawn	Date
0	ISSUED FOR CONSTRUCTION	.	12.02.19
A	ISSUED FOR REVIEW AND COMMENT	CJM	22.01.19

Client WARATAH WYNYARD COUNCIL
Project PORT ROAD LANDSLIP PREVENTION
Title NOTES
Drawing No: 3406-32 B G02 Revision: 0


LANDSLIDE DRAINAGE NOTES:
1. THE PURPOSE OF THESE WORKS IS TO ENSURE THAT SPRING AND SOAKAGE WATERS ARE COLLECTED INTO THE PIPED DRAINAGE NETWORK DRYING THE GROUND AND REDUCE THE EXTENT OF SATURATED GROUND IN THE VICINITY OF THE LANDSLIP ZONE AS MUCH AS POSSIBLE.
2. THE WORKS ARE SHOWN DIAGRAMATICALLY - THE FINAL LOCATION AND NUMBER OF THE NORTHERN SUMP COLLECTION POINTS IS TO BE DETERMINED ON SITE.
3. THE STAINLESS CABLE SHALL BE ANCHORED TO THE HDPE PIPELINE TO PREVENT THERMAL CREEP PROGRESSIVELY PULLING THE PIPE DOWN THE HILL. SOME CONCRETE ANCHOR BLOCKS OR EXISTING LARGE ROCKS MAY BE REQUIRED TO PREVENT THE CABLE AND ABOVE GROUND PIPE LINE FROM ELEVATING INTO THE AIR AS IT GOES UNDER TENSION
4. CONTOUR INTERVAL 5m
5. ALL TRENCHING IN ROAD TO BE BACKFILLED ABOVE ABOVE PIPE BEDDING WITH COMPACTED FCR. PROVIDE PRIMER SEAL AND 40MM ASPHALT SEAL TO ALL ROAD TRENCHES.
LOWER TW SEWER MANHOLE - LOWER LIMIT OF EXCAVTION.
INSTALL COMPACTED CLAY BULKHEAD IN TRENCH TO PREVENT SOAKAGE WATER BEYOND THIS POINT IN TW TRENCH
GRATED ENTRY PIT TO TSD-SW14 - WITH SLIP JOINT DETAIL FOR PIPE CONNECTIONS
PIPE TRENCH ESTABLISHED WITH GCL CLAY LINER OVER "V" SHAPED BASE. INSTALL SOCKED AG SUBSOIL DRAIN IN "V". TAP SUBSOIL DRAIN IN TO GRATED ENTRY PIT. NO WATER SHOULD ESCAPE THE SUBSOIL DRAIN INTO SURROUNDING GROUND. BLUEMETAL TO TOP OF "V" SIDES WHICH SHOULD BE MIN 150mm ABOVE INVERT. SEAL CLAY LINER TO SIDE ENTRY PIT SO THAT ALL WATER IS CAPTURED IN THE PIT
TRENCH DEPTH SET BY SEWER ALIGNMENT. MAINTAIN 300mm CLEARANCE BETWEEN SEWER, SPRING WATER PIPE AND SUBSOIL DRAIN.
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REFER SUMP COLLECTION POINT DETAIL C02
PORT ROAD
ANCHOR MIN 12mm Φ (DIAMETER TO BE CONFIRMED)316 GRADE STAINLES STEEL CABLE INTO LARGE ROCK AS APPROVED ON SITE
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Date
0 ISSUED FOR CONSTRUCTION 12.02.19
A ISSUED FOR REVIEW AND COMMENT CJM 02.01.19
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Project PORT ROAD LANDSLIP PREVENTION
Title OVERALL SITE PLAN
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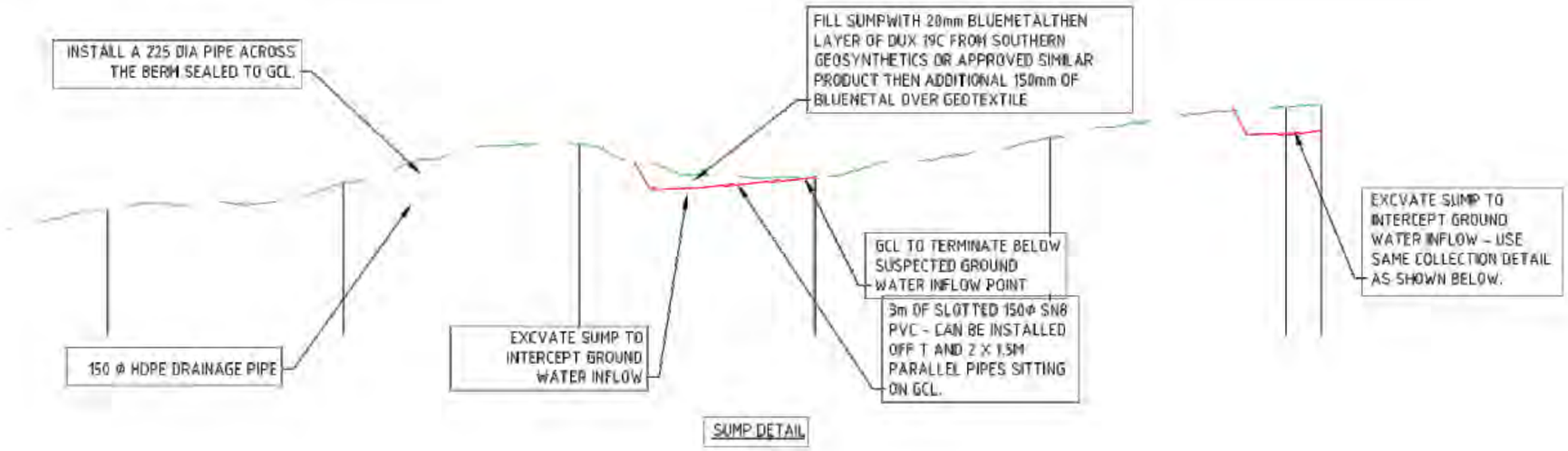
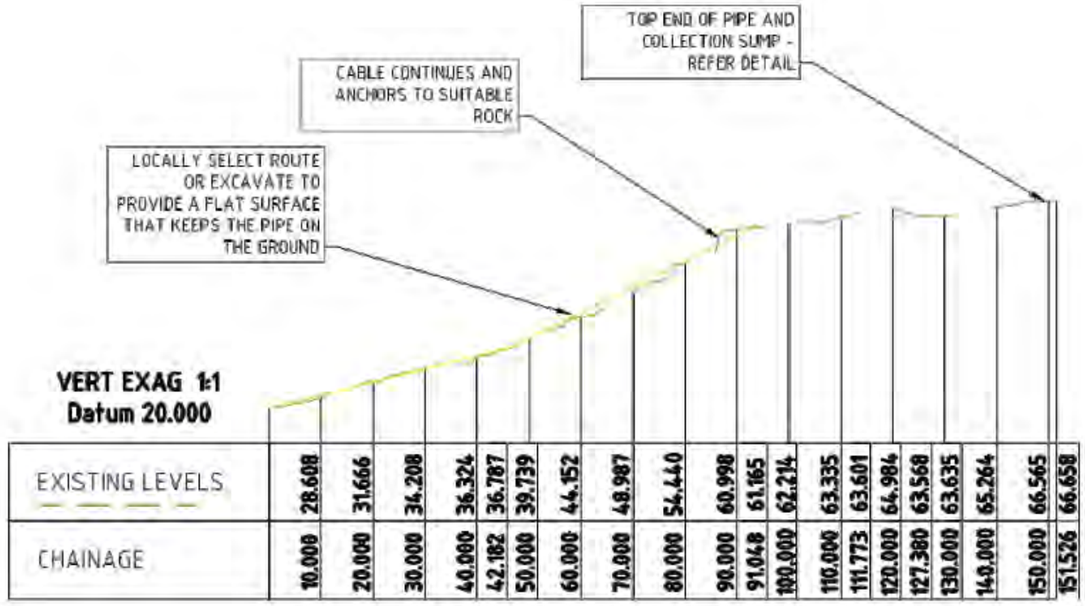
Revision: 0





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60.000	44.152
70.000	48.987
80.000	54.440
90.000	60.998
91.048	61.165
100.000	62.214
110.000	63.335
111.773	63.601
120.000	64.984
127.380	63.568
130.000	63.635
140.000	65.264
150.000	66.565
151.526	66.658

STAINLESS CABLE LONG SECTION

SCALES: HORIZONTAL 1:1000 VERTICAL 1:1000

STABILISATION GRASS MIX FOR SURFACE DRAINS & BATTERS:

Sterile Ryecorn:	3.0 g/m2
Ryegrass var Victorian:	1.5 g/m2
Ryecorn var Concorde:	1.5 g/m2
Chewing Fescue:	0.5 g/m2
Hard Fescue:	0.5 g/m2
Sheep Fescue:	0.5 g/m2
White Clover var Huia:	1.0 g/m2
Sub Clover var Trikkala:	0.5 g/m2
Browntop Bent:	0.5 g/m2
Red Creeping Fescue:	0.5 g/m2
TOTAL:	10.0 g/m2

FERTILISER
N : P : K = 8 : 4 : 10 @50.0g/m2

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No	Revision	Drawn	Date
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A	ISSUED FOR REVIEW AND COMMENT	CJM	30.01.19

Client: WARATAH WYNYARD COUNCIL
Project: PORT ROAD LANDSLIP PREVENTION
Title: STAINLESS CABLE LONG SECTION AND SUMP DETAIL
Drawing No: 3466-32 B C02 | Revision: 0

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WARATAH WYNYARD COUNCIL
PORT ROAD LANDSLIP PREVENTION DRAINAGE

CSE Tasmania Ref: 3406-32 B

FEB 2019

LOCALITY PLAN
N.T.S.

SCHEDULE OF DRAWINGS

3406-32 B	G01 (Rev 0)	- LOCALITY PLAN & INDEX
3406-32 B	G02 (Rev 0)	- NOTES
3406-32 B	C01 (Rev 0)	- OVERALL SITE PLAN
3406-32 B	C02 (Rev 0)	- PIPE AND STAINLESS CABLE LONGSECTION AND DETAIL

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0	ISSUED FOR CONSTRUCTION	.	12.02.19
A	ISSUED FOR REVIEW AND COMMENT	CJM	22.01.19

Client: WARATAH WYNYARD COUNCIL
Project: PORT ROAD LANDSLIP PREVENTION
Title: LOCALITY PLAN & INDEX

Drawing No: 3406-32 B G01 | Revision: 0

NOTES (General, Earthworks & Landscaping)

GENERAL

1. W.W.C. - Waratah Wynyard Council
2. T.W. - TasWater
3. Original base survey - Lidar
4. Setout of boundaries to be provided by a licenced surveyor.
5. Level datum - AHD
6. Prior to any excavation, Contractor is to locate all existing underground services
7. Contractor to arrange provision of 'As Constructed' information. Survey co-ordinates to be recorded in GDA94 & AHD and provided in electronic and hard copy format in accordance with the requirements of T.W. Contact T.W. to obtain further details.
8. Service offsets as per TSD Standard Drawings

LANDSCAPING

9. All disturbed surfaces shall be revegetated and stabilised with stabilisation grass mix. (Refer Sheet C05 for specifications). or as noted>

NOTES (Roadworks & Drainage)

ROADWORKS

1. Service trenches under trafficked areas shall be backfilled with compacted pavement sub base material.
2. Refer to TSD's for the following:
   - Driveway Crossings
   - Footpaths
   - Pedestrian Access Ramps
   - Kerb Profiles

STORMWATER

4. Tops of manholes shall be finished to match adjacent finished surface levels and grades.
5. Pipe bedding and haunching - as per TSD.
6. 20mm crushed rock bedding to be used in stormwater trenches with sub-soil drains.
7. New pipework shall be:
   - As specified on stormwater long sections
   - Property Connections: 150mmϕ P.V.C. (SN8)
9. All pipes greater than 100mmϕ are to be rubber ring jointed and laid on a minimum of 75mm sand bedding extending to 150mm above the top of pipe.
10. All stormwater lot connections shall be brought nominally 100mm above surrounding surface and sealed with a glued end cap. Caps shall be painted green. Locations of connection points to be marked with star pickets.
11. Provide electromagnetic, metal impregnated tape in all non conductive pipe trenches. Ensure tape terminations are accessible.
12. Manhole benching:
    - Minimum height of half pipe diameter.
13. Side Entry pits to TSD-SW10 - Type 4 unless uno
14. Manhole, lids and surrounds:
    - Trafficked areas - Class D - 'Gatic' Heavy Duty
    - Non Trafficked areas - 'Gatic' Light Duty

NOTES (Sewer & Water)

SEWER

1. All sewer supply construction to:
   - Sewerage Supply Code of Australia (WSA 02-2002-2.3) - Part 3: Construction
2. New pipework shall be:
   - As specified on sewer long sections
   - Property Connections: 100 Dia. P.V.C. (SN10) RRJ and in accordance with SEW-1106 including boundary boxes as shown.
     Note - Inspection openings shall be 0.5m inside the property boundary not outside the boundary.
   - TasWater approved products are contained on the City West Water Website http://www.mrwa.com.au/Pages/Products.aspx
   - Inspected prior to backfill
3. Provide electromagnetic, metal impregnated tape in all non metallic pipe trenches. Ensure tape terminations are accessible.
4. All live connections by TW at developers cost.
5. Manholes benching:
   - Full depth of pipe diameter - as per WSA SEW-1302-V
6. Manholes, lids and surrounds:
   - Trafficked areas (most areas in road reserve) - Class D - 'Gatic' Heavy Duty
   - Non Trafficked areas - 'Gatic' Light Duty

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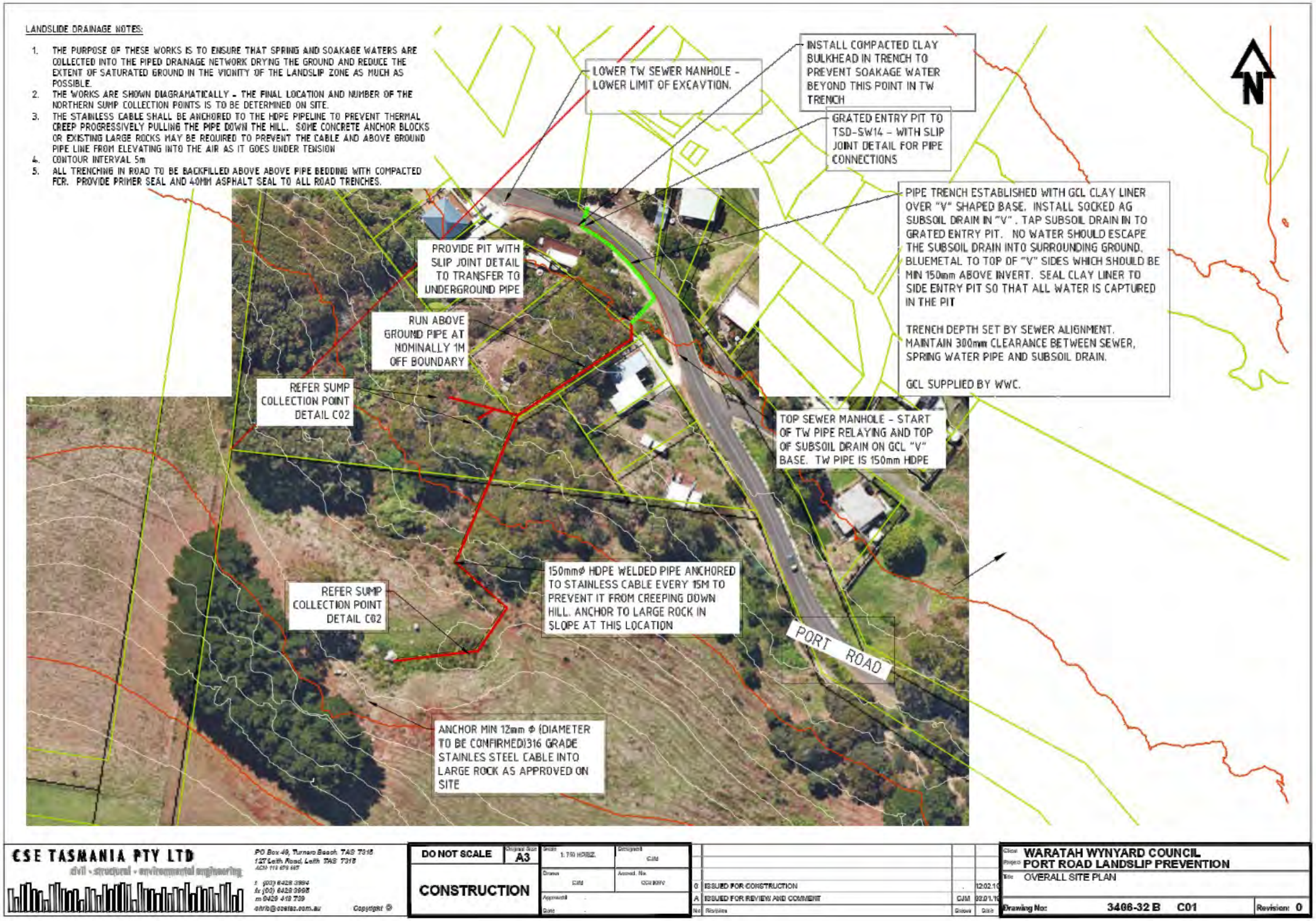
Client WARATAH WYNYARD COUNCIL
Project PORT ROAD LANDSLIP PREVENTION
Title NOTES
Drawing No: 3406-32 B G02 Revision: 0


LANDSLIDE DRAINAGE NOTES:
1. THE PURPOSE OF THESE WORKS IS TO ENSURE THAT SPRING AND SOAKAGE WATERS ARE COLLECTED INTO THE PIPED DRAINAGE NETWORK DRYING THE GROUND AND REDUCE THE EXTENT OF SATURATED GROUND IN THE VICINITY OF THE LANDSLIP ZONE AS MUCH AS POSSIBLE.
2. THE WORKS ARE SHOWN DIAGRAMATICALLY - THE FINAL LOCATION AND NUMBER OF THE NORTHERN SUMP COLLECTION POINTS IS TO BE DETERMINED ON SITE.
3. THE STAINLESS CABLE SHALL BE ANCHORED TO THE HDPE PIPELINE TO PREVENT THERMAL CREEP PROGRESSIVELY PULLING THE PIPE DOWN THE HILL. SOME CONCRETE ANCHOR BLOCKS OR EXISTING LARGE ROCKS MAY BE REQUIRED TO PREVENT THE CABLE AND ABOVE GROUND PIPE LINE FROM ELEVATING INTO THE AIR AS IT GOES UNDER TENSION
4. CONTOUR INTERVAL 5m
5. ALL TRENCHING IN ROAD TO BE BACKFILLED ABOVE ABOVE PIPE BEDDING WITH COMPACTED FCR. PROVIDE PRIMER SEAL AND 40MM ASPHALT SEAL TO ALL ROAD TRENCHES.
LOWER TW SEWER MANHOLE - LOWER LIMIT OF EXCAVTION.
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Approved No. CSE 3406
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Date
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A ISSUED FOR REVIEW AND COMMENT CJM 02.01.19
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Title OVERALL SITE PLAN
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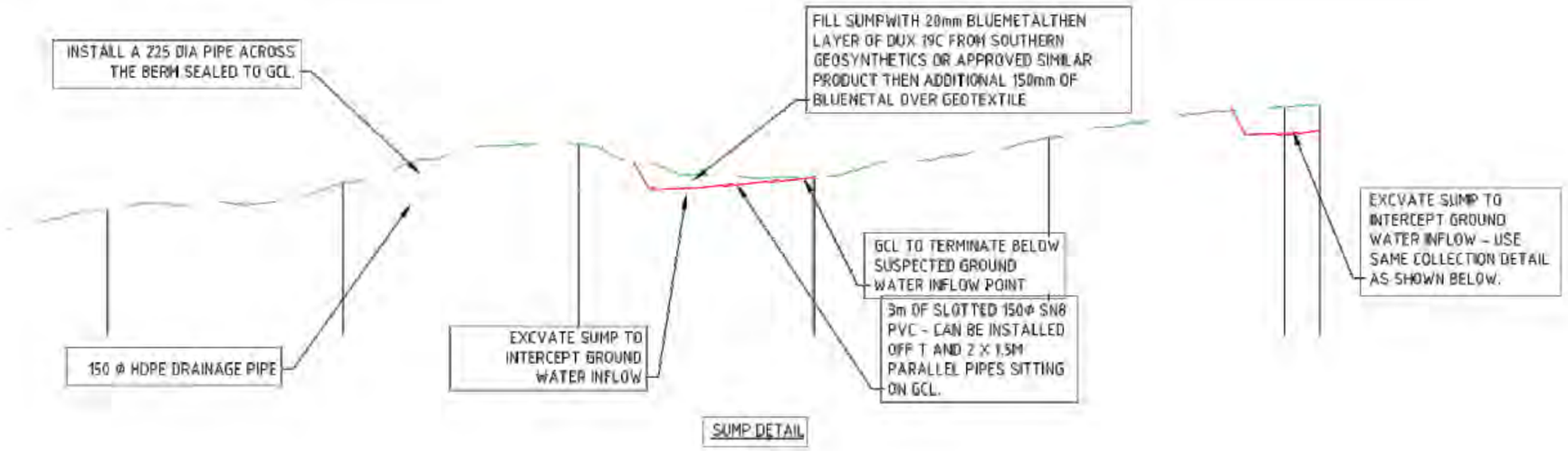

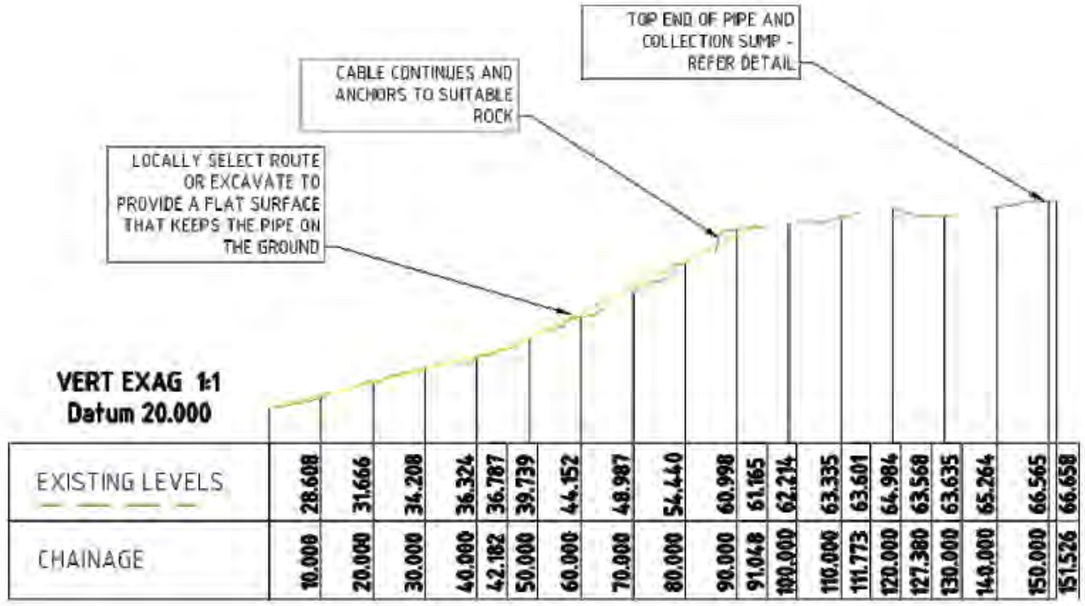

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127.380	63.568
130.000	63.635
140.000	65.264
150.000	66.565
151.526	66.658

STAINLESS CABLE LONG SECTION

SCALES: HORIZONTAL 1:1000 VERTICAL 1:1000

STABILISATION GRASS MIX FOR SURFACE DRAINS & BATTERS:

Sterile Ryecorn:	3.0 g/m2
Ryegrass var Victorian:	1.5 g/m2
Ryecorn var Concorde:	1.5 g/m2
Chewing Fescue:	0.5 g/m2
Hard Fescue:	0.5 g/m2
Sheep Fescue:	0.5 g/m2
White Clover var Huia:	1.0 g/m2
Sub Clover var Trikkala:	0.5 g/m2
Browntop Bent:	0.5 g/m2
Red Creeping Fescue:	0.5 g/m2
TOTAL:	10.0 g/m2

FERTILISER
N : P : K = 8 : 4 : 10 @50.0g/m2

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Client: WARATAH WYNYARD COUNCIL
Project: PORT ROAD LANDSLIP PREVENTION
Title: STAINLESS CABLE LONG SECTION AND SUMP DETAIL
Drawing No: 3466-32 B C02 | Revision: 0

WARATAH COMMUNITY PLAN 2018-2021

Acknowledgements: The Waratah Community Plan 2018-2021 was prepared with the Waratah community for the Waratah Community Board.

HAMMOND ROBERTSON OPENGROUND STRATEGY WORKS WARATAH WYNYARD COUNCIL

Contents

Part One: Background

This section tells us about Waratah and our community planning process.

Developing our community plan

Our Waratah community planning process began after Waratah Wynyard Council started looking at tourism opportunities in Waratah and other areas nearby. David Hammond, a New Zealander, came over to Waratah and did some work with our community. Out of that came the "Destination Management Priorities Report" (13 March 2017) and the "Re-imaging Waratah Community Workshop" (30 May 2017)[1]. These both talked about the need for a new approach to community leadership and planning in Waratah which would work better than in the past.

This Waratah Community Plan has been put together after a week-long set of 3 workshops, lots of discussions, and a survey of people living in Waratah during 2-7 October 2017. More details of these are in Appendix A. The workshops covered:

- Workshop 1: Community strengths, vision and initiatives
- Workshop 2: Prioritising, skills gaps and Council role
- Workshop 3: Community feedback, tourism presentation and moving forward

This has been done alongside planning for a new "Waratah Tourism Association" (WTA) to get some people working specifically on kick-starting tourism in the town and surrounding areas. A Promotions Plan has been written to give that new group a blueprint to work from.

[1] Hammond Robertson Ltd http://www.hammondrobertson.co.nz/

This is us working on the Waratah Community Plan, and making sure we get the Community Board set up right:

We worked hard. Notice Council people were there as well.

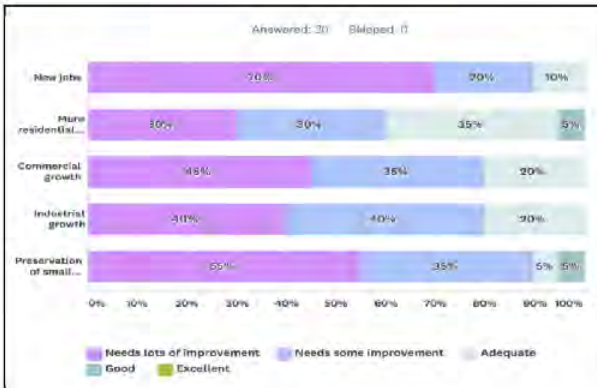
There were quite a few people coming in and out, and everyone took it seriously.

Some workshops were held on tourism and others focused on the community.

What the online survey came back with

There were 20 people who replied to the online survey. That means 1 out of every 8 Waratah adults answered it. The survey was meant to get the opinions of people who might not come to the Workshops or drop in to talk to the people at the Post Office.

Waratah's economy

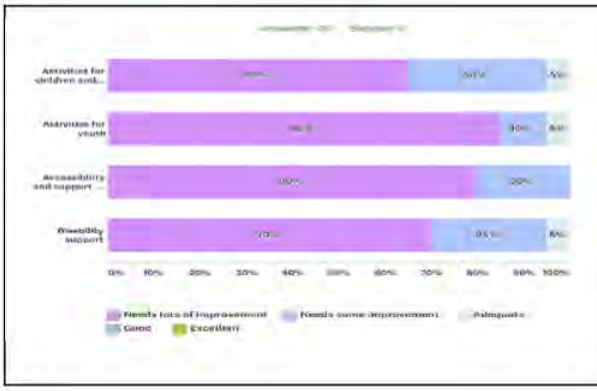


The big concern for people in Waratah was jobs. Only 10% of people who responded thought the job opportunities available were adequate.

The majority of people were concerned that too few businesses of all kinds were located in Waratah.

In general, people were worried about jobs and knew that Waratah needs a new economy to remain a good community to live in.

Waratah's social side



Activities for youth were a second big concern.

Overall, the services available to people in Waratah were seen as inadequate. Changing the trend of services leaving the town is very important to the community.

Do people want to help out in their community or not?

Yes they do! This is a community that really wants to get involved. The survey asked people to name one thing they would be willing to help with. We got a flood of answers:

- Social sports
- History for tourism
- Manpower
- "I'm already doing this by starting a business"
- My time volunteering
- "I want to collate a quarterly event/meeting sheet with brief information"
- Help with clean-up and removing English Broom
- Building better recreational areas
- Health and wellbeing projects like a Co-op Shop
- Want to be a Waratah Tourism Ambassador

What skills do people in Waratah want to contribute to the community?

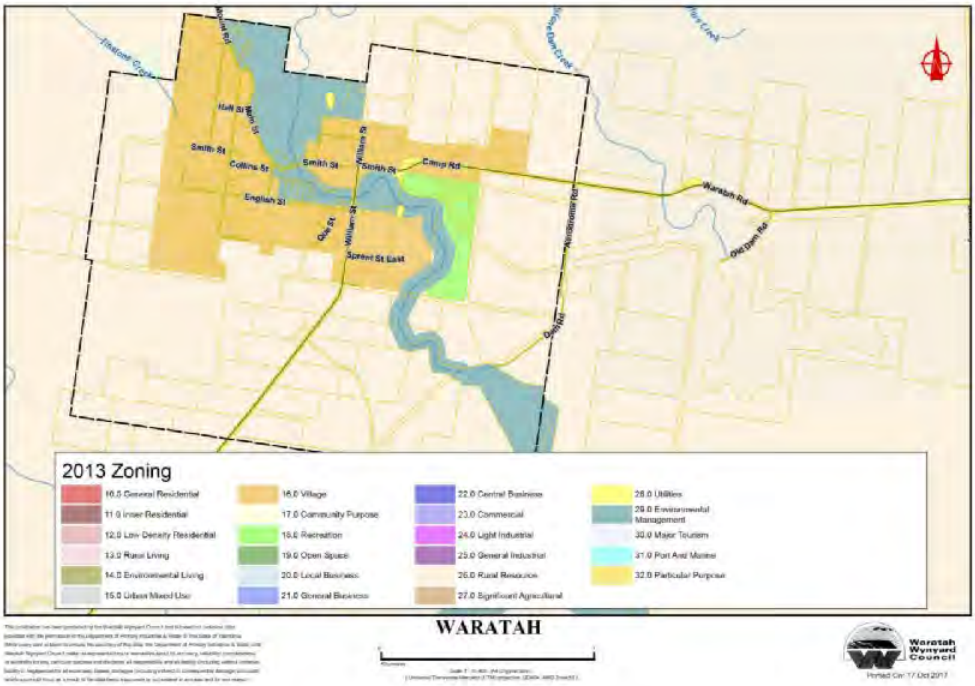
Wow - heaps of skills! It doesn't matter how big or small communities are - they all have a treasure trove of skills to tap into. These are skills people in Waratah said they wanted to contribute:

Musical	Artistic	Local knowledge
Strength	Cooking and functions	Organisation skills
Community support skills	Can print notices	Can fill in grant forms
Meeting organiser	30 years of volunteering	Good with tourists
Advertising and promotions	I have transport	Youth work

Others in the community are just waiting to see what happens before they contribute:

"I've done most things but I want to see if anything is going to come from this first…" ***(online survey response)***

About the Waratah community



This Council Zoning Map show all the different zones in town and how they are laid out today. Waratah is a settlement in Western Tasmania built on a strong mining heritage following the discovery of the Mt Bischoff Tin Deposit by James 'Philosopher' Smith in 1872. It became the largest tin mine in Australia at the time, and Waratah grew to a large population of over 1,500 people. The community was strong and filled with a lot of life and activities. As mining slowed down and Mt Bischoff and surrounding mines closed, the population dropped as people went with the jobs.

The 2016 Census[2] puts the population now at around 250 people and 176 homes. People in our community say that is probably a bit low because some don't fill in the Census information very accurately, or avoid answering it.

While the drop in population does not sound very good, the Council's tourism reports keep saying that Waratah is a tourism gem with a big future.

[2] http://www.censusdata.abs.gov.au/census_services/getproduct/census/2016/quickstat/SSC60710?opendocument

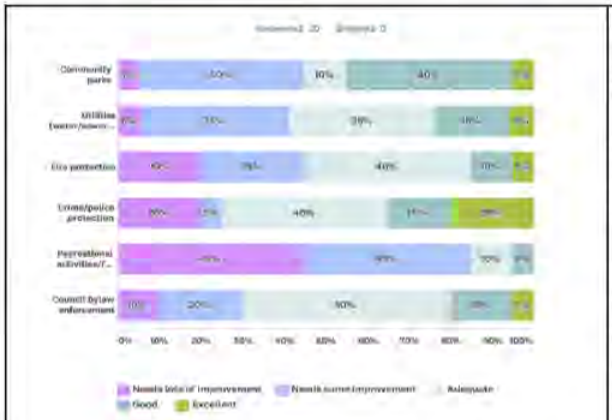
Going into what the 2016 Census said in a bit more detail, the federal government think that:

- The median age of people in Waratah was 53 years. Children aged 0-14 years made up 11.4% of the population and people aged 65 years and over made up 24%.
- In Waratah, 27% of people were in some kind of education. Of these, 14% were in primary school, 23% in secondary school, and 5% in a tertiary or technical institution. 58% did not say what kind of education they were in.
- The median weekly personal income for people aged 15 years and over was $377.
- In Waratah, 63% of houses were occupied and 37% were unoccupied.

"Spread the word about what a great place it is historically and the potential it has for major tourism activities!" ***(online survey response)***

What is the Council doing in Waratah?

This next section looks at what the Council is doing in Waratah in the next year (2017/18), and also looks ahead a few years into the future. The Council is trying to make its processes more visible and transparent to work better with the Waratah community, and so the Community Board can get its submissions together for Council budgets at the right times.



The online survery showed a high level of dissatisfaction with Council services.

The Community Board will need to work out the reasons for people's feelings about this.

The people who did the survey think that Waratah people are trying to send a message "loud and clear". This Plan shows that this voice is being heard.

2017/18 Council spending

Council thinks it will probably spend $7.4M this year in capital $17.8M operational spend over the whole municipality this year, with most of this going on what is called "core infrastructure" such as Council roads (but not State roads). It is expensive to keep paying for what is already there, and there is storm damage to cover as well.

The next table outlines Council spending in the Waratah community in 2017/18. $515,000 of spending has been put in the table but there is more as well. As noted before, it takes a lot just to keep a place running. Making sure these services that are already in place keep running is the Council's first priority. Cost for 2018-2020 will be similar but just adjusted for things like inflation.

Table 1. Council spending and revenue in Waratah 2017/18

Project or Cost Centre	Projected Expenditure 2017/18	Projected Revenue 2017/18
Waratah Planning	10,000	
Waratah Museum / Athenaeum Hall	43,707	1,500
Waratah Camping Ground (incl. public toilets)	17,168	42,000
Kenworth Stamper Mill	1,760	800
Waratah Day Care Centre	29,481	16,500
Waratah Collection Services	12,991	
Waratah Halls & Building (Sundry)	4,830	
Waratah War Memorial Park	10,568	
Fossey Information Bay	6,577	
Waratah Falls Reserve	9,585	
Whyte Hills Lookout	3,841	
Philosopher Falls Walkway	1,582	
Civic Square Waratah	9,304	
Waratah Road Reserve	17,396	
Lake Reserve	9,039	
Oval Reserve	4,710	
Saunders Park	5,661	
Tyre Park	3,801	
Rhododendron Gardens	8,373	
Waratah Sports Centre	6,542	500
Waratah Drainage	11,335	
Waratah Transfer Station	92,161	
Customer Services – Service Centre	212,072	35,840
Emergency Services, regulation, roads, toilets	These activities are currently managed Municipality- wide and their costs are not split out to the individual towns of the Municipality.	
Total	**532,404**	**59,340**

Council's planning for the future

The next section talks about what is in the Council plans for the future.

(a) The Strategic Asset Management Plan is a long term document which takes the approach of maintaining existing infrastructure assets in Waratah as they are. There are no new projects planned for Waratah but there are general provisions made for parks and reserves across the Municipality which are not allocated to any single community. This money could be drawn on by the Waratah Community Board if the Board made a good case.

(b) Draft Open Space, Sport and Recreation Plan 2017-27 (OSSRP) identifies recreation and reserve needs across the Municipality over the next decade. It is a draft. The vision of the OSSRP is,

"A diversity of recreation opportunities that enhance:

- The participation in physical and social opportunities, livability, the health and wellbeing of all residents and the economic environmental and social sustainability of the region. These are delivered and promoted in a sustainable manner in partnership with other providers and users and attract new residents, businesses and visitors to the region." (From page 17 of the OSSRP)

Recommendations for Waratah from the OSSRP are (p.46):

- 202. Promote Waratah as a unique heritage and scenic place to visit and stay. Consider marketing to schools and sports for camps.
- 203. Consider rainforest regeneration in several reserve areas around the township to reduce mowing costs and enhance the diversity of landscapes in the town.
- 204. Promote the golf course, indoor recreation centre and character of the town as an affordable place to live.
- 205. Develop an integrated network of pathways around town including a pathway around the full lake foreshore.

(c) The Waratah-Wynyard Municipality Destination Management Priorities Report 2017 talked about tourism opportunities in Waratah. The Report recommended that all tourism assets (such as signs) be included in Asset Management Plans and scheduled for maintenance. The Report also pointed out potential future priorities, such as the development of trails around town, building a carpark on the edge of town and the development of Waratah Falls.

The opportunity: The Community Board

In the past Waratah hasn't been to be clear enough about its direction or priorities. The purpose of this Community Plan and setting up the Community Board is to do this better.

Our vision

What we said in the workshops and consultation is that we're working towards:

"A growing town enjoying the laughter of people and children, well serviced, has more people getting involved in community life, and where tourism is employing our youth.

"But in all this good stuff, we don't lose our special community values."

Our Waratah values

We said a lot of things we loved about Waratah which we want to protect and also to share with others:

Community First

Waratah values the strength of community, the value of volunteerism, and expects decisions that affect the community to be made with the community as a partner. Waratah has big arms that welcome new people in to become community.

Tranquility

Waratah values its location at the edge of the Tarkine wilderness and the connection between people and nature.

Majesty

Waratah invokes a sense of awe and majesty, being blessed with stunning natural and manmade features that express raw and powerful wildness.

Expression

Waratah celebrates arts, culture, heritage and community.

Legacy

Waratah's identity is told through our built history, people and storytelling reflecting its rich past which it loves to make accessible to people.

Part Two:
What we're going to do
"The Big-3"

This section looks at what we are going to do. It lays out our priorities, and what our new Waratah Community Board is going to make sure happens with us as partners. Note that just because other things are not written in this plan doesn't mean the community won't work on them as well.

Anchor Project 1: Waratah Falls

Waratah Falls is incredible and there are almost no other place in the world has such a great waterfall in the middle of town. It is a big drawcard and we can do more with it. Council in the past has seen this as a major project to work on and put a price tag on it of about $1.6m. That sounds scary but we need to do it. Some in our community have identified that alternative access and implementation options may exist and need to be explored. This project is our top priority since it is likely to have the biggest economic and emotive benefits for our community.

Goal: Give the waterfall a "wow factor" which will turn heads, make us proud and bring people to Waratah from around the world by making Waratah Falls a major tourism attraction.

- *Short Term:* Keep the existing tracks and viewing areas well maintained and visually appealing.
- *Long Term:* By 2021, a re-invigorated Waratah Falls are a significant primary attraction for people to visit Waratah, as evidenced in tourism promotional material.

Possible Partners: Waratah Community Board, Waratah Wynyard Council, Waratah Men's Shed, Waratah Tourism Association, Bernie Field Naturalists, TAS Walking Clubs, Landowners, Fagans, Forico, Tourism TAS, Friends of the Waterfall, Crown Land, Forestry Parks & Wildlife, Greens, Hydro (TAS Networks), Green Army, Work for the Dole, Landcare, Visitors, Tourism TAS, Cradle Coast Authority.

Anchor Project 2: Community Facilitator and Community Social Services

Sadly, Waratah has seen a decline in the number of services and activities available. These include health services, children and youth activities (regular, sporting), bus services for shopping, community transportation, and community events. This can all be turned around.

We can work with partner organisations to explore ways to provide services in Waratah in a coordinated way. The Community Workshops explored a Community Services Hub or Community Centre with a paid part-time facilitator. This position would have to be paid to make it work and be taken seriously.

A part-time community facilitator would be a first step to get the community back into activities, create events, make the best of existing facilities, and improve communication and engagement in the community.

The community needs to establish a legal trust or entity to employ a facilitator. The community would need to work through the goals of that trust and the activities they think it could run. This conversation would be one that involves Council and other providers of services.

Goal: Provide sustainable services in Waratah in a sustainable way which also provides a focus for organising community activities.

- *Short term:* Set up a trust, find seed funding, and pay a community facilitator to stimulate local activities and coordinate access to services.
- *Long term:* Establish a single facility to provide activities and services out of in Waratah, acting as a Community Centre.

Possible Partners: Waratah Community Board, Waratah Wynyard Council, Waratah Men's Shed, Arts Tasmania, Kommunity Kids/ PCYC,Grange/Elementos, Adult classes/Uni, Health Services, State & Federal Govt, Sport & Recreation, Arts Community, Rural Health, TAFE, TAS Community Fund, Waratah Wynyard Youth Leaders, Health Dept, Home and Community Care

(HACC), Housing Dept, Education Dept, Alt Therapies, UTAS, NDIS (National Disability I? Service), Anglicare, Smith Family, Centacare.

Community Thoughts: The following thoughts were put forward during the October workshops that could easily be grouped under this priority and worked through over time.

NEED TO CHANGE	WANT TO CREATE
• Better communication - transparency and consultation • More effective networking • Town attitude • Reduced isolation - connection • Being more supportive and encouraging • More harmony	• A community hub at Athenaeum • Uniform vision for Waratah • Winter festival • Services and facilities hub - to find funding and support • Delegated responsibility • Busy community providing employment opportunities • Cold climate crops + microclimate • Temporary or pop-up art • Welcome pack • Community projects where all participate e.g. flag designs • Welcoming atmosphere

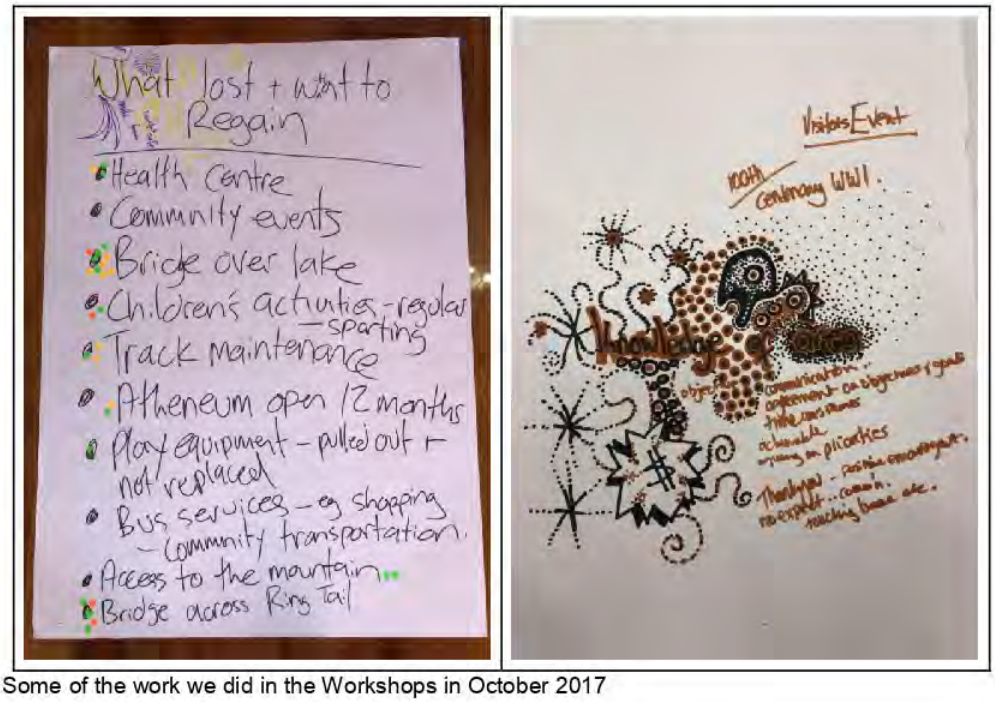
Anchor Project 3: Railway Bridge Restoration

The railway line between Mt Bischoff and Bernie was an important part of Waratah's mining history. There are lots of historical photographs of the rail line in the community. The old railway bridge in the centre of Waratah has deteriorated and is now closed off to the public. Returning the bridge to a safe standard for pedestrian use would see an increase in town pride, and serve as an attraction for visitors.

Goal: Repair the railway bridge repaired and open it to pedestrian access.

- *Short Term:* Find and circulate the engineer's report. A "Save the Bridge" charitable trust be formed to fundraise and work with council and other partners. Council must brief the Community Board on the standards of safety required today for pedestrians.
- *Long Term:* The railway bridge will be brought to safe standard, re-opened, and its ongoing funding be secured by grants or a pay-for tourism model. It will need money to keep it maintained to a safe pedestrian public standard.

Possible Partners: Heritage Tasmania/Heritage Trust, Fagans, Conservation Trust, Don River Railway, ABT Railway, Mining Unions, Australian Association of Engineers, Engineering Consultancies, Tourism TAS, State, Dept. State Growth, Railway Heritage, Sponsors, Crowd Funding, Mine - Grange, TAS Span, Local Skilled Community Members.



Some of the work we did in the Workshops in October 2017

Our other projects

The Big-3 Priorities are going to take time to work on. While they are ticking along, there are other things that have been found to be needed. We can work on these too.

Project	Description	POSSIBLE Responsibility
Community Asset Register	Waratah has a rich pool of knowledge and resources available to the community, but needs to work on getting information to those who may want it. Development of an information database for the community is seen as beneficial to take stock of what skills community members have, what agencies provide what services, and keep an easily accessible record of the area's history for everyone to become familiar with. When putting together a register of community skills, a Head-Heart-Hands approach is an effective starting method.	WCB or Reference Group or anyone who wants to take a lead on it
Community Nursery	The Waratah Fall and Railway Bridge projects have long timeframes to progress and will require elements of significant planting to create a complete asset. The Community Nursery concept was floated during the 3rd workshop and received a positive response from those present. Establishing a Community Nursery in the short term whilst the longer term projects are being worked on enables continuous activity in a productive manner to carry out proactive enhancement throughout the township.	WCB Men's Shed
Visitor information	Local stories and knowledge provide an extremely engaging and valuable experience for visitors. With such a rich history and so many stories, a collaborative community effort to collate and present this information is required. This information is also highly valuable for those people moving into the area.	WTA WCB WWC Reference Group

Project	Description	POSSIBLE Responsibility
Short Walks and Tours	Tourism needs short walks (up to 2 hours) and tours. Meeting nature plus meeting local people, and hearing the stories and personal insights into Waratah's attractions and their history is a strong recipe for success. To do this well means to be consistent, sticking to the advertised length of time and holding tours regularly. A good example is the Tarkine Guided Wilderness Walks offered by the Tarkine Lodge in Muenna - https://tarkinelodge.com.au/bookings.html . These are short walks leaving the Lodge at 10:30am each day and cost $35 per person. Heaps of paid walking tours could be done in and around Waratah, but those that are easily and legally accessible should be the priority. Discussion with community showed there is some uncertainty as to land ownership and/or control of various areas around Waratah. An historic town walk should also be developed to point out the places and buildings of interest and the stories that are associated with them. Candidates are: ○ Philosophers Falls ○ Waratah Calciner ○ Ringtail Falls ○ Magnet Township ○ The Black Tank ○ Tinstone Creek	WCB WWC WTA
Council Assets	The community wants to talk to Council about a whole range of projects to see if they can be funded together: • Drainage at the Tyre Park • Replacement of the stolen sign on Whyte Hill lookout • Powerhouse track - bridge • Calciner - track • Stamper - display improvement	WWC WCB

Other things to work on

There are other things as a community that we need to work on to ensure a bright future. They aren't really projects but more "culture" of the community:

1. Communication

The community has recognised that there is a communication breakdown between different community members, Council and the community, and internally within Council. A more structured approach to ensure communication, which is more transparent and effective, is wanted.

2. Networking

Waratah is seeing an increase of newcomers to the area. It is important that the community is fully welcoming and embracing of new residents, while also providing knowledge of the area to increase cohesion. This networking is also important for providing support to those in need since the services available are limited.

3. Council Maintenance

The community feels that Council has reduced maintenance and is putting pressure on to reduce this even further. Residents view this maintenance as an important part of community morale. Stronger relationships and communication between Council and community are required to catch up on deferred maintenance and find more sustainable solutions moving forward.

Part 3:
Making the Community Plan work for us

This section talks about what we will need to make sure the Waratah Community Plan achieves what it is supposed to do.

Performance measures

Each Big-3 Priority in this plan has varying expected short and long term goals. To allow Council, Waratah Community Board and the wider community to track the progress of these, it is recommended that each Priority have specific performance measures put in place during detailed project planning. These performance measures have been left broad to enable the community to adapt their approach to implementing a Priority and respond to changing conditions.

It is recommended for at least the first two terms of the Waratah Community Board that yearly performance reviews are undertaken through which the community is provided with opportunities to ask questions and provide suggestions for improvement. This should be run together with, and at the same time as, a community satisfaction survey to provide up-to-date monitoring and clear data so this Plan's performance can be accurately reviewed at the end of its intended life.

Plan life

This Community Plan has a three year life cycle in sync with the three year term of Community Board members. During the last 6 months of the Community Board's term, the Board in partnership with Council will undertake a full review of this Plan and the establish a new Plan to guide the new Board. The new Plan should note if any Priorities were not fully met. It should also try to future-proof the next set of priorities the community puts forward.

Tell us what you think

Continuous input from the community is vital to the success of this plan. Please get in contact with your Community Board members outlined at the start of this document (TO BE INCLUDED IN FINAL VERSION) or Tracey Bradley at Waratah Wynyard Council, whose email is tbradley@warwyn.tas.gov.au .

Appendix A

Community Engagement

The Waratah Community Plan was built in 2017 from the following sources:

(a) Waratah Wynyard Destination Management Priorities Report

Written by David Hammond of Hammond Robertson Ltd this report had 4 recommendations for Waratah:

- Recommendation 12: That a Waratah Community Board be formed.
- Recommendation 13: The Waratah Community Board's scope, functions and powers be resolved by Council prior to seeking public expressions of interest for Board members.
- Recommendation 14: That a Waratah Community Plan be developed to guide future priorities and investment, and articulate the community vision and outcomes.
- Recommendation 15: That a hold be put on further significant capital expenditure by Council until the Waratah Community Plan is developed giving shape to community priorities and decisions are taken by the Waratah Community Board and Council.

(b) Re-imaging Waratah Community Workshop May 2017

The Re-imaging Waratah Community Workshop identified:

(a) Community cohesion. There was a strong recognition by the community that it needed to join together and move forward, not dwell on past grievances but to embrace opportunities afforded to them.

(b) Tourism development. Tourism was seen as the best economic opportunity to improve the condition of their town and provide a future for their children.

(c) Community Board and planning. The Workshop embraced the idea of a Community Board and a Community Plan. The strategies to grow local leadership, decision-making and locally decided priorities aligned to their values. They want Council to develop this thinking further. The development of the town sign has become an issue confirming for the community that they seek a new and different future

relationship with council. Localism, as opposed to centralism, was strongly supported.

(d) Brand and promotions development. Waratah has a number of groups emerging with concepts of brands and slogans. These emerged in the Workshop. There is a need to develop a cohesive and coordinated approach to Waratah's brand to guide tourism marketing, imagery, signage and projects. Without this cohesive brand the town will become fractured by well-meaning groups filling the vacuum by their own ideas.

(e) Retention of its strengths. Waratah has incredible strengths in its heritage, environment and the uniqueness of a waterfall in the centre of town. Waratah was prepared to embrace new thoughts such as a 'Republic' and willing to grow in tourism, but wanted to make sure that growth aligned to their values and heritage.

(f) Day destination. Waratah supported the observation that they could be a stronger day-trip destination from the coast. They understood the need for uniqueness, easily understood products, and a great visitor experience but will need help to achieve this.

(c) Waratah Community Workshops 2 to 6 October 2017

WORKSHOP 1: Community strengths, vision & initiatives

Workshop 1 provided an overview of previous work to get to this point, examples of other communities taking a similar approach, identified community assets and priorities, and gave a sense of direction the community wanted to take.

Initiatives
The following is all priorities identified and the weighting they were given to help form the core priorities.

Retain

- 10 - Re-open walking track
- 3 - Old bridge
- 3 - History
- 2 - Lawns + parks, cemeteries, history
- 2 - Uniqueness of flora/fauna
- 2 - Mountains opened up
- 1 - Natural beauty + habitats
- 0 - Caravan park - capacity

	Regain • 10 - Bridge over lake • 5 - Bridge across ringtail • 3 - Health centre • 3 - Track maintenance • 2 - Children and youth activities - regular, sporting • 2 - Access to the mountain • 2 - Athenaeum open 12 months • 1 - Play equipment - pulled out and not replaced • 0 - Bus services - shopping, community transportation • 0 - Community events **Change** • 8 - Sign on highway • 7 - Better communication - Transparency and consultation • 5 - Open track to Calciner - Tourism opportunities, power station • 3 - More effective networking • 2 - Town attitude • 1 - Streetscape improvement • 0 - Reduced isolation - connection • 0 - Being more supportive and encouraging • 0 - More harmony • 0 - A growing economy **Create** • 7 - Working mini power scheme + Grants available + Tourism + Actual power for people • 5 - A community hub at Athenaeum • 5 - New tourism collateral/marketing/promotions • 4 - Guided tours - Mineral Panning, Fly fishing, interactive experiences, men of rock • 3 - Uniform vision for Waratah • 2 - Digital recording of history • 2 - Winter festival • 2 - Services and facilities hub - to find funding and support • 1 - Accessibility to tourism attractions • 1 - Interesting Waratah features highlighted • 1 - Delegated responsibility • 1 - Busy community providing employment opportunities • 0 - Cold climate crops + microclimate • 0 - Temporary or pop-up art • 0 - Welcome pack • 0 - Community projects where all participate e.g. flag designs • 0 - Welcoming atmosphere

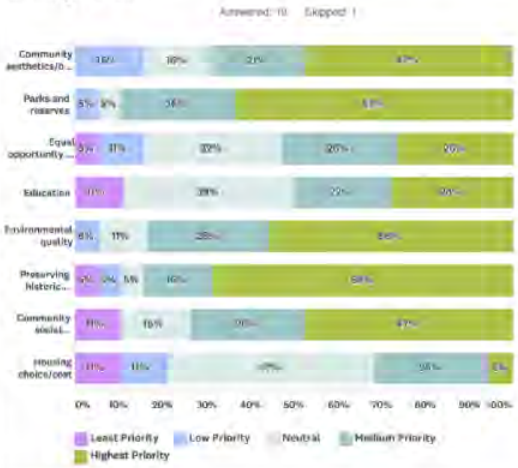
	HEAD, HEART & HANDS This exercise got the community thinking about what skills they have amongst themselves. • Head - What knowledge can you bring to the table? • Heart - What are you most passionate about? • Hands - What actions can you contribute to? **VISION** Key themes/values that underlie formation of community plan: • Solidarity • Tranquility • Majesty • Expression • Legacy
	**WORKSHOP 2: Prioritising, skills gaps & Council role** Workshop 2 reflected on previous workshop and thoughts so far, gave a quality understanding of what Council does, and got the community thinking about how to approach projects and who potential partners on projects may be. Explained the need for a shift in approach from Councils • To - For - With - Of/By When looking at projects ask these questions: • What is the specific goal? • Who are our partners? • What can we do? • What is the Council's role? ○ Direct service provider, Partner, Funder, Advocate, Facilitator
	**WORKSHOP 3: Community feedback, tourism presentation & moving forward** Workshop 3 recapped the first 2 workshops, the direction of thinking that would guide this thinking, explained the Tourism Association in detail, and gave the community opportunity to ask more questions. Potential project partners were also identified further. This workshop left the community feeling much more comfortable with the process and looking forward to the next steps.

(d) Community Survey September to October 2017

A survey was circulated to the community via online link and hardcopy. This survey was completed by 20 respondents. These surveys mirrored the conversations had in workshops and around the community. The survey's main findings were:

- Dis-satisfaction across a large number of areas, particularly around economy with a lack of new jobs and preservation of small business, but also accessibility and inclusion with a lack of activities and support for all groups.
- Waratah seen as a peaceful place with a great natural environment and friendly people.
- Strong recognition that tourism is the main industry for growth and that there is a need for more activities for locals and visitors alike.
- Need to see improved community relationships and rebuild a positive relationship with council to take advantage of opportunities.
- Need to prioritise improvements of parks/reserves, preserving history, and increase activities and support for youth and elderly.

Below is an example of how the community rated priorities for "Quality of Life":



(e) Community Conversations

	The Community was invited to two structured drop-in sessions (Tuesday 3rd Oct, 1.30 - 4.30pm and Thursday 5th Oct, 9.00 - 11.30am) at the Waratah Council/Post Office building of which 6 people took advantage of these sessions. A further 9 people were engaged for 1-on-1 conversations for knowledge of the community. These conversations stressed: • The community was tired of too much talk and not enough action. • This process was a last chance for Council to mend relationship for a collaborative approach. • The conversations also provided a stronger understanding of community dynamics, helpful details for framing priorities, and brilliant examples of the community's capability to make projects happen themselves.

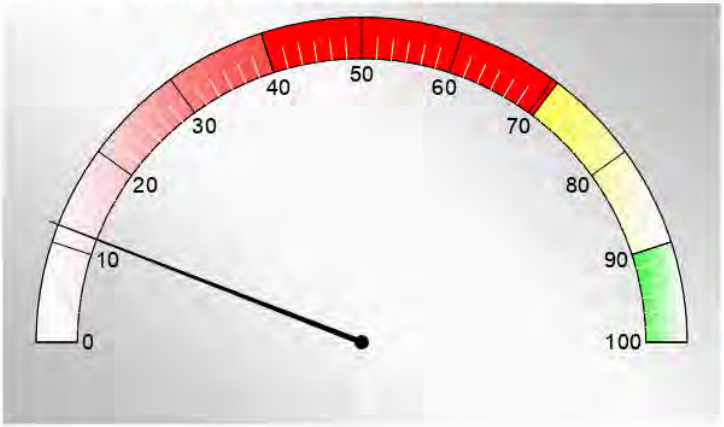
WARATAH WYNYARD COUNCIL

Departmental Monthly Performance Report

August 2019

Departmental Monthly Performance Report

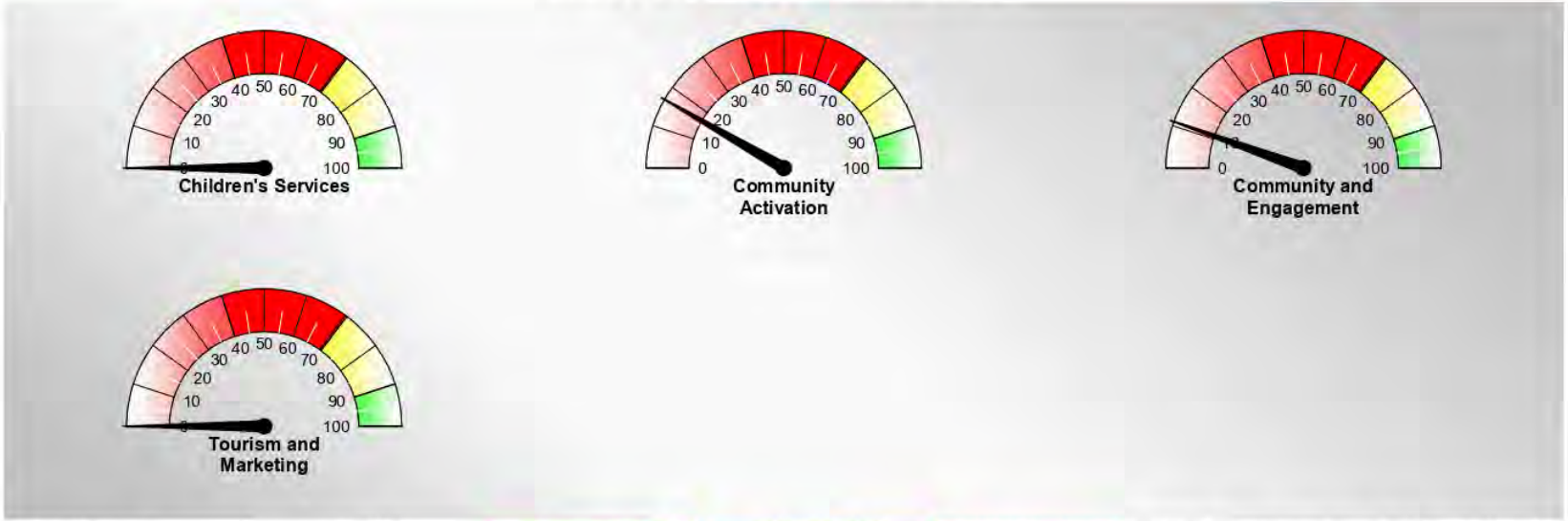
Monthly Progress against Actions



Description	Indicator
55 Actions reported on	
5 Actions at least 90% of monthly target	
1 Actions between 70 and 90% of monthly target	
49 Actions less than 70% of monthly target	
0 Ongoing Actions	
0 Deferred Actions	
0 Actions with no target set	
0 Incomplete Actions	

Departmental Monthly Performance Report

Monthly Progress by Business Group



BUSINESS GROUP	NO. OF ACTIONS REPORTED ON	NO. OF ACTIONS AT LEAST 90% OF TARGET	NO. OF ACTIONS BETWEEN 70 & 90% OF TARGET	NO. OF ACTIONS LESS THAN 70% OF TARGET	NUMBER OF DEFERRED ACTIONS	NUMBER OF ONGOING ACTIONS	ACTIONS WITH NO TARGET	INCOMPLETE ACTIONS
Children's Services	2	0	0	2	0	0	0	0
Community Activation	6	1	0	5	0	0	0	0
Community and Engagement	9	1	0	8	0	0	0	0
Tourism and Marketing	3	0	0	3	0	0	0	0

Departmental Monthly Performance Report - Community and Engagement

At least 90% of monthly Action target achieved

Between 70 and 90% of monthly Action target achieved

Less than 70% of monthly Action target achieved

Children's Services

ACTION	PROGRESS	RESPONSIBLE PERSON	COMP. DATE	KPI TITLE	TARGET	ACTUAL	PROGRESS
Future Direction: 3 Connected Communities							
Strategy: 3.4.1 Promote and work with stakeholders to provide affordable quality services.							
3.4.1.1 Complete detailed design for infrastructure proposal for Warawyn Early Learning and seek funding for the project.		Wendy Richards	30/06/2020	N/A	16	0	
Future Direction: 4 Community Recreation and Wellbeing							
Strategy: 4.1.1 Collaborate with community organisations that provide recreation opportunities to our community.							
4.1.1.1 Implement year two actions for Warawyn Early Years Reconciliation Action Plan.		Wendy Richards	30/06/2020	N/A	16	0	

Departmental Monthly Performance Report - Community and Engagement

Community Activation

ACTION	PROGRESS	RESPONSIBLE PERSON	COMP. DATE	KPI TITLE	TARGET	ACTUAL	PROGRESS
Future Direction: 1 Leadership and Governance							
Strategy: 1.1.1 Commit to best practice in community engagement.							
1.1.1.1 Work with Waratah Community Board to develop a feasibility proposal for Waratah Falls walk to secure funding.		Richard Muir Wilson	30/06/2020	N/A	16	0	
Strategy: 1.4.1 Collaborate with, understand and satisfy our external customers' needs and values.							
1.4.1.1 Process map customer service function to inform proposal for enabling technology.		Bronwyn Folden	30/06/2020	N/A	16	0	
Future Direction: 3 Connected Communities							
Strategy: 3.3.1 Provide high quality shared and multi-use community hubs that combine a range of recreational, sporting and educational uses.							
3.3.1.1 Develop a program of community events including a Christmas themed event for the retail hubs.		Chantelle French	30/06/2020	N/A	16	0	
Strategy: 3.5.1 Build community capacity through services and programs that strengthen, support and care for our community.							
3.5.1.1 Develop implementation plan for Health and Wellbeing Plan and implement year-one deliverables.		Bronwyn Folden	30/06/2020	N/A	16	0	
3.5.1.2 Develop implementation plan for Youth and Age Friendly Communities plans and implement year-one deliverables.		Bronwyn Folden	30/06/2020	N/A	16	0	
Strategy: 3.5.2 Become a 24/7 accessible council through the use of technology.							
3.5.2.1 C/FWD 2018/2019 - Investigate Opportunities for online access to booking payments for facilities.	Work is being undertaken to determine whether this can be integrated into web based software. The Assets and Facilities Group is managing this project.	Bronwyn Folden	30/06/2020	N/A	4	50	

Departmental Monthly Performance Report - Community and Engagement

Community and Engagement

ACTION	PROGRESS	RESPONSIBLE PERSON	COMP. DATE	KPI TITLE	TARGET	ACTUAL	PROGRESS
Future Direction: 1 Leadership and Governance							
Strategy: 1.1.1 Commit to best practice in community engagement.							
1.1.1.1 In conjunction with the community, develop a plan for Sisters Beach informed by OSSR and other relevant plans.		Tracey Bradley	31/12/2019	N/A	32	0	
Strategy: 1.3.1 Facilitate the meeting of community needs through strong advocacy and local and regional collaboration for shared outcomes.							
1.3.1.1 Implement Public Camping Strategy and practices.		Tracey Bradley	30/06/2020	N/A	16	0	
Strategy: 1.6.1 Encourage increased participation by all stakeholders.							
1.6.1.1 Develop Partnership Agreements with key community organisations to formalise working relationship.		Tracey Bradley	30/06/2020	N/A	16	0	
Future Direction: 3 Connected Communities							
Strategy: 3.1.1 Deliver planning for activation through effective urban design and planning that promotes liveability, social gathering and connectedness, and whi							
3.1.1.1 Review Waratah-Wynyard Council Emergency Management Plan.		Julie Bernhagen	30/06/2020	N/A	16	0	
Strategy: 3.3.1 Provide high quality shared and multi-use community hubs that combine a range of recreational, sporting and educational uses.							
3.3.1.1 Complete the Anzac Park All Ability Playground.		Tracey Bradley	30/06/2020	N/A	16	0	
Future Direction: 4 Community Recreation and Wellbeing							
Strategy: 4.1.1 Collaborate with community organisations that provide recreation opportunities to our community.							

Departmental Monthly Performance Report - Community and Engagement

ACTION	PROGRESS	RESPONSIBLE PERSON	COMP. DATE	KPI TITLE	TARGET	ACTUAL	PROGRESS
4.1.1.1 CFWD - 2018/2019 - OSSR - Work with Wynyard BMX Club to design, develop and implement upgrade to facilities in line with OSSR Plan.	The BMX Track Upgrade Project is progressing well and is currently inside its projected budget BMX is managing the works and contractors involved and Dana Hicks is managing Council's involvement in the project. Completed: • Planning and compliance matters e.g. Development Approval, Building Permit, WHS regulations and contractor and volunteer inductions. • Site preparation including surveying and tree removal • Start hill earthworks and underground plumbing and electricals • Purchase of new gate and new shelter The realignment of the track and its connection to the new start hill is underway and on schedule and compaction tests are currently achieving the required standards.	Tracey Bradley	30/06/2020	N/A	77	75	
Strategy: 4.3.1 Commit to ongoing recreation and open space planning to ensure evidence-based decisions are made about the role of Council and its partners in							
4.3.1.1 Develop facility / sponsorship policy.		Bronwyn Folden	30/06/2020	N/A	16	0	
Strategy: 4.4.2 Provide and maintain quality and safe places and spaces for physical, social and cultural activities, including shared and multi-use facilities where							
4.4.2.1 Review all Council infrastructure leases, agreements and fees and implement any required changes to ensure equity and consistency.		Greg Irwin	30/06/2020	N/A	16	0	
Future Direction: 5 Economic Prosperity							
Strategy: 5.1.3 Support existing and encourage new innovative activities/industries to the area.							
5.1.3.1 Progress planning for a regional heritage centre in Waratah.		Tracey Bradley	30/06/2020	N/A	16	0	

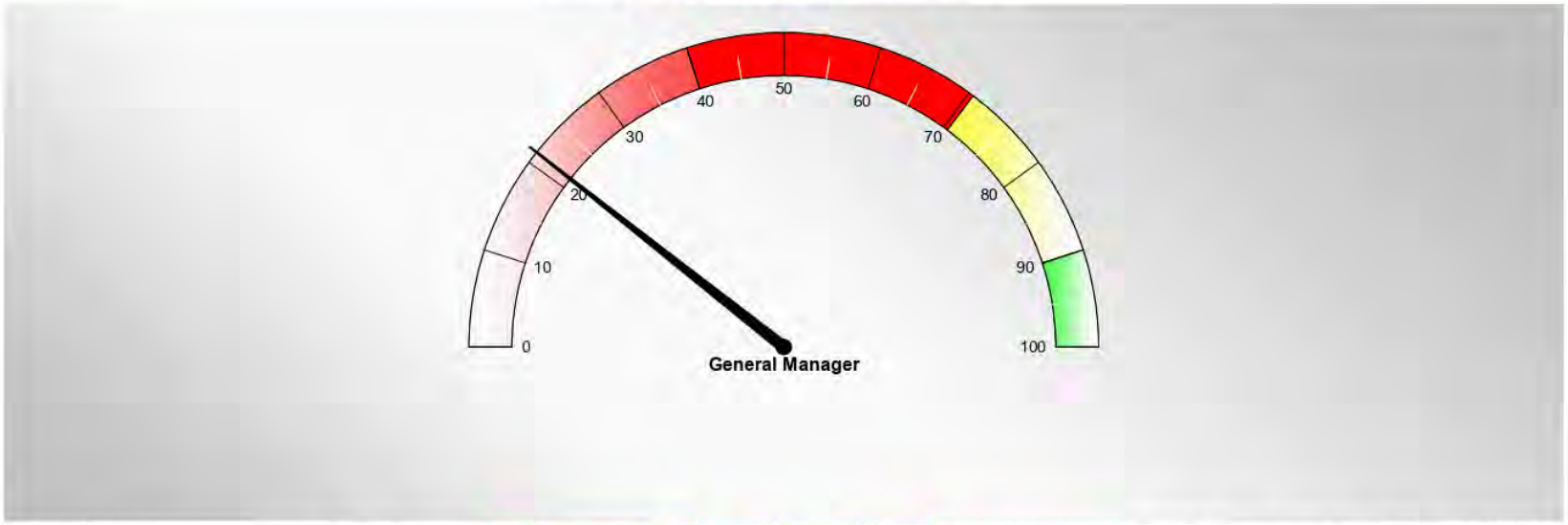
Departmental Monthly Performance Report - Community and Engagement

Tourism and Marketing

ACTION	PROGRESS	RESPONSIBLE PERSON	COMP. DATE	KPI TITLE	TARGET	ACTUAL	PROGRESS
Future Direction: 3 Connected Communities							
Strategy: 3.2.1 Deliver engagement strategies that adapt to community needs to ensure effective communication and collaboration.							
3.2.1.1 Implement year-one priorities from the Communications and Engagement Strategy 2019-2021.		Rachael Hogge	30/06/2020	N/A	16	0	
Future Direction: 5 Economic Prosperity							
Strategy: 5.1.1 Investigate and embrace new economic opportunities.							
5.1.1.1 Implementation of recommendations of the Destination Action Plan 2017 - progress and complete the 'Loo with a View' concept plan and feasibility plan.		Rachael Hogge	30/06/2020	N/A	16	0	
Strategy: 5.1.3 Support existing and encourage new innovative activities/industries to the area.							
5.1.3.1 Review and update the Tourism Plan (2011-2020).		Rachael Hogge	30/06/2020	N/A	16	0	

Departmental Monthly Performance Report - General Manager

Monthly Progress by Business Group



BUSINESS GROUP	NO. OF ACTIONS REPORTED ON	NO. OF ACTIONS AT LEAST 90% OF TARGET	NO. OF ACTIONS BETWEEN 70 & 90% OF TARGET	NO. OF ACTIONS LESS THAN 70% OF TARGET	NUMBER OF DEFERRED ACTIONS	NUMBER OF ONGOING ACTIONS	ACTIONS WITH NO TARGET	INCOMPLETE ACTIONS
General Manager	9	2	0	7	0	0	0	0

Departmental Monthly Performance Report - General Manager

At least 90% of monthly Action target achieved

Between 70 and 90% of monthly Action target achieved

Less than 70% of monthly Action target achieved

General Manager

ACTION	PROGRESS	RESPONSIBLE PERSON	COMP. DATE	KPI TITLE	TARGET	ACTUAL	PROGRESS
Future Direction: 1 Leadership and Governance							
Strategy: 1.1.1 Commit to best practice in community engagement.							
1.1.1.1 Establish a program of community engagement forums across the municipality to seek feedback from residents.		Sally Blanc	30/09/2019	N/A	66	0	
Strategy: 1.5.1 Build our knowledge base to apply in decision-making processes.							
1.5.1.1 CFWD - 2018/2019 - Complete feasibility study for a HR system to record training and qualifications to identify skill gaps.	Not yet commenced.	Sharon Debono	30/06/2020	N/A	16	0	
Future Direction: 2 Organisational Support							
Strategy: 2.2.2 Review and update systems and processes to ensure best practice and customer-centric outcomes.							
2.2.2.1 CFWD 2018/2019 - Refine arrangements for resource shared employees, including development of individual MOU's.	Facilitated meeting with all resource shared employees to gain feedback. Draft MOU developed. Working through staff to place all on MOUs in order to better define and clarify the resource sharing arrangements. Risk Management function has been set up as a shared service arrangement with appropriate documentation in place. Next internal pulse survey is likely to be focussed on this area.	Shane Crawford	30/06/2020	N/A	50	45	

Departmental Monthly Performance Report - General Manager

ACTION	PROGRESS	RESPONSIBLE PERSON	COMP. DATE	KPI TITLE	TARGET	ACTUAL	PROGRESS
2.2.2.2 Progress actions and continue to explore shared service and resource sharing opportunities.		Shane Crawford	30/06/2020	N/A	16	0	
Strategy: 2.6.1 Promote Best Practice and foster innovation.							
2.6.1.1 Undertake a review of the internal employee classification system.		Sharon Debono	30/06/2020	N/A	16	0	
Future Direction: 3 Connected Communities							
Strategy: 3.1.1 Deliver planning for activation through effective urban design and planning that promotes liveability, social gathering and connectedness, and whi							
3.1.1.1 Develop a detailed and prioritised implementation plan for the Boat Harbour Beach Masterplan and complete year-one actions.		Shane Crawford	30/06/2020	N/A	16	0	
Future Direction: 4 Community Recreation and Wellbeing							
Strategy: 4.1.1 Collaborate with community organisations that provide recreation opportunities to our community.							
4.1.1.1 CFWD 2018/2019 - Work with Taswater and the Waratah community to facilitate a mutually agreed future for the Waratah Dam.	Discussions ongoing. Public meeting held Tuesday 2 April. EOI process underway seeking possible dam owner and closes on 22 May.	Shane Crawford	30/06/2020	N/A	54	50	
Strategy: 4.3.1 Commit to ongoing recreation and open space planning to ensure evidence-based decisions are made about the role of Council and its partners in							
4.3.1.1 Develop detailed design for the Somerset Recreation Precinct.		Shane Crawford	30/06/2020	N/A	16	0	
Strategy: 4.4.2 Provide and maintain quality and safe places and spaces for physical, social and cultural activities, including shared and multi-use facilities where							
4.4.2.1 Secure an operator for the cafe within the new multi-purpose (Yacht Club) facility.		Shane Crawford	30/06/2020	N/A	16	0	

Departmental Monthly Performance Report - Infrastructure and Development Services

Monthly Progress by Business Group

BUSINESS GROUP	NO. OF ACTIONS REPORTED ON	NO. OF ACTIONS AT LEAST 90% OF TARGET	NO. OF ACTIONS BETWEEN 70 & 90% OF TARGET	NO. OF ACTIONS LESS THAN 70% OF TARGET	NUMBER OF DEFERRED ACTIONS	NUMBER OF ONGOING ACTIONS	ACTIONS WITH NO TARGET	INCOMPLETE ACTIONS
Asset Services	5	0	0	5	0	0	0	0
Development and Regulatory Services	3	0	0	3	0	0	0	0
Engineering and Projects	3	0	0	3	0	0	0	0
Infrastructure and Development Services	6	0	1	5	0	0	0	0
Project Works and Services	2	0	0	2	0	0	0	0

Departmental Monthly Performance Report - Infrastructure and Development Services

At least 90% of monthly Action target achieved

Between 70 and 90% of monthly Action target achieved

Less than 70% of monthly Action target achieved

Asset Services

ACTION	PROGRESS	RESPONSIBLE PERSON	COMP. DATE	KPI TITLE	TARGET	ACTUAL	PROGRESS
Future Direction: 1 Leadership and Governance							
Strategy: 1.2.1 Review and adjust service levels to provide value for money.							
1.2.1.1 CFWD 2018/2019 Conduct internal review of the management of public halls (Asset and Facilities Group.	Information regarding the municipal halls has been gathered and is being analysed.	Dana Hicks	30/06/2020	N/A	34	20	
1.2.1.2 Update the Stormwater Asset Management Plan.		Jonathan Linden	31/12/2019	N/A	32	0	
1.2.1.3 Update a Stormwater Service Level document.		Jonathan Linden	30/11/2019	N/A	40	0	
1.2.1.4 Develop a Stormwater Management Plan.		Jonathan Linden	31/12/2019	N/A	32	0	
Future Direction: 6 Transport and Access							
Strategy: 6.1.1 Develop service levels to inform the delivery of a transport network that affordably meets demand and transparently communicates accepted risk.							
6.1.1.2 Update the Roads Service Level documentation.		Jonathan Linden	30/09/2019	N/A	16	0	

Departmental Monthly Performance Report - Infrastructure and Development Services

Development and Regulatory Services

ACTION	PROGRESS	RESPONSIBLE PERSON	COMP. DATE	KPI TITLE	TARGET	ACTUAL	PROGRESS
Future Direction: 1 Leadership and Governance							
Strategy: 1.2.1 Review and adjust service levels to provide value for money.							
1.2.1.1 Undertake a review of town planning services.		Ashley Thornton	31/12/2019	N/A	32	0	
Future Direction: 5 Economic Prosperity							
Strategy: 5.4.2 Ensure evidence-based allocation of infrastructure and land use to enable sustainable growth.							
5.4.2.1 Develop and deliver a Settlement Strategy to guide future growth and development within the municipality.		Ashley Thornton	30/06/2020	N/A	16	0	
Future Direction: 7 Environment							
Strategy: 7.2.1 Practice effective urban and landscape design and planning that promotes liveability and connectivity and recognises local heritage.							
7.2.1.1 Tasmanian Planning Scheme implementation.		Ashley Thornton	30/06/2020	N/A	16	0	

Departmental Monthly Performance Report - Infrastructure and Development Services

Engineering and Projects

ACTION	PROGRESS	RESPONSIBLE PERSON	COMP. DATE	KPI TITLE	TARGET	ACTUAL	PROGRESS
Future Direction: 1 Leadership and Governance							
Strategy: 1.2.1 Review and adjust service levels to provide value for money.							
1.2.1.1 Undertake reserve irrigation installation at Frederick Street Reserve and Somerset Recreation Ground.		Corey Gould	30/05/2020	N/A	10	0	
Future Direction: 4 Community Recreation and Wellbeing							
Strategy: 4.4.2 Provide and maintain quality and safe places and spaces for physical, social and cultural activities, including shared and multi-use facilities where							
4.4.2.1 Continue flood mitigation projects, including - Cotton Street, Stanwyn Court and Port Creek, Wynyard.		Corey Gould	30/06/2020	N/A	16	0	
Future Direction: 7 Environment							
Strategy: 7.3.1 Provide education to facilitate awareness and appreciation of built and natural assets.							
7.3.1.1 Develop and adopt Environmental Plan.		Daniel Summers	30/06/2020	N/A	16	0	

Departmental Monthly Performance Report - Infrastructure and Development Services

Infrastructure and Development Services

ACTION	PROGRESS	RESPONSIBLE PERSON	COMP. DATE	KPI TITLE	TARGET	ACTUAL	PROGRESS
Future Direction: 3 Connected Communities							
Strategy: 3.1.1 Deliver planning for activation through effective urban design and planning that promotes liveability, social gathering and connectedness, and whi							
3.1.1.1 CFWD 2018/2019 Design, develop and implement the next stage of Coastal Pathway - Cooee to Wynyard.	Project now reliant upon the State Governments process for providing access to the rail corridor following coastal erosion events	Daniel Summers	30/06/2020	N/A	32	26	
Future Direction: 4 Community Recreation and Wellbeing							
Strategy: 4.1.1 Collaborate with community organisations that provide recreation opportunities to our community.							
4.1.1.1 Undertake Wynyard Recreation Ground changeroom construction.		Dana Hicks	31/05/2020	N/A	10	0	
Strategy: 4.2.1 Focus on the value of recreation in promoting the health and wellbeing of our community.							
4.2.1.1 Review and improve educational information relating to animal control.		Ashley Thornton	30/06/2020	N/A	16	0	
Strategy: 4.4.2 Provide and maintain quality and safe places and spaces for physical, social and cultural activities, including shared and multi-use facilities where							
4.4.2.1 Continue the Wynyard Waterfront Project including seawall, boardwalk and multi-purpose facility.		Daniel Summers	30/06/2020	N/A	16	0	
Future Direction: 6 Transport and Access							
Strategy: 6.1.1 Develop service levels to inform the delivery of a transport network that affordably meets demand and transparently communicates accepted risk.							
6.1.1.1 Undertake a Roads Condition Assessment.		Daniel Summers	31/08/2019	N/A	16	0	
Future Direction: 7 Environment							
Strategy: 7.1.1 Foster opportunity through sustainable development and community engagement.							
7.1.1.1 Waste Strategy adoption and implement year-one actions.		Daniel Summers	30/06/2020	N/A	16	0	

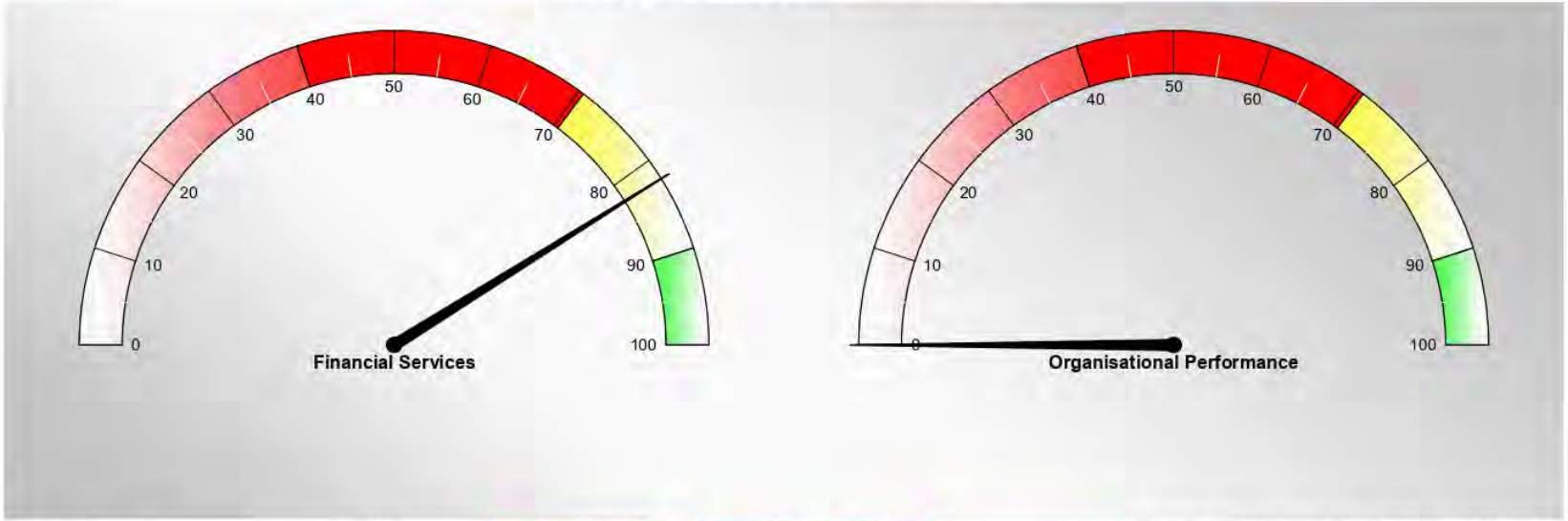
Departmental Monthly Performance Report - Infrastructure and Development Services

Project Works and Services

ACTION	PROGRESS	RESPONSIBLE PERSON	COMP. DATE	KPI TITLE	TARGET	ACTUAL	PROGRESS
Future Direction: 2 Organisational Support							
Strategy: 2.2.2 Review and update systems and processes to ensure best practice and customer-centric outcomes.							
2.2.2.1 Complete a review of after-hours and call out arrangements.		Don Russell	30/04/2020	N/A	20	0	
Future Direction: 7 Environment							
Strategy: 7.5.1 Consider and encourage biodiversity through forward thinking and planning.							
7.5.1.1 Complete Camp Creek reclamation stages 2 to 4.		Don Russell	31/10/2020	N/A	16	0	

Departmental Monthly Performance Report - Organisational Performance

Monthly Progress by Business Group



BUSINESS GROUP	NO. OF ACTIONS REPORTED ON	NO. OF ACTIONS AT LEAST 90% OF TARGET	NO. OF ACTIONS BETWEEN 70 & 90% OF TARGET	NO. OF ACTIONS LESS THAN 70% OF TARGET	NUMBER OF DEFERRED ACTIONS	NUMBER OF ONGOING ACTIONS	ACTIONS WITH NO TARGET	INCOMPLETE ACTIONS
Financial Services	2	1	0	1	0	0	0	0
Organisational Performance	5	0	0	5	0	0	0	0

Departmental Monthly Performance Report - Organisational Performance

At least 90% of monthly Action target achieved

Between 70 and 90% of monthly Action target achieved

Less than 70% of monthly Action target achieved

Financial Services

ACTION	PROGRESS	RESPONSIBLE PERSON	COMP. DATE	KPI TITLE	TARGET	ACTUAL	PROGRESS
Future Direction: 1 Leadership and Governance							
Strategy: 1.2.1 Review and adjust service levels to provide value for money.							
1.2.1.1 CFWD 2018/2019 Improve the Long Term Financial Plan.	List of new and upgraded assets arising from recent strategy plans has been provided and is currently being inserted into the LTFP. Awaiting SAMP review and updated renewals program to update LTFP prior to the capital works budget. The LTFP update continuing without a SAMP revision or asset life review. Most indexes have been updated, as are the waste and garbage models. Data is being entered for year 0, formula are being reset and rolled forward to new ten year forecast. 10 Year capital works program is being being reviewed and data entry commenced. Further progress pending Asset Management Plan review(s) which will have implications on Strategic Asset Management Plan.	Samantha Searle	30/06/2020	N/A	14	5	
Future Direction: 2 Organisational Support							
Strategy: 2.2.1 Facilitate effective knowledge management practices.							

Departmental Monthly Performance Report - Organisational Performance

ACTION	PROGRESS	RESPONSIBLE PERSON	COMP. DATE	KPI TITLE	TARGET	ACTUAL	PROGRESS
2.2.1.1 CFWD 2018/2019 Update the financial module of the enterprise software solution (Authority).	Will be updating to Version 7 in the new year, part of which will include Hierachy Manager which will enable more workflows. Version 7 Go live date is now early June 2019. Go Live date has been pushed out to October 2019.	Stephen Imms	30/06/2020	N/A	59	55	

Departmental Monthly Performance Report - Organisational Performance

Organisational Performance

ACTION	PROGRESS	RESPONSIBLE PERSON	COMP. DATE	KPI TITLE	TARGET	ACTUAL	PROGRESS
Future Direction: 1 Leadership and Governance							
Strategy: 1.1.1 Commit to best practice in community engagement.							
1.1.1.1 Conduct the four-year review of the 10-year Strategic Plan.		Samantha Searle	30/06/2020	N/A	16	0	
Strategy: 1.3.1 Facilitate the meeting of community needs through strong advocacy and local and regional collaboration for shared outcomes.							
1.3.1.1 Implement year one actions identified through the Sustainable Murchison 2040 framework Memorandum of Understanding.		Samantha Searle	30/06/2020	N/A	16	0	
Strategy: 1.4.1 Collaborate with, understand and satisfy our external customers' needs and values.							
1.4.1.1 Review complaint handling procedures relating to services provided by Council to address legislative requirements.		Samantha Searle	30/06/2020	N/A	16	0	
Future Direction: 3 Connected Communities							
Strategy: 3.1.1 Deliver planning for activation through effective urban design and planning that promotes liveability, social gathering and connectedness, and whi							
3.1.1.1 Develop a Municipal Signage Strategy.		Samantha Searle	30/06/2020	N/A	16	0	
3.1.1.2 Complete and implement CCTV project in Somerset and Wynyard CBD's.		Murray Jamieson	30/06/2020	N/A	16	0	

	WARATAH-WYNYARD COUNCIL
	COUNCIL MEETING PROCEDURES POLICY

1. SCOPE

1.1 This policy applies to all meetings of Council or its Committees.

2. PURPOSE

2.1 The objective of this policy is to provide guidance and support for chairpersons, other elected members and Council staff in relation to the conduct of meetings of Council or its Committees.

3. POLICY STATEMENT

3.1 Pursuant to Regulation 37 of the *Local Government (Meeting Procedures) Regulations 2015*, the provisions are to apply to meetings of Council and its Committees.

Legislative Requirements:

The *Local Government Act 1993* provides as follows:

18. Establishment of councils

(1) There is established in each municipal area a council.

(2) The name of each council in a municipal area is specified in column 2 of Schedule 3 next to the name of that municipal area.

(3) A meeting of a council is to be conducted in accordance with prescribed procedures.

The *Local Government (Meeting Procedures) Regulations 2005* provides as follows:

37. Other procedures

A council may determine any other procedures relating to meetings it considers appropriate.

Related Procedures/Guidelines:

The *Local Government (Meeting Procedures) Regulations 2015* as follows.

Amendment – Council Meeting - 21 October 2019:

– Addition of 8(2)(g) Public Statements to Section 8 Agenda; and

Section 32 B – Public Statements

DOC NO: GOV.009	**VERSION NO: 5**	**APPROVAL DATE: 17 June 2019**
CONTROLLER: General Manager	**APPROVED BY: -** COUNCIL	**REVIEW DATE: June 2023**

Page 1

	WARATAH-WYNYARD COUNCIL
	COUNCIL MEETING PROCEDURES POLICY

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	WARATAH-WYNYARD COUNCIL
	COUNCIL MEETING PROCEDURES POLICY

PART 1 - Preliminary

1. Short title

These regulations may be cited as the Local Government (Meeting Procedures) Regulations 2015.

2. Commencement

These regulations take effect on 29 June 2015.

3. Interpretation

In these regulations:

Act means the *Local Government Act 1993*;

associated reports and documents means reports and documents relating to an item on the agenda of a meeting;

chairperson means the person who chairs a meeting;

closed meeting means that part of a meeting which is closed to the public under regulation 15;

commissioner means a person appointed as such under section 230 of the Act;

council committee meeting means a meeting of a council committee convened in accordance with regulation 5(1);

council meeting means an ordinary council meeting or a special council meeting;

council workshop means a workshop, seminar or gathering of persons for the purposes of a council, but does not include a meeting or a meeting of a special committee;

meeting means:

(a) a council meeting; or
(b) a council committee meeting;

ordinary council meeting means an ordinary meeting of the council convened in accordance with regulation 4(1)(a), (2), (3) or (5), other than the council's annual general meeting;

pecuniary interest means an interest within the meaning of section 49 of the Act;

prescribed newspaper means a newspaper prescribed in the Local Government (General) Regulations 2015 for the purposes of section 72B of the Act;

relevant municipal area, in relation to a council, general manager of a council, council meeting or council committee meeting, means the municipal area for which the council has responsibility;

special council meeting, means a special meeting of the council convened in accordance with regulation 4(1)(b) or (6);

statutory holiday has the same meaning as in the Statutory Holidays Act 2000.

PART 2 - Meetings

Division 1 - Convening and agendas

4. Convening council meetings

(1) The mayor of a council may convene:
(a) an ordinary meeting of the council; and
(b) a special meeting of the council.

(2) The general manager of an existing council is to convene the first ordinary meeting of the council following an ordinary election.

(3) The Minister is to convene the first ordinary meeting of a newly established council on a date determined by the Minister.

(4) An ordinary meeting of a council is to be held at least once in each month.

(5) The general manager is to convene an ordinary meeting of a council if the mayor has not convened such a meeting in the previous calendar month.

(6) The mayor of a council, or the general manager if the mayor has not done so, must convene a special meeting of the council at the request of a majority of councillors or if the council so determines.

(7) A request for a special meeting of a council must:
(a) be in writing and signed by the councillors making the request;
(b) include details of the subject matter and any motion to be dealt with by the meeting; and
(c) be lodged with the mayor.

5. Convening meetings of council committee

(1) The chairperson of a council committee may convene a meeting of that committee.

(2) The chairperson of a council committee must convene a meeting of that committee:
(a) if the council committee or the council so determines; or
(b) at the request of a majority of the members of the committee.

6. Times of meetings

(1) A meeting is not to start before 5:00 pm unless otherwise determined by the council by absolute majority or by the council committee by simple majority.

(2) After each ordinary election, a council and a council committee are to review the times of commencement of their meetings.

7. Notice of meetings

(1) The general manager is to provide each councillor with a notice in writing of the time and place of a council meeting or a council committee meeting:
(a) at least 4 days, but not more than 14 days, before an ordinary council meeting or a council committee meeting; or
(b) at least 2 days, but not more than 14 days, before a special council meeting.

(2) At least once in each year, the general manager is to publish in a daily newspaper, or in a prescribed newspaper, circulating in the relevant municipal area a notice containing:
- (a) the times and places of the ordinary council meetings for the next 12 months; and
- (b) the times and places, as known, of the council committee meetings for the next 12 months.

(3) The general manager also is to ensure that:
- (a) the notice referred to in subregulation (2) is made available to the public on the website of the council for the period to which the notice applies; and
- (b) any member of the public is able to inspect, and obtain a copy of, that notice, free of charge, at the public office of the council.

(4) If there is any change in the time or place of an ordinary council meeting, or a council committee meeting, as published under subregulations (2) and (3), the general manager is to:
- (a) publish a notice of the change in a daily newspaper, or in a prescribed newspaper, circulating in the relevant municipal area;
- (b) ensure that the notice of the times and places for such meetings published on the website of the council is accordingly up-dated; and
- (c) ensure that the notice of the times and places for such meetings that is made available to the public, at the public office of the council, also is accordingly up-dated.

(5) In the case of a special council meeting:
- (a) the general manager is to publish in a daily newspaper, or in a prescribed newspaper, circulating in the relevant municipal area a notice of the time and place of the meeting at least 2 days, but not more than 14 days, before the meeting;
- (b) the general manager is to ensure that the notice:
  - (i) is made available to the public on the website of the council for the relevant period; and
  - (ii) any member of the public is able to inspect, and obtain a copy of, that notice, free of charge, at the public office of the council; and
- (c) the notice is to:
  - (i) state whether any part of the meeting is likely to be a closed meeting; and
  - (ii) if a part of the meeting is not likely to be a closed meeting, include details of the items to be discussed at that meeting or part of the meeting.

(6) A period referred to in this regulation includes Saturdays, Sundays and statutory holidays, but does not include:
- (a) the day on which a notice is provided or made available under subregulation (1); or
- (b) the day of the meeting.

8. Agenda

(1) The general manager is to:
- (a) prepare an agenda for each council meeting and council committee meeting;
- (b) in the case of a council meeting, provide each councillor with the agenda and any associated reports and documents at least:
  - (i) 2 days before a special council meeting; or
  - (ii) 4 days before an ordinary council meeting; and
- (c) in the case of a council committee meeting, provide each member of the committee with the agenda and any associated reports and documents at least 4 days before the council committee meeting.

(2) The agenda of an ordinary council meeting is to provide for, but is not limited to, the following items:
- (a) attendance and apologies;
- (b) confirmation of the minutes;
- (c) the date and purpose of any council workshop held since the last meeting;
- (d) applications for leave of absence;
- (e) declarations of any pecuniary interest of a councillor or close associate;
- (f) public question time;
- (g) public statements;
- (h) any reports to be received; and
- (i) any matter to be discussed at the meeting.

(3) The general manager is to arrange the agenda so that the items to be dealt with by a council, or council committee, as a planning authority are sequential.

(4) The business of a meeting is to be conducted in the order in which it is set out in the agenda of that meeting, unless the council by absolute majority, or the council committee by simple majority, determines otherwise.

(5) Subject to subregulation (6), a matter may only be discussed at a meeting if it is specifically listed on the agenda of that meeting.

(6) A council by absolute majority at an ordinary council meeting, or a council committee by simple majority at a council committee meeting, may decide to deal with a matter that is not on the agenda if:
- (a) the general manager has reported the reason it was not possible to include the matter on the agenda;
- (b) the general manager has reported that the matter is urgent; and
- (c) in a case where the matter requires the advice of a qualified person, the general manager has certified under section 65 of the Act that the advice has been obtained and taken into account in providing general advice to the council.

(7) The chairperson of a council or a council committee is to request councillors or members of the committee to indicate whether they have, or are likely to have, a pecuniary interest in any item on the agenda.

(8) A period referred to in subregulation (1) includes Saturdays, Sundays and statutory holidays, but does not include:
(a) the day on which the agenda and any associated reports and documents are provided under subregulation (1)(b); or
(b) the day of the meeting.

9. Public access to documents

(1) As far as practicable, the general manager is to make available for inspection by members of the public a copy of the agenda of a meeting and any associated reports and documents, other than an extract relating to any matter referred to in regulation 15(2), at least:
(a) 2 days before the meeting in the case of a special council meeting; or
(b) 4 days before the meeting in the case of an ordinary council meeting or a council committee meeting.

(2) The agenda and associated reports and documents made available for inspection under subregulation (1) are to be so made available under that subregulation:
(a) at the public office, and on the website, of the council; and
(b) free of charge.

(3) As far as practicable, the general manager is to make available for purchase by members of the public, by payment of the fee specified in Schedule 1, copies of the agenda and any associated reports and documents made available for inspection under subregulation (1).

(4) The agenda and associated reports and documents made available for purchase under subregulation (3) are to be made available under that subregulation at the public office of the council during the relevant period specified in subregulation (1).

(5) At a meeting, a copy of the agenda of the meeting is to be made available free of charge to any member of the public attending the meeting.

(6) At a meeting, any associated report or document made available for inspection under subregulation (1) is to be made available free of charge for inspection by members of the public attending the meeting.

(7) Subject to the Right to Information Act 2009, the general manager must withhold from the public all associated reports and documents which, in the opinion of the general manager, relate to any matter referred to in regulation 15(2).

(8) Despite subregulation (7), but subject to the Right to Information Act 2009, the general manager may release to the public an associated report or document that he or she is otherwise required under that subregulation to withhold, if:
(a) the council, or a council committee, has authorised its release to the public under regulation 15(9); or
(b) the council, or a council committee, has discussed, at a meeting that was not closed to the public under regulation 15, the matter to which the associated report or document relates and has, after considering privacy and confidentiality issues, authorised its release to the public.

(9) A period referred to in subregulation (1) includes Saturdays, Sundays and statutory holidays, but does not include:
(a) the day on which an agenda and any associated reports and documents are made available under that subregulation; or
(b) the day of the meeting.

10. Chairperson

(1) The mayor or, in his or her absence, the deputy mayor is the chairperson of a council meeting.

(2) If both the mayor and the deputy mayor are not present at a council meeting, the councillors present are to elect one of the councillors present to be the chairperson of that meeting.

(3) A council may:
(a) elect a member of a council committee as chairperson of that council committee; or
(b) delegate that power of election to the members of the council committee.

(4) If the chairperson is absent from a council committee meeting, the councillors present who are members of that council committee are to elect one of their members present to be the chairperson of that meeting.

(5) If the chairperson has moved or seconded a motion, the chairperson is to vacate the chair until the motion has been dealt with.

11. Quorum

(1) A meeting may only transact business if a quorum is present.

(2) The quorum at a council meeting is an absolute majority.

(3) The quorum at a council committee meeting is the majority of such number of councillors as are members of the committee.

(4) If a meeting lacks a quorum because a councillor declares a pecuniary interest and must leave the meeting, the Minister may permit the councillor to remain at that meeting or at a later meeting when the matter is next considered to make up a quorum on condition that the councillor does not take part in any discussion or vote on the matter.

(5) The details of any permission given by the Minister are to be noted in the minutes.

(6) If at any time during a meeting the required quorum is no longer present, the chairperson is to adjourn the meeting until the quorum is present or until a later date, unless the quorum is likely to be present for the next item of business.

12. Abandoned meetings

(1) If a quorum is not present within half an hour after a meeting is to start, the meeting is to be abandoned.

(2) If a council meeting is abandoned because of the lack of a quorum, the general manager is to record the following details as the minutes of that meeting, even though business could not be transacted at that meeting:
(a) the absence of a quorum;
(b) the abandonment of the meeting and the time of abandonment; and
(c) the names of the councillors present at the time of abandonment.

(3) If a council meeting is abandoned, the mayor:
(a) within 14 days after the abandonment of the meeting, is to convene another council meeting to deal with the business that was to be dealt with at the abandoned meeting; and
(b) is to provide notice of the new meeting in accordance with regulation 7.

(4) If 3 consecutive council meetings have been abandoned, the general manager must report the matter to the Minister.

13. Adjournments

(1) At any time during a meeting, the chairperson, subject to subregulation (2), may adjourn the meeting:
(a) to a later date; or
(b) to a later time on the same day.

(2) The chairperson may only adjourn a meeting:
(a) for a proper purpose;
(b) if it is reasonable to do so in the circumstances; and
(c) in good faith.

(3) If a meeting is adjourned, the chairperson is to ensure that any business of the meeting not then disposed of is given precedence at the resumption of the adjourned meeting.

(4) At the adjournment of a meeting, the chairperson is to advise the councillors present of the date and time when the meeting is to be resumed and of the reasons for the adjournment.

(5) If a meeting is adjourned, the general manager is to advise the councillors not present at the meeting:
(a) that the meeting was adjourned;
(b) of the date and time of the resumption of the meeting; and
(c) of the reasons for the adjournment.

(6) The reason for the adjournment of a meeting is to be recorded in the minutes.

(7) If a meeting is adjourned for a period which would allow a special meeting to be convened, the general manager is to publish in a daily newspaper, or in a prescribed newspaper, circulating in the relevant municipal area a notice stating:
(a) that the meeting has been adjourned; and
(b) the date and time of the resumption of the meeting.

14. Open meetings

A meeting is to be open to the public unless closed under regulation 15.

15. Closed meetings

(1) At a meeting, a council by absolute majority, or a council committee by simple majority, may close a part of the meeting to the public for a reason specified in subregulation (2).

(2) A part of a meeting may be closed to the public when any one or more of the following matters are being, or are to be, discussed at the meeting:
- (a) personnel matters, including complaints against an employee of the council and industrial relations matters;
- (b) information that, if disclosed, is likely to confer a commercial advantage or impose a commercial disadvantage on a person with whom the council is conducting, or proposes to conduct, business;
- (c) commercial information of a confidential nature that, if disclosed, is likely to:
  - (i) prejudice the commercial position of the person who supplied it; or
  - (ii) confer a commercial advantage on a competitor of the council; or
  - (iii) reveal a trade secret;
- (d) contracts, and tenders, for the supply of goods and services and their terms, conditions, approval and renewal;
- (e) the security of:
  - (i) the council, councillors and council staff; or
  - (ii) the property of the council;
- (f) proposals for the council to acquire land or an interest in land or for the disposal of land;
- (g) information of a personal and confidential nature or information provided to the council on the condition it is kept confidential;
- (h) applications by councillors for a leave of absence;
- (i) matters relating to actual or possible litigation taken, or to be taken, by or involving the council or an employee of the council; and
- (j) the personal hardship of any person who is resident in, or is a ratepayer in, the relevant municipal area.

(3) Unless subregulation (4) applies, a council or council committee must not close a part of a meeting when it is:
- (a) acting as a planning authority under the Land Use Planning and Approvals Act 1993;
- (b) considering whether or not to grant a permit under that Act; or
- (c) considering proposals for the council to deal with public land under section 178 of the Act.

(4) A council or council committee may close a part of a meeting when it is acting or considering as referred to in subregulation (3) if it is to consider any matter relating to:
- (a) legal action taken by, or involving, the council; or
- (b) possible future legal action that may be taken, or may involve, the council.

(5) If at a meeting a council or council committee closes a part of the meeting, the grounds for the closure are to be recorded in the minutes relating to the part of the meeting that is open to the public.

(6) The chairperson:
(a) is to exclude members of the public from a closed meeting;
(b) may exclude the general manager from a closed meeting if the matter to be discussed relates to the contract of employment, or the performance, of the general manager; and
(c) may invite any person to remain at the meeting to provide advice or information.

(7) A council, or council committee, by simple majority may re-open a closed meeting to the public.

(8) While in a closed meeting, the council, or council committee, is to consider whether any discussions, decisions, reports or documents relating to that closed meeting are to be kept confidential or released to the public, taking into account privacy and confidentiality issues.

(9) Subject to the Right to Information Act 2009, any discussions, decisions, reports or documents relating to a closed meeting are to be kept confidential unless the council or council committee, after considering privacy and confidentiality issues, authorises their release to the public.

Division 2 - Motions

16. Motions

(1) If, during a meeting, a councillor intends to move a motion of which notice has not been given, the chairperson of the meeting may require the councillor to provide a written copy of the motion.

(2) The chairperson of a meeting is not to allow a motion to be debated or otherwise dealt with unless it has been moved by one councillor and seconded by another councillor.

(3) The chairperson of a council committee meeting may waive the requirement for a motion to be seconded.

(4) A councillor moving a motion for an adjournment of the debate on another motion is to include in the motion the reason for the adjournment.

(5) A councillor may give to the general manager, at least 7 days before a meeting, written notice of a motion, together with supporting information and reasons, to be included on the agenda of that meeting.

(6) The general manager, after consultation with the relevant chairperson, may refuse to accept a written motion given under subregulation (5) if, in the opinion of both of them, the motion:
(a) is defamatory;
(b) contains offensive language; or
(c) is unlawful.

(7) If a councillor who has given notice of a motion that has not been refused under subregulation (6) does not move the motion at the meeting, the motion lapses.

(8) A councillor who has moved a motion, whether it is being debated or not, may only withdraw the motion:
(a) with the consent of the seconder, if a seconder was required; or
(b) with the consent of the meeting.

(9) The chairperson of a meeting may refuse to accept a motion of which written notice has not been given under subregulation (5) if, in the opinion of the chairperson, the motion:
(a) is defamatory;
(b) contains offensive language; or
(c) is unlawful.

(10) The period referred to in subregulation (5) includes Saturdays, Sundays and statutory holidays, but does not include:
(a) the day on which notice is given under that subregulation; and
(b) the day of the meeting.

17. Motions to amend motions

(1) At a meeting, a councillor who did not move or second a motion (the ***original motion***) may move a motion to amend the original motion.

(2) A councillor is not to move a motion to amend another motion while a previous motion to amend that other motion is before the meeting.

(3) If a motion to amend another motion is resolved in the affirmative, that other motion, as amended, is then the motion before the meeting.

(4) The chairperson may refuse to accept more than 2 motions to amend another motion.

18. Motion to overturn decision

(1) For the purposes of this regulation, a decision may be overturned, wholly or partly, by:
(a) a motion directly rescinding or otherwise overturning the decision or part of the decision; or
(b) a motion that conflicts with, or is contrary to, the decision or part of the decision.

(2) A council or council committee may only overturn a decision passed at a previous meeting held since the last ordinary election:
(a) by an absolute majority, in the case of a council; or
(b) by a simple majority, in the case of a council committee.

(3) Any report given by the general manager to a council in respect of a proposed motion to overturn a decision of the council, or that will result in the overturning of a decision of the council, wholly or partly, is to include:
(a) a statement that the proposed motion, if resolved in the affirmative, would overturn that previous decision or part of that previous decision;
(b) the details of that previous decision, or the part of that previous decision, that would be overturned;

(c) advice as to whether or not that previous decision, or that part of that previous decision, directed that certain action be taken; and
(d) if that previous decision, or that part of that previous decision, directed that certain action be taken, advice as to whether or not that action has been wholly or substantially carried out.

19. Discussion of resolved matter

(1) The chairperson of a meeting may only allow a matter in respect of which a decision was made earlier in the meeting to be discussed again at that meeting if:
(a) in the opinion of the chairperson, the vote may not have accurately reflected the opinion held by the meeting due to misunderstanding of the motion or for some other reason;
(b) new information comes to hand; or
(c) in the opinion of the chairperson, some vital information has been overlooked.

(2) A motion that a matter be allowed to be discussed again under subregulation (1) is to be made and voted for in the affirmative before the matter may be discussed.

20. Procedural motions

(1) The following motions or their negatives are procedural motions:
(a) that the motion be now put;
(b) that the matter be deferred;
(c) that the matter of the motion be referred to a committee;
(d) that the meeting be now adjourned; and
(e) that the meeting be closed to the public.

(2) Regulation 16(2) and (3) apply to a procedural motion.

(3) The chairperson is to:
(a) consider a procedural motion in precedence over all other business; and
(b) accept or reject that motion.

(4) If the chairperson of a meeting accepts a procedural motion:
(a) no discussion on the procedural motion is to be allowed; and
(b) the procedural motion is to be put to the vote.

(5) If the chairperson of a meeting rejects a procedural motion, the chairperson is to give reasons for the rejection.

(6) A councillor at a meeting must not move a motion of dissent against a ruling by the chairperson under subregulation (3).

(7) Despite subregulation (4)(a), if the procedural motion is that the meeting be now adjourned, the chairperson is to allow discussion on, and only on, the date, time and place of resumption of the meeting.

(8) If the chairperson of a meeting rejects a procedural motion or the vote in respect of a procedural motion is lost, the chairperson:
(a) is to allow discussion on the original motion to be resumed; and
(b) is not to permit a similar procedural motion to be moved until at least one councillor has addressed the meeting on the original motion.

21. Addressing council meeting

(1) At a council meeting, a person is to refer to the chairperson by his or her title.

(2) If 2 or more councillors wish to address a meeting of the council, the chairperson is to decide the order in which they are to do so.

(3) If a councillor is addressing a meeting of a council, another councillor is not to converse aloud, interrupt the speaker or interject, except to call attention to a point of order or to call attention to the want of a quorum.

(4) The council may resolve that this regulation applies to a council committee.

22. Debate at council meeting

(1) A councillor in addressing a council meeting is not to digress from the subject under discussion.

(2) A councillor at a council meeting may speak once to a motion at any time after the motion has been moved and seconded.

(3) A councillor at a council meeting is not to speak for more than 5 minutes on a motion.

(4) A councillor at a council meeting may seek leave of the council to speak on a motion for a further period of up to 3 minutes at any one time on a motion.

(5) A councillor at a council meeting who moves a motion:
(a) has a right of reply for up to 3 minutes; and
(b) is not to introduce any new information in exercising that right.

(6) A councillor at a council meeting who moves a motion loses the right of reply if a motion that the motion be put is passed.

(7) The chairperson of a council meeting may invite the general manager or an employee of the council to provide further qualified advice to the meeting on any item on the agenda or incidental to the agenda.

(8) The chairperson of a council meeting may note a foreshadowed motion given by a councillor.

(9) If the council so decides, the chairperson of a council meeting is to suspend the operation of this regulation.

(10) The council may resolve that this regulation applies to a council committee meeting.

23. Point of order at meeting

(1) A councillor at a meeting may raise a point of order if:
(a) a councillor speaking raises an issue that is irrelevant to the motion being discussed;
(b) a councillor speaking is being interrupted or distracted;
(c) the councillor is of the opinion that a meeting procedure is contrary to the Act or these regulations;
(d) the councillor has been misrepresented during the debate; or

(e) a statement is made by a councillor speaking that the councillor raising the point of order believes is, or is likely to be, offensive to a councillor or to another individual.

(2) A councillor who is interrupted by the taking of a point of order is to cease speaking.

(3) The chairperson is to deal with a point of order as soon as it is raised and before the meeting resumes to deal with other business.

(4) The chairperson's ruling on a point of order:
(a) is not to be questioned; and
(b) is binding on the meeting.

24. Personal explanation at meeting

(1) The chairperson of a meeting may allow a councillor to explain a matter of a personal nature in the absence of a motion on the matter if, in the opinion of the chairperson, it is in the interests of the councillor and the council, or the council committee, to do so.

(2) An explanation:
(a) is not to include reference to any matter that, in the opinion of the chairperson, is irrelevant to the explanation; and
(b) although it may be referred to in debate, is not to be the subject of debate.

25. Acting as planning authority

(1) If a council or council committee intends to act at a meeting as a planning authority under the *Land Use Planning and Approvals Act 1993*, the chairperson is to advise the meeting accordingly.

(2) The general manager is to ensure that the reasons for a decision by a council or council committee acting as a planning authority are recorded in the minutes of the meeting.

Division 3 - Voting

26. Votes

(1) At a council meeting, each councillor, including the chairperson, has one vote.

(2) At a council committee meeting, each member of the committee, including the chairperson and a councillor who is filling a vacancy at the meeting at the request of the council committee, has one vote.

27. Voting procedure

(1) Immediately after discussion on a motion is finished at a meeting, the chairperson is to:
(a) put the motion to the vote, first in the affirmative, then, if necessary, in the negative; and
(b) put the motion to the vote as often as is necessary to enable the chairperson to declare the result.

(2) The chairperson of a council meeting or council committee meeting is to take the vote by any means the council or council committee determines.

(3) The chairperson is to ensure that the vote of each councillor is recorded in the minutes of the meeting.

(4) Voting at a meeting may be conducted by secret ballot if the purpose is to select a person to represent the council on a committee or other body.

28. Determination of voting

(1) A motion at a council meeting is determined by a simple majority of votes unless an absolute majority is required under the Act or any regulations made under the Act.

(2) A motion at a council committee meeting is determined by a simple majority of votes.

(3) To abstain from voting at a meeting is to vote in the negative.

(4) A tied vote at a meeting results in the motion being determined in the negative.

Division 4 - Questions

29. Questions without notice

(1) A councillor at a meeting may ask a question without notice:
- (a) of the chairperson; or
- (b) through the chairperson, of:
  - (i) another councillor; or
  - (ii) the general manager.

(2) In putting a question without notice at a meeting, a councillor must not:
- (a) offer an argument or opinion; or
- (b) draw any inferences or make any imputations –

except so far as may be necessary to explain the question.

(3) The chairperson of a meeting must not permit any debate of a question without notice or its answer.

(4) The chairperson, councillor or general manager who is asked a question without notice at a meeting may decline to answer the question.

(5) The chairperson of a meeting may refuse to accept a question without notice if it does not relate to the activities of the council.

(6) Questions without notice, and any answers to those questions, are not required to be recorded in the minutes of the meeting.

(7) The chairperson of a meeting may require a councillor to put a question without notice in writing.

30. Questions on notice

(1) A councillor, at least 7 days before an ordinary council meeting or a council committee meeting, may give written notice to the general manager of a question in respect of which the councillor seeks an answer at that meeting.

(2) An answer to a question on notice must be in writing.

31. A Public question time

(1) A member of the public may give written notice to the general manager at least 7 days before an ordinary council meeting of a question to be asked at that meeting.

(2) The chairperson of an ordinary council meeting may:
(a) address questions on notice submitted by members of the public; and
(b) invite any member of the public present at the meeting to ask questions relating to the activities of the council.

(3) The chairperson of an ordinary council meeting must ensure that, if required, at least 15 minutes of that meeting is made available for questions by members of the public.

(4) A question by any member of the public under this regulation and an answer to that question are not to be debated at the ordinary council meeting.

(5) The chairperson of an ordinary council meeting may:
(a) refuse to accept a question from a member of the public; or
(b) require a question from a member of the public asked without notice to be put on notice and in writing to be answered at a later ordinary council meeting.

(6) If the chairperson of an ordinary council meeting refuses to accept a question from a member of the public, the chairperson is to give reasons for doing so.

(7) A council is to determine any other procedures to be followed in respect of public question time at an ordinary council meeting.

(8) The period referred to in subregulation (1) includes Saturdays, Sundays and statutory holidays, but does not include:
(a) the day on which notice is given under that subregulation; and
(b) the day of the ordinary council meeting.

B Public Statements

(1) Members of the public may, during the public statements segment of the order of business, with the consent of the Presiding Member make a public statement on any matter that appears on the agenda for that meeting provided that:
(a) The member of the public submits to the General Manager prior to the commencement of the meeting the public statement in a form acceptable to the General Manager and which includes the name and residential or contact address of the member of the public;

(b) The public statement precedes discussion of any matter which requires a decision to be made at the meeting but otherwise at item (6.2) of order of business at clause 4.2;
(c) The public statement is limited to a maximum period of 3 minutes, unless otherwise determined by the Presiding Member; and
(d) No discussion or questions relating to the statement are permitted, unless otherwise determined by the Presiding Member.

(2) Fifteen minutes is to be allocated for the public statement time.

(3) Once all statements have been made, nothing prevents the unused part of the statement time period from being used for other matters.

(4) If the 15-minute period set aside for public statement time is reached, Council, by resolution, may resolve statement time be extended for an additional 15 minutes to allow statements to be made.

(5) No more than two 15-minute extensions to public statement time are to be permitted.

(6) Procedures for public statement time are to be in accordance with policy adopted from time to time by the Council and, where the policy is silent on a matter, the procedures for that matter are to be determined by the Presiding Member.

Division 5 - Minutes

32. Minutes

(1) Subject to regulation 34(1), the general manager is to ensure that the minutes of a meeting accurately record the following matters:
(a) any matter discussed at the meeting;
(b) any decision made at the meeting;
(c) if the Act or any regulations made under the Act require the making of a decision by absolute majority, that the decision was by absolute majority;
(d) a summary of any address, statement or report made or provided on an invitation under regulation 38;
(e) any motion moved during the meeting;
(f) any question on notice by a councillor that is answered and the answer to that question;
(g) any question asked and put in writing during the period referred to in regulation 31(3) and any written answer or summary of that answer to that question;
(h) any question asked, without notice, by a member of the public and a summary of any answer given in response;
(i) the attendance of councillors; and
(j) any absence of any councillor during the meeting, including the times of leaving and returning to the meeting.

(2) The general manager is to ensure that:
(a) copies of the minutes of meetings are kept as records of the council; and
(b) those copies are available to councillors.

33. Audio recording of meetings

(1) A council may determine that an audio recording is to be made of any meeting or part of a meeting.

(2) If the council so determines, the audio recording of a meeting or part of a meeting that is not closed to the public is to be:
(a) retained by the council for at least 6 months; and
(b) made available free of charge for listening on written request by any person.

(3) If after the minutes of a meeting have been confirmed as a true record a discrepancy between the minutes and an audio recording of that meeting or part of that meeting is noticed, the council, at the next appropriate meeting, is to review the audio recording and either confirm that the minutes are a true record or amend the minutes to reflect the audio recording and then confirm the minutes as amended to be a true record.

(4) A council may determine any other procedures relating to the audio recording of meetings it considers appropriate.

34. Minutes of closed meeting

(1) If at a meeting it is decided to hold a part of the meeting as a closed meeting:
(a) in accordance with regulation 15(5), the grounds for the closure are to be recorded in the minutes of that part of the meeting that is open to the public;
(b) in relation to a matter discussed at the closed meeting:
(i) the fact that the matter was discussed at the closed meeting; and
(ii) a brief description of the matter so discussed –
are to be recorded in the minutes of that part of the meeting that is open to the public, but are to be so recorded in a manner that does not disclose any confidential information and protects confidentiality; and
(c) in relation to a matter discussed at the closed meeting, the details of the discussion of the matter, and the outcome of the discussion, are not to be recorded in the minutes of that part of the meeting that is open to the public unless the council, or council committee, determines otherwise.

(2) The general manager is to record in the minutes of a closed meeting any matter of a kind listed in regulation 32(1) that relates to the closed meeting.

(3) The minutes of a closed meeting are to be kept confidential unless the council, or the council committee, after considering privacy and confidentiality issues, authorises the release to the public of the minutes.

(4) If the general manager is excluded from a closed meeting, the chairperson of the meeting is to direct a person to record the minutes of the meeting.

(5) A copy of the minutes of a closed meeting is to be provided to each councillor by the general manager or, if the general manager is excluded from the meeting, the person who recorded the minutes.

(6) At the next closed meeting, the minutes of a closed meeting, after any necessary correction, are to be confirmed as the true record by the council or council committee and signed by the chairperson of the closed meeting.

35. Circulation and inspection of minutes of open meeting

(1) The minutes of a meeting, other than a closed meeting:
(a) as soon as practicable but at least at the next ordinary council meeting, or next council committee meeting, that is open to the public, are to be circulated to all councillors; and
(b) at that next ordinary council meeting or next council committee meeting, after any necessary correction, are to be confirmed as the true record by the council or the council committee and signed by the chairperson of the meeting.

(2) The general manager is to ensure that the minutes, and copies of any extract from the minutes, as confirmed under subregulation (1)(b), of a meeting that was open to the public are available to the public:
(a) on the council's website for inspection; and
(b) at the public office of the council for inspection, free of charge, and for purchase by payment of the fee specified in Schedule 1 –

within 7 days after the minutes are so confirmed.

(3) The general manager may withhold from purchase any extract from the minutes of a meeting:
(a) for which the council does not own the intellectual property; or
(b) which contains information provided to the council on the condition that it be not made available to members of the public.

(4) The period of 7 days referred to in subregulation (2) does not include Saturdays, Sundays and statutory holidays.

36. Confirming minutes

In confirming the minutes of a meeting, debate is allowed only in respect of the accuracy of the minutes.

PART 3 - General Provisions

37. Other procedures

(1) A council may determine any other procedures relating to meetings it considers appropriate.

(2) Despite subregulation (1), a council may not determine that a councillor may attend a meeting in any manner that does not consist of the person attending the meeting in person.

38. Invitations to address meeting

(1) The chairperson of a meeting, including a closed meeting, may invite a person:
(a) to address the meeting; and
(b) to make statements or deliver reports to the meeting.

(2) An invitation under subregulation (1) may be subject:
(a) in the case of a council meeting, to any condition the council may impose; or
(b) in the case of a council committee meeting, to any condition the council, or the council committee, may impose.

39. Leave of absence

(1) If a councillor wishes to take a leave of absence in respect of one or more meetings, the councillor, or the chairperson on behalf of the councillor, may request that leave of absence.

(2) At a meeting:
(a) the council may grant a request for a leave of absence from one or more of its meetings or one or more council committee meetings, or both; and
(b) a council committee may grant a request for a leave of absence from one or more of its meetings.

(3) A leave of absence may not be granted retrospectively.

(4) The purpose of the leave of absence and the period involved are to be recorded in the minutes.

40. Suspension from meeting

(1) The chairperson of a meeting may suspend a councillor from part or all of the meeting if the councillor:
(a) makes a personal reflection about another councillor or an employee of the council and refuses to apologise; or
(b) interjects repeatedly; or
(c) disrupts the meeting and disobeys a call to order by the chairperson.

(2) Before deciding to suspend a councillor, the chairperson is to:
(a) advise the councillor that suspension is being considered and of the reasons for considering suspension; and
(b) give the councillor an opportunity to argue against suspension or to apologise.

(3) If, after considering any argument or apology from a councillor under subregulation (2), the chairperson suspends the councillor, the councillor:
(a) must leave the meeting; and
(b) must not attend the meeting while suspended.

Penalty: Fine not exceeding 10 penalty units.

(4) The chairperson may request the assistance of a police officer to remove a councillor who refuses to leave a meeting as required under subregulation (3)(a).

41. Offences

(1) A member of the public must not hinder or disrupt a meeting.

Penalty: Fine not exceeding 10 penalty units.

(2) A member of the public must leave a closed meeting unless invited to remain.

Penalty: Fine not exceeding 10 penalty units.

(3) If a member of the public:
(a) hinders or disrupts a meeting;
(b) tries to hinder or disrupt a meeting; or
(c) fails or refuses to leave a closed meeting –

the chairperson may take reasonable steps to remove the person from the meeting or closed meeting, including requesting the assistance of a police officer in removing the person.

42. Application of regulations to commissioner

(1) The meeting procedures in these regulations apply as far as practicable to a commissioner but the commissioner may vary those meeting procedures if the commissioner considers it necessary to do so.

(2) If a commissioner varies the meeting procedures, the commissioner is to:
(a) table a copy of those meeting procedures; and
(b) conduct council meetings and council committee meetings in accordance with the tabled meeting procedures.

(3) If a commissioner varies the meeting procedures, the commissioner is to ensure that a copy of the varied meeting procedures are available during business hours for public scrutiny at the public office of the council and at any council meeting.

SCHEDULE 1 - Fees

Regulations 9(2) and 35(2)

1. The fee payable for the purchase of the following documents is an amount not exceeding 1 fee unit for every 5 pages:

(a) the minutes of a meeting;
(b) a copy of any part of or extract from the minutes of a meeting;
(c) the agenda for a meeting;
(d) a copy of any part of or extract from the agenda for a meeting;
(e) a record or document associated with the agenda for a meeting;
(f) a copy of any part of or extract from a record or document associated with the agenda for a meeting.

Tasmanian Audit Office

Independent Auditor's Report

To the Councillors of Waratah-Wynyard Council

Report on the Audit of the Financial Report

Opinion

I have audited the financial report of Waratah-Wynyard Council (Council) which comprises the statement of financial position as at 30 June 2019, the statements of comprehensive income, changes in equity and cash flows for the year then ended, notes to the financial statements, including a summary of significant accounting policies, other explanatory notes and the General Manager's statement.

In my opinion, the accompanying financial report:

(a) presents fairly, in all material respects, Council's financial position as at 30 June 2019 and of its financial performance and its cash flows for the year then ended

(b) is in accordance with the *Local Government Act 1993* and Australian Accounting Standards.

Basis for Opinion

I conducted the audit in accordance with Australian Auditing Standards. My responsibilities under those standards are further described in the *Auditor's Responsibilities for the Audit of the Financial Report* section of my report. I am independent of Council in accordance with the ethical requirements of the Accounting Professional and Ethical Standards Board's APES 110 *Code of Ethics for Professional Accountants* (the Code) that are relevant to my audit of the financial report in Australia. I have also fulfilled my other ethical responsibilities in accordance with the Code.

The *Audit Act 2008* further promotes the independence of the Auditor-General. The Auditor-General is the auditor of all Tasmanian public sector entities and can only be removed by Parliament. The Auditor-General may conduct an audit in any way considered appropriate and is not subject to direction by any person about the way in which audit powers are to be exercised. The Auditor-General has for the purposes of conducting an audit, access to all documents and property and can report to Parliament matters which in the Auditor-General's opinion are significant.

My audit responsibility does not extend to the budget figures included in the financial report, asset renewal funding ratio disclosed in note 9.9(f), nor the Significant Business Activities disclosed in note 3.6 to the financial report and accordingly, I express no opinion on them.

I believe that the audit evidence I have obtained is sufficient and appropriate to provide a basis for my opinion.

Key audit matters

Key audit matters are those matters that, in my professional judgement, were of most significance in my audit of the financial report of the current period. These matters were addressed in the context of my audit of the financial report as a whole, and in forming my opinion thereon, and I do not provide a separate opinion on these matters.

Why this matter is considered to be one of the most significant matters in the audit	Audit procedures to address the matter included
Valuation of Property and Infrastructure *Refer to notes 3.3, 6.1 and 9.7*	
Property and infrastructure at 30 June 2019 includes land, buildings, roads, bridges and drainage, with the fair values totalling $137.19m. The fair values of land and buildings are derived from observable market information while the fair values of infrastructure assets are based on depreciated replacement cost. Council undertakes formal revaluations on a regular basis to ensure valuations represent fair value. Indexation is applied to fair values between formal valuations. In 2018-19 Council revalued drainage assets, based on depreciated replacement cost valuations determined by internal experts. The valuations are highly dependent upon a range of assumptions and estimated unit rates. The calculation of depreciation requires estimation of asset useful lives, which involves a high degree of subjectivity. Changes in assumptions and depreciation policies can significantly impact the depreciation charged Capital payments in 2018–19 totalled $4.62m on a number of significant programs to upgrade and maintain assets. Capital	• Assessing the scope, expertise and independence of experts involved to assist in the valuations. • Evaluating the appropriateness of the valuation methodology applied to determine fair values. • Critically assessing assumptions and other key inputs in the valuation model, including corroboration of assumptions to external data. • Testing, on a sample basis, the mathematical accuracy of the valuation model's calculations. • Evaluating management's assessment of the useful lives. • Performing substantive analytical procedures on depreciation expenses. • Testing, on a sample basis, significant expenditure on maintenance and capital works to corroborate appropriate treatment. • Testing, on a sample basis, capital work-in-progress to ensure that active projects will result in usable assets and that assets commissioned are transferred in a timely manner.

Why this matter is considered to be one of the most significant matters in the audit	Audit procedures to address the matter included
projects can contain a combination of enhancement and maintenance activity which are not distinct and therefore the allocation of costs between capital and operating expenditure is inherently judgemental.	• Evaluating the adequacy of disclosures made in the financial report, including those regarding key assumptions used.

Responsibilities of the General Manager for the Financial Report

The General Manager is responsible for the preparation and fair presentation of the financial report in accordance with Australian Accounting Standards and the *Local Government Act 1993* and for such internal control as determined necessary to enable the preparation of the financial report that is free from material misstatement, whether due to fraud or error.

In preparing the financial report, the General Manager is responsible for assessing Council's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless Council is to be dissolved by an Act of Parliament or the Councillors intend to cease operations, or have no realistic alternative but to do so.

Auditor's Responsibilities for the Audit of the Financial Report

My objectives are to obtain reasonable assurance about whether the financial report as a whole is free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes my opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with the Australian Auditing Standards will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of this financial report.

As part of an audit in accordance with the Australian Auditing Standards, I exercise professional judgement and maintain professional scepticism throughout the audit. I also:

- Identify and assess the risks of material misstatement of the financial report, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for my opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of Council's internal control.

- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the General Manager.
- Conclude on the appropriateness of the General Manager's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Council's ability to continue as a going concern. If I conclude that a material uncertainty exists, I am required to draw attention in my auditor's report to the related disclosures in the financial report or, if such disclosures are inadequate, to modify my opinion. My conclusion is based on the audit evidence obtained up to the date of my auditor's report. However, future events or conditions may cause Council to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the financial report, including the disclosures, and whether the financial report represents the underlying transactions and events in a manner that achieves fair presentation.

I communicate with the General Manager regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that I identify during my audit.

From the matters communicated with the General Manager, I determine those matters that were of most significance in the audit of the financial report of the current period and are therefore the key audit matters. I describe these matters in my auditor's report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, I determine that a matter should not be communicated in my report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

Stephen Morrison
Assistant Auditor-General Financial Audit Services
Delegate of the Auditor-General

Tasmanian Audit Office

27 September 2019
Hobart

WARATAH WYNYARD COUNCIL

Financial Report 2019

Statement of Comprehensive Income
For the Year Ended 30 June 2019

	Note	Actual 2019 $	Budget 2019 $	Actual 2018 $
Income				
Recurrent Income				
Rates and charges	**2.3**	11,201,705	11,099,094	10,990,737
User Charges	**2.4**	2,403,450	2,461,944	2,290,948
Interest		330,510	275,010	276,882
Reimbursements/contributions		763,479	739,929	984,451
Grants	**2.5**	3,194,672	2,415,193	3,631,757
Distributions from Water Corporation	**4.1**	523,607	576,000	845,669
		18,417,423	17,567,170	19,020,444
Capital Income				
Capital Grants	**2.5**	1,893,684	3,620,175	814,744
Capital Reimbursements			-	552,061
Gain/(Loss) on disposal of assets	**2.6**	(197,436)	(112,980)	(316,210)
Total Income		20,113,671	21,074,365	20,071,039
Expenses				
Employee costs	**3.1**	6,415,825	6,838,463	6,453,890
Materials and contracts	**3.2**	6,129,293	6,698,772	6,429,587
Depreciation and amortisation	**3.3**	3,841,278	3,986,635	4,145,487
State levies		504,190	531,718	492,984
Borrowing Costs	**3.4**	36,059	65,340	39,733
Remissions and discounts		397,752	397,384	398,262
Other expenses	**3.5**	258,820	257,630	252,715
Total Expenses		17,583,217	18,775,942	18,212,658
Surplus/(Deficit)		2,530,454	2,298,423	1,858,381
Other comprehensive income				
Items that will not be reclassified to surplus or deficit				
Net asset revaluation increment/(decrement)	**9.1**	2,246,592	-	2,688,568
Fair value adjustment on equity investment assets	**6.3**	6,569,535	-	0
		11,346,581	2,298,423	4,546,949
Items that may be reclassified subsequently to surplus or deficit				
Financial Assets available for sale reserve				
- Fair value adjustment on available for sale assets	**6.3**	-	-	578,080
Comprehensive Result		11,346,581	2,298,423	5,125,029

The above Statement of Comprehensive Income should be read in conjunction with the accompanying notes.

Statement of Financial Position
As at 30 June 2019

	Note	Actual 2019 $	Actual 2018 $
Current Assets			
Cash and cash equivalents	**5.1**	12,440,925	10,549,513
Receivables	**5.3**	1,079,019	870,368
Inventories	**5.4**	108,631	117,126
Land held for resale		110,182	110,182
Other	**5.5**	186,527	230,550
Total Current Assets		13,925,284	11,877,739
Non-Current Assets			
Property, plant and equipment	**6.1**	158,746,045	156,550,195
Intangible assets	**6.2**	414,943	295,082
Receivables		-	-
Investment in Water Corporation	**6.3**	51,687,317	45,117,782
Total Non-Current Assets		210,848,305	201,963,059
TOTAL ASSETS		224,773,589	213,840,798
Current Liabilities			
Payables	**7.1**	1,225,397	1,335,969
Financial Liabilities	**7.2**	115,936	112,139
Provisions	**7.3**	1,696,838	1,781,048
Total Current Liabilities		3,038,171	3,229,156
Non-Current Liabilities			
Financial Liabilities	**8.1**	870,174	986,110
Provisions	**8.2**	280,145	387,014
Total Non-Current Liabilities		1,150,319	1,373,124
TOTAL LIABILITIES		4,188,490	4,602,280
NET ASSETS		220,585,099	209,238,518
Equity			
Accumulated Surplus		154,661,712	152,140,271
Reserves	**9.1**	65,923,387	57,098,247
TOTAL EQUITY		220,585,099	209,238,518

The above Statement of Financial Position should be read in conjunction with the accompanying notes.

Statement of Changes in Equity
For year ended 30 June 2019

	Total		Accumulated Surplus		Reserves	
	2019 $	2018 $	2019 $	2018 $	2019 $	2018 $
Balance at beginning of the year	209,238,518	204,113,489	152,140,271	149,599,458	57,098,247	54,514,031
Comprehensive Result	2,530,454	1,858,381	2,530,454	1,858,381	-	-
Transfer to Reserves	8,816,127	3,266,648	(9,013)	(13,568)	8,825,140	3,280,216
Transfer from Reserves	-	-	-	696,000	-	(696,000)
Balance at end of the year	**220,585,099**	**209,238,518**	**154,661,712**	**152,140,271**	**65,923,387**	**57,098,247**

The above Statement of Changes in Equity should be read in conjunction with the accompanying notes.

Statement of Cash Flows
For year ended 30 June 2019

	Note	2019 $	2018 $
Cash flows from operating activities			
Cash Used			
Employee Costs		(6,580,767)	(6,430,102)
Materials and Contracts		(7,276,421)	(7,637,079)
State levies		(504,190)	(492,984)
Finance costs		(35,786)	(39,430)
Other expenses		(258,820)	(252,715)
		(14,655,984)	**(14,852,310)**
Cash Received			
Rates		10,739,299	10,600,175
User charges		2,604,520	2,475,260
Interest		343,732	246,752
Reimbursement of expenses		763,479	984,451
Government grants		3,194,672	3,631,757
Net GST recovered from ATO		704,375	813,539
		18,350,077	**18,751,934**
Net Cash provided by (used in) operating activities	**5.2**	**3,694,093**	**3,899,624**
Cash flows from investing activities			
Cash Used			
Payments for Property, Plant and Equipment		(4,616,674)	(4,508,898)
		(4,616,674)	**(4,508,898)**
Cash Received			
Investment revenue from Water Corporation		523,607	845,669
Proceeds from Sale of Property, Plant and Equipment		508,841	176,362
Capital grants		1,893,684	814,744
Flood Damages reimbursements		0	1,905,138
		2,926,132	**3,741,913**
Net cash provided by (used in) investing activities		**(1,690,542)**	**(766,985)**
Cash flows from financing activities			
Financial liabilities		(112,139)	(108,465)
Net cash provided by financing activities		**(112,139)**	**(108,465)**
Net (Decrease) in Cash Held		1,891,412	3,024,174
Cash at beginning of year		10,549,513	7,525,339
Cash at end of year	**5.1**	**12,440,925**	**10,549,513**

The above Statement of Cash Flows should be read in conjunction with the accompanying notes.

CONTENTS

NOTE 1 GENERAL ACCOUNTING POLICIES

1.1 Reporting Entity

(a) The Waratah-Wynyard Council was established on 2 April 1993 and is a body corporate with perpetual succession and a common seal.

Council's Main Office is located at 21 Saunders Street, Wynyard.

(b) The purpose of the Council is to:

- provide for health, safety and welfare of the community;
- to represent and promote the interests of the community;
- to provide peace, order and good government in the municipality.

1.2 Basis of Accounting

These financial statements are a general-purpose financial report that consists of the Statements of Comprehensive Income, Financial Position, Changes in Equity, Cash Flows, and notes accompanying these financial statements. The general-purpose financial report complies with Australian Accounting Standards, other authoritative pronouncements of the Australian Accounting Standards Board (AASB), and the *Local Government Act 1993 (LGA1993) (as amended)*. Council has determined that it does not have profit generation as a prime objective. Consequently, where appropriate, Council has elected to apply options and exemptions within accounting standards that are applicable to not-for-profit entities.

This financial report has been prepared on the accrual and going concern basis.

All amounts are presented in Australian dollars and unless stated, have been rounded to the nearest dollar.

This financial report has been prepared under the historical cost convention, except where specifically stated in notes 6.1, 6.3, 7.3 and 8.1.

Unless otherwise stated, all accounting policies are consistent with those applied in the prior year. Where appropriate, comparative figures have been amended to accord with current presentation, and disclosure has been made of any material changes to comparatives.

All entities controlled by Council that have material assets or liabilities, such as Special Committees of Management, and material subsidiaries or joint ventures, have been included in this financial report. All transactions between these entities and Council have been eliminated in full.

1.3 Use of Judgements and Estimates

Judgements and Assumptions
In the application of Australian Accounting Standards, Council is required to make judgements, estimates and assumptions about carrying values of assets and liabilities that are not readily apparent from other sources. The estimates and associated assumptions are based on historical experience and various other factors that are believed to be reasonable under the circumstances, the results of which form the basis of making the judgements. Actual results may differ from these estimates

The estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognised in the period in which the estimate is revised if the revision affects only that period or in the period of the revision and future periods if the revision affects both current and future periods.

Council has made no assumptions concerning the future that may cause a material adjustment to the carrying amounts of assets and liabilities within the next reporting period. Judgements made by Council that have significant effects on the financial report are disclosed in the relevant notes as;

Employee entitlements
Assumptions are utilised in the determination of Council's employee entitlement provisions. These assumptions are discussed in note 7.3.

Defined benefit superannuation fund obligations
Actuarial assumptions are utilised in the determination of Council's defined benefit superannuation fund obligations. These assumptions are discussed in note 9.5.

Fair Value of Property Plant & Equipment
Assumptions and judgements are utilised in determining the fair value of Council's property, plant and equipment including useful lives and depreciation rates. These assumptions are discussed in note 6.1.

Investment in Water Corporation
Assumptions utilised in the determination of Council's valuation of its investment in TasWater are discussed in note 4.1 and in note 6.3.

1.8 Other significant accounting policies and pending accounting standards

(a) Taxation
Council is exempt from all forms of taxation except Fringe Benefits Tax, Payroll Tax, Land Tax and the Goods and Services Tax.

Goods and Services Tax (GST)
Revenues, expenses and assets are recognised net of the amount of GST, except where the amount of GST incurred is not recoverable from the Australian Tax Office. In these circumstances the GST is recognised as part of the cost of acquisition of the asset or as part of an item of the expense. Receivables and payables in the balance sheet are shown inclusive of GST. Cash flows are presented on a gross basis. The GST components of investing and financing cash flows are recoverable from or payable to the tax authority are presented as operating cash flows.

(b) Impairment of Non-financial Assets
At each reporting date, Council reviews the carrying value of its assets to determine whether there is any indication that these assets have been impaired. If such an indication exists, the recoverable amount of the asset, being the higher of the asset's fair value less costs to sell and value in use, is compared to the assets carrying value. Any excess of the assets carrying value over its recoverable amount is expensed to the comprehensive income statement, unless the asset is carried at the revalued amount in which case, the impairment loss is recognised directly against the revaluation reserve in respect of the same class of asset to the extent that the impairment loss does not exceed the amount in the revaluation surplus for that same class of asset. For non-cash generating assets of Council such as roads, drains, public buildings and the like, value in use is represented by the deprival value of the asset approximated by its written down replacement cost.

(c) Allocation between current and non-current
In the determination of whether an asset or liability is current or non-current, consideration is given to the time when each asset or liability is expected to be settled. The asset or liability is classified as current if it is expected to be settled within the next twelve months, being Council's operational cycle, or if Council does not have an unconditional right to defer settlement of a liability for at least 12 months after the reporting date.

(d) Financial guarantees
Financial guarantee contracts are recognised as a liability at the time the guarantee is issued. The liability is initially measured at fair value, and if there is material increase in the likelihood that the guarantee may have to be exercised, at the higher of the amount determined in accordance with AASB 137 Provisions, Contingent Liabilities and Contingent Assets and the amount initially recognised less cumulative amortisation, where appropriate. In the determination of fair value, consideration is given to factors including the probability of default by the guaranteed party and the likely loss to Council in the event of default.

(e) Contingent assets, contingent liabilities and commitments
Contingent assets and contingent liabilities are not recognised in the Statement of Financial Position, but are disclosed by way of a note and, if quantifiable, are measured at nominal value. Contingent assets and liabilities are presented inclusive of GST receivable or payable respectively.

Commitments are not recognised in the Statement of Financial Position. Commitments are disclosed at their nominal value inclusive of the GST payable.

(f) Budget
The estimated revenue and expense amounts in the Statement of Other Comprehensive Income represent revised budget amounts and are not audited.

(g) Adoption of new and amended accounting standards
In the current year, Council has adopted all of the new and revised Standards and Interpretations issued by the Australian Accounting Standards Board that are relevant to its operations and effective for the current annual reporting period. These include:

(i) AASB 9 Financial Instruments
This standard replaces the existing standard, AASB139: Financial Instruments: Recognition and Measurement and revises classification, measurement and disclosure of financial assets and liabilities. It reduces the number of categories for financial assets and simplifies the measurement choices, including the removal of impairment testing of assets measured at fair value. Classification of financial assets is determined by Council's business model for holding the particular asset and its contractual cash flows.

Council has applied this standard from 1 July 2018 using a retrospective approach with cumulative catch-up. This does not require Council to restate comparative figures but does require the presentation of both qualitative and quantitative disclosures for affected items, along with a corresponding adjustment to the opening balance of Accumulated Surpluses for transitional effects of re-measurement.

The nature of adjustments is described below:

(a) Classification and measurement
The financial assets of Council have been reclassified into one of the following categories on adoption of AASB 9. The classifications are primarily based on Council's business model in which a financial asset is managed and its contractual cash flow characteristics. The main effects resulting from reclassification are as follows:

Trade and other receivables - classified as 'Loans and receivables' as at 30 June 2018, these are held to collect contractual cash flows and give rise to cash flows representing solely payments of principal and interest. These are classified and measured as Financial assets at 'Amortised cost' beginning 1 July 2018.

Investment in water corporation - classified as an 'Available-For-Sale' financial asset as at 30 June 2018. As Council does not hold this equity investment for trading purposes, it has made an irrevocable election for this equity instrument to present any subsequent changes in fair value in Other comprehensive income. Under this approach only dividends are recognised in profit or loss. Council's Investment in water corporation is classified and measured as an 'Equity instrument at fair value through other comprehensive income' beginning 1 July 2018.

Council did not designate any financial assets as at fair value through profit or loss.

Council has not designated any financial liabilities at fair value through profit or loss. There are no changes in the classification and measurement for Council's financial liabilities.

In summary, upon the adoption of AASB 9, Council had the following required (or elected) reclassifications as at 1 July 2018:

AASB 139 Category and carrying amount			AASB 9 Category and carrying amount
	Note	$'000	Equity instrument at fair value through **OCI** $'000
Available-for-sale Investment in water corporation	6.3	45,117	45,117
			45,117

(b) Impairment of financial assets
The adoption of AASB 9 has fundamentally changed Council's accounting for impairment losses for financial assets by replacing AASB 139's incurred loss approach, with a forward-looking expected credit loss (ECL) approach. AASB 9 requires Council to recognise an allowance for ECLs for all financial assets not held at fair value through profit or loss.

Council recorded no impairment losses in the 2018/19 year.

There was no impact on Council's accounting for financial liabilities, as the new requirements only affect the accounting for financial liabilities that are designated at fair value through profit or loss and Council does not have any such liabilities. The de-recognition rules have been transferred from AASB 139 Financial Instruments: Recognition and Measurement and have not been changed.

(h) Pending Accounting Standards
Certain new accounting standards and interpretations have been published that are not mandatory for 30 June 2019 reporting periods. Council's assessment of the impact of the relevant new standards and interpretations is set out below. (Note: standards are applicable to reporting periods beginning on or after to effective date referred to below).

(i) AASB 15 Revenue from Contracts with Customers
The standard has been deferred by AASB 2016-7 Deferral of AASB15 for Not-for-Profit Entities, until the 2019-20 reporting period.

AASB 15 introduces a five-step process for revenue recognition, with the core principle of the new standard being for entities to recognise revenue to depict the transfer of goods or services to customers in amounts that reflect the consideration (that is, payment) to which the entity expects to be entitled in exchange for those goods or services.

Accounting policy changes will arise in the timing of revenue recognition, treatment of contracts costs and contracts which contain a financing element.

Council has analysed the new revenue recognition requirements noting that future impacts include:

- Depending on the respective contractual terms, the new requirements of AASB 15 may result in a change to the timing of revenue from sales of goods and services such that some revenue may need to be deferred as a liability to a later reporting period to the extent that Council has received cash, but has not met its associated performance obligations, (a promise to transfer a good or service).
- Grants received to construct non-financial assets controlled by Council will be recognised as a liability, and subsequently recognised progressively as revenue as Council satisfies its performance obligations under the grant. At present, such grants are recognised as revenue upfront.
- Other grants presently recognised as revenue upfront may be eligible to be recognised as revenue progressively as the associated performance obligations are satisfied, but only if the associated performance obligations are enforceable and sufficiently specific.

- Grants that are not enforceable and/or not sufficiently specific, will not qualify for deferral, and continue to be recognised as revenue as soon as they are controlled. Council receives several grants for which there are no sufficiently specific performance obligations, for example the Commonwealth Financial Assistance Grants. These grants are will continue being recognised as revenue upfront assuming no change to the current grant arrangements.

  For Council there will be a significant effect in the treatment of all grants with sufficiently specific performance obligations, but where the conditions have yet to be fulfilled at year end. Council currently presents unexpended grant income received in note 5. Council's assessment is that the majority of the amounts received unexpended for the year, $1,460,772, will be deferred as a liability under AASB15 and progressively recorded as income as performance obligations are fulfilled.

  Council will apply the standard from 1 July 2019 using a retrospective approach with cumulative catch-up with an adjustment to Accumulated surpluses for the difference in accounting treatment on initial adoption.

(ii) AASB 1058 Income of Not-for-Profit Entities
This standard has been deferred until the 2019-20 reporting period.

AASB 1058 supersedes all the income recognition requirements relating to councils, previously in AASB 1004 Contributions. The timing of income recognition under AASB 1058 depends on whether a transaction gives rise to a liability or other performance obligation, or a contribution by owners, related to an asset (such as cash or another asset) received.

AASB 1058 applies when Council receives volunteer services or enters into other transactions in which the consideration to acquire an asset is significantly less than the fair value of the asset, and where the asset is principally to enable Council to further its objectives. In cases where Council enters into other transactions, Council recognises and measures the asset at fair value in accordance with the applicable Australian Accounting Standard (e.g. AASB 116 Property, Plant and Equipment).

If the transaction is a transfer of a financial asset to enable Council to acquire or construct a recognisable non-financial asset to be controlled by council (i.e. an in-substance acquisition of a non-financial asset), Council recognises a liability for the excess of the fair value of the transfer over any related amounts recognised. Council will recognise income as it satisfies its obligations under the transfer, similarly to income recognition in relation to performance obligations under AASB 15 as discussed above.

Where the asset acquired is leased at a "Peppercorn" rate, Council is required to recognise the leased asset at its fair value, the remaining lease liability and the balance as income. These leased right-of-use assets have not previously been recognised.

Council currently has 31 peppercorn leases/licences with no material commercial value and they are not expected to have a material impact on the Statement of Financial position or Statement of Comprehensive Income.

AASB 1058 also encompasses non-contractual statutory income such as rates, taxes and fines. Council currently recognises income when received. Under AASB 1058, income is recognised when the taxable event has occurred. An impact for Council is that prepaid rates received prior to the beginning of a rating period, will now be recognised as a financial liability until the commencement of that rating period. The impact to Council will be that revenue recognised when received from Rates and Charges in advance as disclosed in note 2.3, will now be recorded as a liability, with revenue deferred until the commencement of the applicable rating period.

AASB 1058 requires the recognition of Volunteer services where they would have been purchased if not donated and the fair value of those services can be reliably measured.

Council will apply the standard from 1 July 2019 using a retrospective approach with cumulative catch-up with an adjustment to Accumulated surpluses for the difference in accounting treatment on initial adoption.

Council has assessed these requirements and determined that whilst the volunteers add value to the service experience, no disclosures related to volunteers is required by the accounting standards.

(iii) AASB 16 Leases

This standard is applicable to annual reporting periods beginning on or after 1 January 2019. Council will apply the standard from 1 July 2019. Exemptions allow councils to apply AASB 117 for the 30 June 2019 reporting year.

AASB 16 introduces a single lessee accounting model and requires a lessee to recognise assets and liabilities for all leases with a term of more than 12 months, unless the underlying asset is of low value. A lessee is required to recognise a right-of-use asset representing its right to use the underlying leased asset and a lease liability representing its obligations to make lease payments.

AASB 16 will result in most of Council's operating leases being brought onto the statement of financial position. There are limited exceptions relating to short-term leases and low-value assets which may remain off the balance sheet. Council's existing lease commitments are disclosed in Note 9.4.

The calculation of the lease liability will take into account appropriate discount rates, assumptions about the lease term, and increases in lease payments. A corresponding right to use assets will be recognised, which will be amortised over the term of the lease. Rent expense will no longer be shown. The profit and loss impact of the leases will be through amortisation and interest charges. Council's current operating lease expenditure is shown at Note 9.4. In the Statement of Cash Flows lease payments will be shown as cash flows from financing activities instead of operating activities.

Council currently has 5 Commercial Leases with total payments of $5,340 and they are not expected to have a material impact on the Statement of Financial Position or Statement of Comprehensive Income.

Lessor accounting under AASB 16 remains largely unchanged. For finance leases, the lessor recognises a receivable equal to the net investment in the lease. Lease receipts from operating leases are recognised as income either on a straight-line basis or another systematic basis where appropriate.

Council will apply the standard from 1 July 2019 using a retrospective approach with cumulative catch-up with an adjustment to Accumulated surpluses for the difference in accounting treatment on initial adoption.

NOTE 2 OUR PERFORMANCE

2.1 Functions/Activities of the Council Notes to and forming part of the Financial Report

For the year ended 30 June 2019
Note 2.1(a): Expenses, Revenues and Assets have been attributed to the following functions/activities, descriptions of which are set out in note 2.1(c).

2019 ACTUAL	CORPORATE SERVICES	TRANSPORT	DEVELOPMENT SERVICES	PARKS AND RECREATION	COMM SERVICES	FIRE LEVY	WASTE MGT	DRAINAGE SERVICES	OTHER - NOT ATTRIBUTABLE	TOTAL
EXPENSES $	2,519,035	4,763,977	1,141,001	2,929,960	2,829,837	442,510	2,008,159	645,544	303,194	17,583,217
%	14.3	27.1	6.5	16.7	16.1	2.5	11.4	3.7	1.7	100.0
REVENUES $										
GRANTS	40,354	1,864,192	0	1,410,000	139,495	0	0	0	1,634,315	5,088,356
OTHER	1,739,540	-142,134	363,830	109,373	1,704,392	473,654	1,918,977	807,155	8,050,528	15,025,315
TOTAL	1,779,894	1,722,058	363,830	1,519,373	1,843,887	473,654	1,918,977	807,155	9,684,843	20,113,671
%	8.8	8.6	1.8	7.6	9.2	2.4	9.5	4.0	48.2	100.0
SURPLUS/(DEFICIT) FOR YEAR										2,530,454
ASSETS (Note 2.1(b))	76,778,423	98,510,106	275,275	26,023,779	4,464,083	0	0	18,193,150	528,773	224,773,589

2019 BUDGET	CORPORATE SERVICES	TRANSPORT	DEVELOPMENT SERVICES	PARKS AND RECREATION	COMM SERVICES	FIRE LEVY	WASTE MGT	DRAINAGE SERVICES	OTHER - NOT ATTRIBUTABLE	TOTAL
EXPENSES $	2,998,487	4,800,088	1,313,293	3,650,493	2,639,805	452,800	1,984,364	634,365	302,247	18,775,942
%	16.0	25.6	7.0	19.4	14.1	2.4	10.6	3.4	1.6	100.0
REVENUES $										
GRANTS	0.00	1,859,554	0.00	4,035,000	43,500	0	0	0	97,317	6,035,368
OTHER	1,732,748	-101,027	338,510	120,500	1,776,862	471,312	1,896,208	837,751	7,966,135	15,038,999
TOTAL	1,732,748	1,758,527	338,510	4,155,500	1,820,362	471,312	1,896,208	837,751	8,063,449	21,074,367
%	8.2	8.3	1.6	19.7	8.6	2.2	9.0	4.0	38.3	100.00
SURPLUS/(DEFICIT) FOR YEAR										2,298,425

2018 ACTUAL	CORPORATE SERVICES	TRANSPORT	DEVELOPMENT SERVICES	PARKS AND RECREATION	COMM SERVICES	FIRE LEVY	WASTE MGT	DRAINAGE SERVICES	OTHER - NOT ATTRIBUTABLE	TOTAL
EXPENSES $	2,746,343	5,355,965	1,503,749	2,593,276	2,690,989	428,031	1,910,790	680,371	303,144	18,212,658
%	15.1	29.4	8.3	14.2	14.7	2.4	10.5	3.7	1.7	100.0
REVENUES $										
GRANTS	100,000	2,247,466	421,139	0	109,519	0	0	0	1,568,377	4,446,501
OTHER	2,053,738	512,531	337,305	124,966	1,552,729	449,911	1,900,230	814,244	7,878,884	15,624,538
TOTAL	2,153,738	2,759,997	758,444	124,966	1,662,248	449,911	1,900,230	814,244	9,447,261	20,071,039
%	10.7	13.8	3.8	0.6	8.3	2.2	9.5	4.1	47.1	100.0
SURPLUS/(DEFICIT) FOR YEAR										1,858,381
ASSETS (Note 2.1(b))	64,947,450	98,015,483	182,121	31,607,539	2,566,023	0	0	16,158,352	363,829	213,840,798

	Actual 2015 $	Actual 2014 $

(b) Total assets shown in note 2.1(a) are reconciled with the amounts shown for assets in the statement of financial position as follows:

Current Assets	13,925,284	11,877,739
Non-Current Assets	210,848,305	201,963,059
	224,773,589	**213,840,798**

(c) Component Functions/Activities

The activities relating to the Local Government's components reported at Note 1.4(a) are as follows:

Transport
Construction and maintenance of roads, footpaths, bridges and traffic signs. It also includes gravel pits and municipal car parks.

Development Services
Administration and implementation of the Council's environmental health, animal management, building control and town planning legislative requirements.

Parks & Recreation
Operation and maintenance of halls, recreation centres, public conveniences and open space networks.

Community Services
Operation of Council's emergency management, and various children and community activation services.

Waste Management
Operation of Wynyard Waste Transfer Station and waste collection services.

Drainage Services
Construction and maintenance of Council's Drainage Works.

Corporate Services
Operation and maintenance of Council Chambers, administration offices and depots. Also includes the Waratah Post Office, rental of Council owned property at commercial rates, subdivision and sale of Council land.

Fire Levy
Collected on behalf of the State Government for state-wide fire services.

Other - Not Attributable
This grouping recognises revenue and expenditure items which do not fall into any of the above functions/activities.

	Actual 2019 $'000s	Budget 2019 $'000s	Actual 2018 $'000s
2.2 Council's performance against budget			
Comprehensive Surplus (Deficit) as per Statement of Comprehensive Income	11,346	2,298	5,125
Less: Non operating Income			
Less: Capital grants	1,894	3,620	1,367
Less: Financial assistance grant received in advance 2019	1,547		1,487
Add: Financial assistance grant in advance in 2018	1,487	1,406	1,426
Less: Other Comprehensive Income			
Fair value revaluation of non-current assets	2,247	-	2,689
Current year fair value adjustment to Tas Water	6,569	-	578
Council's underlying result against budget	**576**	**84**	**430**

Council's result for the 2018-19 year was $0.576m compared to a budgeted result of $0.084m. A favourable variance to budget of $0.492m

2.3 Rates and charges

Council uses Assessed Annual Valuation (AAV) as the basis of valuation of all properties within the municipality. The AAV of a property is its valuation that has been adjusted to reflect movements in board market valuations.

	Actual 2019 $	Actual 2018 $
General rate	8,050,527	7,878,883
Waste service charges	1,851,677	1,841,905
Fire levies	455,544	432,362
Stormwater service charges	843,958	837,587
Total Rates and Charges	**11,201,705**	**10,990,737**

The date of the latest general revaluation of land for rating purposes within the municipality was 1 July 2017.

In 2018/19 the council has received $550,217 of rates payments paid in advance (2017/18 $505,572).

Accounting Policy
Rate income is recognised as revenue when Council obtains control over the assets comprising the receipt. Control over assets acquired from rates is obtained at the commencement of the rating year as it is an enforceable debit linked to the rateable property or, where earlier, upon receipt of the rates. A provision for impairment on rates has not been established as unpaid rates represents a charge against the rateable property that will be recovered when the property is next sold.

2.4 User charges

Childcare	1,433,080	1,310,149
Building and Development	220,874	217,277
Property Certificates	91,430	104,197
Other	658,066	659,325
Total User Charges	**2,403,450**	**2,290,948**

	Actual 2015 $	Actual 2018 $

Accounting Policy
Fees and fines are recognised as revenue when the service has been provided, the payment is received, or when the penalty has been applied, whichever occurs first. A provision for impairment is recognised when collection in full is no longer probable.

Rent
Rents are recognised as revenue when payment is due, or the payment is received, whichever first occurs. Rental payments received in advance are recognised as a prepayment until they are due.

Interest
Interest is recognised progressively as it is earned.

Operating leases as lessor
Council is a lessor and enters into agreements with a number of lessees. These include commercial and non-commercial agreements.

Distributions
Distribution revenue is recognised when Council's right to receive payment is established.

Non-monetary contributions
Non-monetary contributions (including developer contributions) with a value in excess of the recognition thresholds are recognised as revenue and as non-current assets. Non-monetary contributions below the thresholds are recorded as revenue.

Where leases are non-commercial agreements, these are generally with not for profit, such as sporting, organisations. In these cases, subsidised or peppercorn rents are charged because Council recognises part of its role is community service and community support. In these situations, Council records lease revenue on an accruals basis and records the associated properties as part of land and buildings within property, plant and equipment. Buildings are recognised at depreciated replacement cost.

Where leases are commercial agreements, but properties leased are part of properties predominantly used by Council for its own purposes, Council records lease revenue on an accruals basis and records the associated properties as part of land and buildings within property, plant and equipment. Buildings are recognised at depreciated replacement cost.

3.5 Grants

Grants were received in respect of the following:

Grants - Operating		
Roads		
Commonwealth Government Grant – General Purpose	1,634,315	1,568,377
Commonwealth Government Grants – Roads	1,330,818	1,292,815
Commonwealth Government Grants – Bridges	85,671	80,116
Heavy Vehicle Funding	59,791	59,791
Family and Children	52,411	78,889
Other	31,666	551,769
Total Operating grants	**3,194,672**	**3,631,757**
Grants - Capital		
Information Technology	40,354	0
Child Care	5,418	
Recreation	1,460,000	0
	1,505,772	**0**

	Actual 2019 $	Actual 2018 $
Roads		
Roads to Recovery	387,912	782,744
Blackspot Funding	0	32,000
	387,912	**814,744**
Total Capital Grant Revenue	**1,893,684**	**814,744**
Total Grants Revenues	**5,088,356**	**4,446,501**

The Commonwealth Government provides Financial Assistance Grants to Council for general purpose use and the provision of local roads. During 2018/19 The Commonwealth Government announced that they would bring forward the first two payments of the 2019/20 year. In accordance with AASB 1004 Contributions, Council recognises these grants as revenue when it receives the funds and obtains control. The early receipt of instalments resulted in Commonwealth Government Financial Assistance Grants being above that originally budgeted in 2018-19, resulting in the surplus/(deficit) being higher in 2018-19 by $1,546,955.

Total Grants Revenues		
Capital grants received specifically for new or upgraded assets		
Commonwealth Government - Roads to Recovery	387,912	782,744
Recreation	1,460,000	0
Information Technology	40,354	0
Child Care	5,418	0
Blackspot Funding	0	32,000
	1,893,684	**814,744**
Total Capital Grant Revenue	**1,893,684**	**814,744**
Recurrent Grants	3,194,672	3,631,757
Capital Grants	1,893,684	814,744
Total Grants Revenues	**5,088,356**	**4,446,501**

Conditions on Grants

Non-reciprocal grants which were obtained on the condition that they be expended for specified purposes or in a future period, but which are not yet expended.

Plus, amounts recognised as revenues in this reporting period but not yet expended in accordance with the conditions.

Family and Children	10,418	0
Information Technology	40,354	
Recreation	1,410,000	0
Agricultural Landscape Rehabilitation Scheme	0	2,319
Unexpended at the close of this reporting period	**1,460,772**	**2,319**
Net increase/(decrease) in non-reciprocal grant revenues for the year	1,460,772	2,319

	Actual 2019 $	Actual 2018 $

Accounting Policy
Grant income is recognised as revenue when Council obtains control over the assets comprising the receipt.

Control over granted assets is normally obtained upon their receipt (or acquittal) or upon earlier notification that a grant has been secured and are valued at their fair value at the date of transfer.

Control over assets acquired from rates is obtained at the commencement of the rating year as it is an enforceable debt linked to the rateable property or, where earlier, upon receipt of the rates. A provision for impairment on rates has not been established as unpaid rates represents a charge against the rateable property that will be recovered when the property is next sold.

Where grants or contributions recognised as revenues during the financial year were obtained on condition that they be expended in a particular manner or used over a particular period and those conditions were undischarged at balance date, the unused grant or contribution is disclosed. The note also discloses the amount of unused grant or contribution from prior years that was expended on Council's operations during the current year.

A liability is recognised in respect of revenue that is reciprocal in nature to the extent that the requisite service has not been provided at balance date and conditions include a requirement to refund unused contributions. Revenue is then recognised as the various performance obligations under an agreement are fulfilled. Council does not currently have any reciprocal grants.

2.8 Sale of property, plant and equipment, infrastructure

Disposal of assets in the ordinary course of business have given rise to the following losses

Proceeds of sale	508,841	176,362
Less: Written down value of assets disposed	(706,277)	(492,572)
Net Gain/(Loss) on disposal	**(197,436)**	**(316,210)**

Accounting Policy
The profit or loss on sale of an asset is determined when control of the asset has irrevocably passed to the buyer.

NOTE 3 EXPENSES

3.1 Employee benefits

Expenses are recognised in the Statement of Profit or Loss and Other Comprehensive Income when a decrease in future economic benefits relate to a decrease in asset or an increase of a liability has arisen that can be measured reliably.

Wages, Salaries and Allowances	5,145,108	4,971,976
Workers Compensation	176,980	230,650
Superannuation Expenses	604,473	604,341
Annual, Sick and Long Service Leave	729,795	799,604
Other Employee Expenses	121,680	300,489
Total Direct Employee Costs	**6,778,037**	**6,907,060**
Less: Amounts Capitalised	**(362,212)**	**(453,170)**
Net Employee Costs	**6,415,825**	**6,453,890**

	Actual 2019 $	Actual 2018 $

Waratah-Wynyard Council and Circular Head Council have a formal resource sharing agreement. Costs associated with resource shared employees of Circular Head are accounted as materials (note 9.8(d)). Employee costs for resource shared employees of Waratah-Wynyard Council are accounted in full as an employee cost, however revenue is received from Circular Head Council as a reimbursement. Employee costs disclosed in this note are not offset by any income received.

Accounting Policy
Employee benefits include, where applicable, entitlements to wages and salaries, annual leave, sick leave, long service leave, superannuation and any other post-employment benefits.

9.1 Materials and contracts

Contract payments	2,504,453	2,477,309
Waste Disposal	541,019	523,224
Insurance	153,084	140,442
Fuel	223,025	155,468
Electricity	324,982	335,428
Water and Sewerage	195,158	170,508
Other Materials and Services	2,187,572	2,627,208
Total Materials and Contracts	**6,129,293**	**6,429,587**

Accounting Policy
Expenses are recognised in the Statement of Comprehensive Income when a decrease in future economic benefits related to a decrease in assets or an increase of a liability has arisen that can be measured reliably.

Routine maintenance, repair costs, and minor renewals are expensed as incurred. Where the repair related to the replacement of a component of an asset and the cost exceeds the capitalisation threshold the cost is capitalised and depreciated. The carrying value of the replaced asset is expensed.

9.2 Depreciation and amortisation

Land Improvements	264,802	267,391
Buildings	340,147	316,894
Furniture and Fittings	79,274	85,439
Plant and Equipment	351,710	360,641
Roads	1,963,934	2,327,256
Bridges	371,710	382,358
Drainage Works	432,703	368,517
Intangible Assets	36,998	36,991
	3,841,278	**4,145,487**

Accounting Policy
Depreciation and amortisation of property, plant and equipment, infrastructure and intangibles

Buildings, land improvements, plant and equipment, infrastructure and other assets having limited useful lives are systematically depreciated over their useful lives to the Council in a manner which reflects consumption of the service potential embodied in those assets. Estimates of remaining useful lives and residual values are made on a regular basis with major asset classes reassessed annually. Depreciation rates and methods are reviewed annually.

Where assets have separate identifiable components that are subject to regular replacement, these components are assigned distinct useful lives and residual values and a separate depreciation rate is determined for each component.

	Actual 2019 $	Actual 2018 $

Land, heritage, artworks and road earthworks are not depreciated on the basis that they are assessed as not having a limited useful life.

The non-depreciation of road earthwork assets shall be reviewed at least at the end of each reporting period, to ensure that the accounting policy applied to particular earthwork assets reflects the most recent assessment of the useful lives of the assets, having regard to factors such as asset usage, physical deterioration and technical and commercial obsolescence.

Straight line depreciation is charged based on the residual useful life as determined each year.

Major depreciation periods used are listed below and are consistent with the prior year unless otherwise stated:

	2019	2018
Buildings	10 to 100 years	10 to 100 years
Land Improvements	4 to 150 years	4 to 150 years
Plant	3 to 15 years	3 to 15 years
Motor Vehicles	2 to 5 years	2 to 5 years
Office Equipment & Furniture	2 to 20 years	2 to 20 years
Stormwater/Drainage Systems	80 years	80 years
Roads	10 to 100 years	10 to 100 years
Bridges & Culverts	20 to 80 years	20 to 80 years

Repairs and maintenance
Routine maintenance, repair costs, and minor renewal costs are expensed as incurred. Where the repair relates to the replacement of a component of an asset and the cost exceeds the capitalisation threshold the cost is capitalised and depreciated. The carrying value of the replaced asset is expensed.

3.3 Borrowing costs

Interest	**36,059**	**39,733**

Accounting Policy
Expenses are recognised in the Statement of Comprehensive Income when a decrease in future economic benefits related to a decrease in asset or an increase of a liability has arisen that can be measured reliably.

Finance costs are recognised as an expense in the period in which they are incurred, except where they are capitalised as part of a qualifying asset constructed by Council. Where specific borrowings are obtained for the purpose of specific asset acquisition, the weighted average interest rate applicable to borrowings at balance date, excluding borrowings associated with superannuation, is used to determine the borrowing costs to be capitalised.

No borrowing costs were capitalised during the current period, (2017/18, $0).

Finance costs include interest on bank overdrafts, borrowings and bank guarantee fees.

3.4 Other expenses

Audit Services - External Audit *	34,000	32,728
- Other Audit Services	1,500	1,200
Community Assistance Grants	48,612	46,614
Councillor's Allowances (refer to note 10.1(a))	174,708	172,173
	258,820	**252,715**

* includes base audit fee of $28,910 (2017/18 $27,270)

	Actual 2019 $	Actual 2018 $

Accounting Policy
Expenses recognised in the Statement of Profit or Loss and Other Comprehensive Income when a decrease in future economic benefits related to a decrease in asset or an increase of a liability has arisen that can be measured reliably.

3.5 Significant business activities

CHILDREN'S SERVICES		
REVENUE		
Direct		
Rates	-	-
User Charges	1,432,943	1,310,149
Contributions	-	-
Government Grants	71,669	78,889
Other	908	1,378
	1,505,520	**1,390,416**
EXPENDITURE		
Direct		
Employee Costs	1,071,288	1,055,510
Materials & Contracts	151,040	143,403
Interest	-	-
Other	-	-
	1,222,328	**1,198,912**
Indirect		
Indirect Expenditure	**61,430**	**72,400**
Capital Costs		
Depreciation	26,304	22,641
Opportunity Costs of Capital	49,998	46,118
Competitive Neutrality Costs	45,429	31,787
	121,731	**100,546**
Notional Profit/Loss	**100,031**	**18,557**

Accounting Policy
Council is required to report the operating, capital and competitive neutrality costs in respect of each significant business activity undertaken by the Council. Council has determined, based upon competitive neutrality principles that Warawyn Early Learning Centre within Children's Services is considered a significant business activity. Competitive neutrality costs include notional costs i.e. income tax equivalent, rates and loan guarantees in preparing the information disclosed in relation to significant business activities.

Council will continue to review its operations to determine which activities meet the requirements for disclosure as a significant business activity.

NOTE 4 OUR ASSETS

4.1 Investment revenue in Water Corporation

Dividend revenue	294,731	519,825
Tax equivalent	191,356	248,829
Guarantee fee	37,520	77,015
Total investment revenue from water corporation	**523,607**	**845,669**

Accounting Policy
Dividend revenue is recognised when Council's right to receive payment is established.

	Actual 2019 $	Actual 2018 $

NOTE 5 CURRENT ASSETS

5.2 Cash and cash equivalents

Cash	1,600	2,200
Trading Account	539,325	1,536,735
Road Accident - Trust Account	0	10,578
Short Term Deposits	11,900,000	9,000,000
	12,440,925	**10,549,513**

Council's cash and cash equivalents are subject to a number of internal and external restrictions that limit amounts available for discretionary or future use. This includes coverage of future commitments for infrastructure renewals, liabilities and reserve funds.

These include:		
Conditions on Grants (note 2.5)	1,460,772	2,319
Trust Funds and deposits	157,295	154,104
Restricted funds	**1,618,067**	**156,423**
Total unrestricted cash and cash equivalents	**10,822,858**	**10,393,090**

Council has a corporate credit card facility with a limit of $50,000. The balance is paid in full on a monthly basis.

5.3 Reconciliation of cash flows from operating activities to surplus (deficit)

Surplus/(Deficit) for Year	**2,530,454**	**1,858,381**
Items not involving Cash		
Depreciation expense	3,841,278	4,145,487
Capital Reimbursements	0	(552,061)
	3,841,278	**3,593,426**
Change in Operating Assets and Liabilities		
Receivables and other Assets	(153,778)	(52,278)
Payables	(130,569)	(180,149)
Provisions	(164,942)	23,788
Inventories	(8,495)	659
	(457,784)	**(207,980)**
Investing Activity		
Loss/(Profit) on disposal of Non-Current Assets	197,436	316,210
Distributions from Water Corporation	(523,607)	(845,669)
Capital Grants	(1,893,684)	(814,744)
	(2,219,855)	**(1,344,203)**
Cash flows from Operating Activities	**3,694,093**	**3,899,624**

Financing Arrangements
Unrestricted access was available at the reporting date to the following lines of credit:

Available at reporting date – Bank Overdraft	**250,000**	**250,000**

Accounting Policy
For the purposes of the Statement of Cash Flows, cash and cash equivalents include cash on hand, deposits at call, and other highly liquid investments with original maturities of six months or less, net of outstanding bank overdrafts. Cash equivalents are held for the purpose of meeting short term cash commitments rather than for investment or other purposes.

	Actual 2019 $	Actual 2018 $
5.4 Receivables		
Rates and Charges	514,607	452,217
Other Debtors	564,412	418,151
	1,079,019	**870,368**

Accounting Policy
Receivables are carried at amortised cost using the effective interest rate method. A provision for impairment is recognised using an expected credit less model. In the comparative period, a provision was recognised when there is evidence that an impairment loss has occurred. A provision for impairment on rates has not been established as unpaid rates represents a charge against the rateable property that will be recovered when the property is next sold.

5.5 Inventories		
Stores and Material	66,284	80,893
Post Office Stock	5,159	4,892
Wonders of Wynyard	37,188	31,341
	108,631	**117,126**

Accounting Policy
Inventories held for distribution are measured at cost adjusted when applicable for any loss of service potential. Other inventories are measured at the lower of cost and net realisable value. Where inventories are acquired at no cost, or for nominal consideration, the cost shall be the current replacement cost as at the date of acquisition.

5.6 Other		
Accrued Income	37,046	98,535
Prepayments	141,660	127,015
Security & Other Deposits	7,821	5,000
	186,527	**230.550**

Accrued income only includes items that are reciprocal in nature. This does not include Rates in Advance.

NOTE 6 NON-CURRENT ASSETS

6.1 Property, plant and equipment

Land		
At Fair Value	21,634,227	21,874,045
At Cost	80,746	0
Work in Progress	0	0
Land under Roads	4,412,680	4,412,680
	26,127,653	**26,286,725**

The Council Land valuation was carried out by the Valuer General, as at 1 July 2017 – based on current market value. Land under Roads was valued by the Valuer General as at 30th June 2014 – based on current market value.

Land Improvements		
At Cost	8,969,252	8,868,663
Less Accumulated Depreciation	(3,641,021)	(3,385,923)
Work in Progress	910,962	206,012
	6,239,193	**5,688,752**

	Actual 2019 $	Actual 2018 $
Buildings		
At Fair Value	12,675,771	12,675,771
At Cost	1,048,157	930,090
Less Accumulated Depreciation	(657,041)	(316,894)
Work in Progress	152,226	62,703
	13,219,113	**13,351,670**

The Council valuation was carried out by the Valuer General, as at 1 July 2017 – based on current market value.

Furniture and Fittings		
At Cost	1,679,386	1,629,255
Less Accumulated Depreciation	(1,373,393)	(1,294,118)
Work in Progress	6,695	0
	312,688	**335,136**
Plant and Equipment		
At Cost	4,951,099	4,891,238
Less Accumulated Depreciation	(2,108,534)	(2,235,213)
Work in Progress	1,682	
	2,844,247	**2,656,025**
Roads		
At Cost	12,835,944	10,660,846
At Fair Value	127,064,782	128,099,962
Less Accumulated Depreciation	(63,597,556)	(62,481,104)
Work in progress	849,295	775,464
	77,152,465	**77,055,168**

The Council valuation was carried out by Council's Engineer, as at 1 July 2014 - based on depreciated replacement cost.

Bridges		
At Fair Value	22,691,364	22,691,364
At Cost	3,707,501	3,707,501
Less Accumulated Depreciation	(11,752,208)	(11,380,498)
Work in progress	10,878	
	14,657,535	**15,018,367**

The Council valuation was carried out by Auspan, as at 30 June 2014 – based on depreciated replacement cost.

Drainage Assets		
At Fair Value	32,969,746	28,105,287
At Cost	1,857,515	1,641,465
Less Accumulated Depreciation	(16,675,773)	(13,588,400)
Work in progress	41,663	
	18,193,151	**16,158,352**

The Council valuation was carried out by Council's Engineer as at 1 July 2018 – based on depreciated replacement cost.

The Council reassessed the useful lives of road assets during the current financial year, leading to a reduction in depreciation expense compared to the comparative period.

TOTAL PROPERTY PLANT & EQUIPMENT	**158,746,045**	**156,550,195**

	Actual 2019 $	Actual 2018 $
Reconciliations:		
Land		
Carrying amount at beginning of year	26,286,725	24,829,242
Additions	80,746	0
Revaluations	0	1,457,483
Disposals	(239,818)	0
Carrying amount at end of year	**26,127,653**	**26,286,725**
Land Improvements		
Carrying amount at beginning of year	5,688,752	5,471,877
Additions	815,246	495,628
Disposals	0	(11,362)
Depreciation	(264,805)	(267,391)
Carrying amount at end of year	**6,239,193**	**5,688,752**
Buildings		
Carrying amount at beginning of year	**13,351,670**	**11,496,310**
Additions	207,590	941,169
Revaluation	0	1,231,085
Disposals	0	0
Depreciation	(340,147)	(316,894)
Carrying amount at end of year	**13,219,113**	**13,351,670**
Furniture and Fittings		
Carrying amount at beginning of year	335,136	275,801
Additions	56,826	144,774
Disposals	0	0
Depreciation	(79,274)	(85,439)
Carrying amount at end of year	312,688	335,136
Plant and Equipment		
Carrying amount at beginning of year	2,656,025	2,874,162
Additions	781,890	306,970
Disposals	(241,958)	(164,466)
Depreciation	(351,710)	(360,641)
Carrying amount at end of year	**2,844,247**	**2,656,025**
Roads		
Carrying amount at beginning of year	77,055,168	77,534,325
Additions	2,248,929	2,030,456
Disposals	(187,698)	(182,356)
Depreciation	(1,963,934)	(2,327,257)
Carrying amount at end of year	**77,152,465**	**77,055,168**
Bridges		
Carrying amount at beginning of year	15,018,367	15,246,719
Additions	10,878	265,050
Disposals	0	(111,045)
Depreciation	(371,710)	(382,358)
Carrying amount at end of year	**14,657,535**	**15,018,367**
Drainage		
Carrying amount at beginning of year	16,158,352	16,294,375
Additions	257,713	255,837
Revaluation	2,246,592	0
Disposals	(36,803)	(23,343)
Depreciation	(432,703)	(368,517)
Carrying amount at end of year	**18,193,151**	**16,158,352**

Accounting Policy
Acquisitions of assets are initially recorded at cost. Cost is determined as the fair value of the assets given as consideration plus costs incidental to the acquisition.

Property, plant and equipment and infrastructure received in the form of contributions, are recognised as assets and revenues at fair value by Council valuation where that value exceeds the recognition thresholds for the respective asset class. Fair value is the price that would be received to sell the asset in an orderly transaction between market participants at the measurement date.

Where assets are constructed by Council, cost includes all materials in constructions, direct labour, borrowing costs incurred during construction, and an appropriate share of directly attributable variable and fixed overheads.

The following classes of assets have been recognised. In accordance with Council's policy, the threshold limits detailed below have applied when recognising assets within an applicable asset class and unless otherwise stated are consistent with the prior year.

	$		$
Land	0	Plant and Equipment	1,000
Buildings	2,500	Bridges	5,000
Land Improvements	1,000	Drainage Assets	2,000
Furniture and Fittings	1,000	Roads	5,000

Revaluation
Council has adopted the following valuation bases for its non-current assets.

Land under roads	fair value
Land	fair value
Plant and machinery	cost
Furniture, fittings and office equipment	cost
Stormwater and drainage infrastructure	fair value
Roads and streets infrastructure	fair value
Bridges	fair value
Buildings	fair value
Intangibles	cost
Parks, recreation facilities and community amenities	cost
Heritage	cost
Investment in water corporation	fair value

Subsequent to the initial recognition of assets, non-current physical assets, other than plant and machinery and furniture, fittings and office equipment, parks, recreation facilities and community amenities and heritage assets are measured at their fair value in accordance with AASB 116 Property, Plant & Equipment and AASB 13 Fair Value Measurement. At balance date, Council reviewed the carrying value of the individual classes of assets measured at fair value to ensure that each asset class materially approximated its fair value. Where the carrying value materially differed from the fair value at balance date the class of asset was revalued.

In addition, Council undertakes a formal revaluation of land, buildings, and infrastructure assets on a regular basis to ensure valuations represent fair value. The valuation is performed either by experienced Council officers or independent experts.

Fair value valuations are determined in accordance with a valuation hierarchy. Changes to the valuation hierarchy will only occur if an external change in the restrictions or limitations of use on an asset result in changes to the permissible or practical highest and best use of the asset.

Where the assets are revalued, the revaluation increments are credited directly to the asset revaluation reserve except to the extent that an increment reverses a prior year decrement for that class of asset that had been recognised as an expense in which case the increment is recognised as revenue up to the amount of the expense. Revaluation decrements are recognised as an expense except where prior increments are included in the asset revaluation surplus for that class of asset in which case the decrement is taken to the reserve to the extent of the remaining increments. Within the same class of assets, revaluation increments and decrements within the year are offset.

	Actual 2019 $	Actual 2018 $
6.2 Intangible assets		
At Cost	816,599	606,620
Less Accumulated Amortisation	(401,656)	(380,552)
Work in progress	0	69,014
	414,943	**295,082**
Reconciliation		
Carrying amount at beginning of year	295,082	263,059
Additions	156,859	69,014
Amortisation	(36,998)	(36,991)
Carrying amount at end of year	**414,943**	**295,082**

Accounting Policy
Intangible assets with finite lives that are acquired separately are carried at cost less accumulated amortisation and accumulated impairment losses. Amortisation is recognised on a straight-line basis over their estimated useful lives. The estimated useful life and amortisation method are reviewed at the end of each reporting period, with the effect of any changes in estimate being account for on a prospective basis. Intangible assets with indefinite useful live that are acquired separately are carried at cost less accumulated impairment losses.

6.3 Investment in Water Corporation		
Opening Balance	45,117,782	44,539,702
Fair value adjustments on Available-for-Sale Assets	6,569,535	578,080
	51,687,317	**45,117,782**

As Council's investment in TasWater is held for long-term strategic purposes, Council has elected under AASB 9 Financial Instruments to irrevocably classify this equity investment as designated as fair value through other comprehensive income. Subsequent changes in fair value on designated investments in equity instruments are recognised in other comprehensive income (for fair value reserve, refer note 9.1) and not reclassified through the profit or loss when derecognised. Dividends associated with the equity investments are recognised in profit and loss when the right of payment has been established and it can be reliably measured.

Fair value was determined by using Council's ownership interest against the water corporation's net asset value at balance date. At 30 June 2019, Council held a 2.78% ownership interest in TasWater which is based on Schedule 2 of the Corporation's Constitution which reflects the Council's voting rights.

NOTE 7 OUR LIABILITIES

7.1 Payables		
Trade and Other Payables		
Trade Creditors	1,068,102	1,181,865
	1,068,102	**1,181,865**
Trust Funds & Deposits	157,295	154,104
Total Payables	**1,225,397**	**1,335,969**
7.2 Financial liabilities		
Secured Loans	**115,936**	**112,139**

	Actual 2015 $	Actual 2018 $
7.3 Provisions		
Provisions for Annual Leave	545,086	566,802
Provision for Long Service Leave	922,158	957,199
Employee benefits - On-costs	183,405	196,377
Provision for Banked Employee Time	20,084	37,182
Purchased Leave	26,105	23,488
	1,696,838	**1,781,048**

Accounting Policy

i) *Short term obligations*
Liabilities for wages and salaries, including non-monetary benefits, annual leave and accumulating sick leave expected to be wholly settled within 12 months after the end of the period in which the employees render the related service are recognised in respect of employees' services up to the end of the reporting period and are measured at the amounts expected to be paid when the liabilities are settled. The liability for annual leave is recognised in the provision for employee benefits. All other short-term employee benefit obligations are presented as payables.

ii) *Other long-term employee benefit obligations*
The liability for long service leave and annual leave which is not expected to be wholly settled within 12 months after the end of the period in which the employees render the related service is recognised in the provision for employee benefits and measured as the present value of expected future payments to be made in respect of services provided by employees up to the end of the reporting period using the projected unit credit method. Consideration is given to expected future wage and salary levels, experience of employee departures and periods of service. Expected future payments are discounted using market yields at the end of the reporting period on national government bonds with terms to maturity and currency that match, as closely as possible, the estimated future cash outflows.

iii) *Sick Leave*
No accrual is made for sick leave as Council experience indicates that, on average, sick leave taken in each reporting period is less than the entitlement accruing in that period, and this experience is expected to recur in future reporting periods. Council does not make payment for untaken sick leave.

iv) *Defined benefit plans*
A liability or asset in respect of defined benefit superannuation plans would ordinarily be recognised in the statement of financial position and measured as the present value of the defined benefit obligation at the reporting date plus unrecognised actuarial gains (less unrecognised actuarial losses) less the fair value of the superannuation fund's assets at that date and any unrecognised past service cost. The present value of the defined benefit obligation is based on expected future payments which arise from membership of the fund to the reporting date, calculated annually by independent actuaries using the projected unit credit method.
Consideration is given to expected future wage and salary levels, experience of employee departures and periods of service. However, when this information is not reliably available, Council accounts for its obligations to defined benefit plans on the same basis as its obligations to defined contribution plans i.e as an expense when it becomes payable.

v) *Defined contribution plans*
Contributions to defined contribution plans are recognised as an expense as they become payable. Prepaid contributions are recognised as an asset to the extent that a cash refund or a reduction in the future payments is available.

	Actual 2019 $	Actual 2018 $

NOTE 8 NON-CURRENT LIABILITIES

8.1 Interest-bearing loans and borrowings

Secured Loans	**870,174**	**986,110**

Security for Borrowings
The loans are secured over the general rates of the Council.

Accounting Policy
Interest bearing liabilities
The borrowing capacity of Council is limited by the Local Government Act 1993. Interest bearing liabilities are initially recognised at fair value, net of transaction costs incurred. Subsequent to initial recognition these liabilities are measured at amortised cost. Any difference between the proceeds (net of transaction costs) and the redemption amount is recognised in the Statement of Profit or Loss and Other Comprehensive Income over the period of the liability using the effective interest method.

Leases
i) *Finance leases as lessee*
Leases of assets where substantially all the risks and rewards incidental to ownership of the asset, are transferred to the Council are classified as finance leases. Finance leases are capitalised, recording an asset and a liability at the lower of the fair value of the asset and the present value of the minimum lease payments, including any guaranteed residual value. Lease payments are allocated between the reduction of the lease liability and the interest expense. Leased assets are depreciated on a straight-line basis over their estimated useful lives to Council where it is likely that Council will obtain ownership of the asset or over the term of the lease, whichever is the shorter. Currently Council has no finance leases.

ii) *Operating leases as lessee*
Leases in which a significant portion of the risks and rewards of ownership are not transferred to Council as lessee are classified as operating leases. Payments made under operating leases (net of any incentives received from the lessor) are charged to the income statement on a straight-line basis over the period of the lease.

Council leases several parcels of Crown land under lease agreements with the State Government. These leases, in general, do not reflect commercial arrangements, are long-term and have minimal lease payments. Crown land is recognised as an asset in the Statement of Financial Position and carried at fair value when Council establishes that (i) it has control over the land and (ii) it will derive economic benefits from it.

Lease income from operating leases where Council is a lessor is recognised in income on a straight-line basis over the lease term.

iii) *Leasehold improvements*
Leasehold improvements are recognised at cost and are amortised over the unexpired period of the lease or the estimated useful life of the improvement, whichever is the shorter.

	Actual 2019 $	Actual 2018 $
8.2 Non-current provisions		
Provision for Long Service Leave	58,215	157,947
Employee benefits - on-costs	4,931	13,583
Provision for Gravel Pit Rehabilitation	216,999	215,484
	280,145	**387,014**
Movement in Provision for Gravel Pit Rehabilitation		
Opening balance	215,484	210,633
Contributions received	1,515	4,851
Rehabilitation Works	0	0
	216,999	**215,484**

The present values of employee entitlements not expected to be settled within twelve months of balance date have been calculated using the following weighted averages:

Assumed rate of increase in wage and salary rates	2.5%
Discount rate	1.267%
Settlement term (years)	7
Number of employees at year end	87

Accounting Policy
Provision has been made for Gravel Pit rehabilitation and restoration on an incremental basis during the course of the life of the Pit. Amounts are allocated to the provision based on the amount of gravel (in cubic metres) extracted from the Council's gravel pits at a rate of $3 per cubic metre.

NOTE 9 OTHER INFORMATION

9.1 Reserves

Composition:		
Asset Acquisition	154,018	154,018
Public Open Space	167,092	158,079
Bridge Replacement Reserve	0	0
Asset Revaluation	53,217,938	50,971,346
Fair Value Reserve	12,384,339	5,814,804
	65,923,387	**57,098,247**
Movements:		
Asset Acquisition		
Balance at the beginning of the financial year	154,018	154,018
Amount transferred from accumulated surplus	0	0
Amount transferred to accumulated surplus	0	0
Balance at the end of the financial year	154,018	154,018
Public Open Space		
Balance at the beginning of the financial year	158,079	144,511
Amount transferred from accumulated surplus	9,013	13,568
Amount transferred to accumulated surplus	0	0
Balance at the end of the financial year	167,092	158,079
Bridge Replacement Reserve		
Balance at the beginning of the financial year	0	696,000
Amount transferred from accumulated surplus	0	0
Amount transferred to accumulated surplus	0	696,000
Balance at the end of the financial year	0	0

	Actual 2019 $	Actual 2018 $
Asset Revaluation - Council		
Balance at the beginning of the financial year	50,971,346	48,282,778
Revaluation Assets	2,246,592	2,688,568
Balance at the end of the financial year	53,217,938	50,971,346
Fair Value Reserve		
Balance at the beginning of the financial year	5,814,804	5,236,724
Fair Value Adjustment	6,569,535	578,080
Balance at the end of the financial year	**12,384,339**	**5,814,804**

Nature and Purpose of Reserves:

Asset Acquisition Reserve
The amount standing to the credit of the Asset Acquisition Reserve resulted from prior period allocation of accumulated surplus for the purpose of identifying the surplus set aside for specific works to be conducted in future years. The reserve will be released to accumulated surplus when the specific works are undertaken. The balance in this account at 30 June 2019 represents amounts to be spent on specific works to be undertaken in the community.

Public Open Space Reserve
The amount standing to the credit of the Public Open Space Reserve resulted from prior period allocation of accumulated surplus for the purpose of identifying the surplus set aside for public open space works to be conducted in future years. The reserve will be released to accumulated surplus when the specific works are undertaken.

Bridge Replacement Reserve
The amount standing to the credit of the Bridge Replacement Reserve resulted from prior period allocation of accumulated surplus for the purpose of identifying the surplus set aside for replacement of bridges to be conducted in future years. The reserve was released to accumulated surplus when the specific works are undertaken.

Asset Revaluation Reserves
This amount standing to the credit of the Asset Revaluation Reserve resulted from periodic revaluation of Assets.

Fair Value Reserve
The fair value reserve was established to capture the fair value movements in Council's Water Corporation investment.

9.2 Reconciliation of liabilities arising from financing activities

2019	Interest Bearing Loans
Balance as at 1 July 2018	**1,098,249**
Cash Repayments	(112,139)
Balance as at 30 June 2019	**986,110**

9.3 Contingent assets and contingent liabilities

Council holds bank guarantees for the following:

Construction Contracts & Bitumen Surfacing	119,579	75,416

These guarantees have not been recognised as assets as it is uncertain, and unlikely, that Council will require these funds.

Council has provided bank guarantees of $56,000 (2017/18 $56,000) as security deposits for rehabilitation of mining leases that it operates. These guarantees have not been recognised as liabilities as it is unlikely that Council will not meet its obligations.

	Actual 2019 $	Actual 2018 $

9.3 Commitments

(a) Capital Expenditure Commitments

Not later than one year	1,629,084	398,716

(b) Operating Lease Commitments
Commitments under non-cancellable operating leases at the reporting date are payable as follows:

Not later than one year	8,153	6,110
Later than one year and not later than five years	17,224	20,037

Council leases equipment under non-cancellable operating leases. Leases generally provide Council with a right of renewal. Lease payments do not include any contingent rentals.

(c) Operating Expense Commitments

Not later than one year	1,417,786	562,489

Council's commitments for expenditure are predominately based around environmental services such as waste management and contract street sweeping. The capital commitments have increased due bridge replacements caused by flood damage.

9.5 Superannuation

Council contributes to accumulation schemes on behalf its employees; however, the Council has no ongoing responsibility to make good any deficiencies that may occur in those schemes.

During the year Council made the required superannuation contributions for all eligible employees to an appropriate complying superannuation fund as required by the Superannuation Guarantee (Administration) Act 1992.

As required in terms of paragraph 148 of AASB 119 Employee Benefits, Council discloses the following details:

- During the reporting period the amount of contributions paid to defined benefits schemes was $0 (2017-18, $0), and the amount paid to Tasplan accumulation schemes was $440,267 (2017-18, $469,083) and the amount paid to 25 other superannuation funds was $164,207 (2017-18 $135,258).

5.5 Financial Instruments

(a) Accounting Policy, terms and conditions.

Financial Instruments	Note	Accounting policy	Terms and conditions
Financial assets			
Cash and cash equivalents	5.1	Cash on hand, at bank and in cash management accounts are valued at face value. Interest is recognised as it accrues. Investments are held to maximise interest returns of surplus cash.	The weighted average interest rate return on operating accounts at 30 June 2019 was 1.00% (1.25% in 2017/2018). The weighted average interest rate return on term deposit investments at 30 June 2019 was 2.05% (2.38% in 2017/2018).
Receivables	5.3	An impairment loss is not recognised on rates receivable. An allowance for impaired debts is recognised on other debtors under an expected credit loss model, whilst in the comparative period impairment was recognised when there was objective evidence that an impairment loss has occurred. Collectability of overdue accounts is assessed on an ongoing basis.	Unpaid rates represent a charge against the rateable property that will be recovered when the property is next sold. General debtors are unsecured, and arrears do not attract interest.
Financial liabilities			
Trade and other payables	7.1	Liabilities are recognised for amounts to be paid in the future for goods and services provided to Council as at balance date whether or not invoices have been received.	General Creditors are unsecured, not subject to interest charges and are normally settled within 30 days of invoice receipt.
Interest-bearing loans and borrowings	7.2,8.1	Loans are carried at their principal amounts, which represent the present value of future cash flows associated with servicing the debt.	Borrowings are secured by way of mortgages over the general rates of the Council. The weighted average interest rate on borrowings is 3.37% (3.37% in 2017/2018).
Bank Guarantees		Bank guarantees are given as security deposits for rehabilitation of mining leases it operates.	The cost is a flat 2% per annum. (2.00% in 2017/2018)
Bank Overdraft		Overdrafts are recognised at the principal amount. Interest is charged as an expense as it accrues.	The overdraft is subject to annual review. It is secured by a mortgage over Council's general rates. The interest rate at balance date was 8.56%

(b) Interest Rate Risk

Exposure to interest rate risk and the effective interest rates of financial assets and liabilities, both recognised and unrecognised, at balance date are as follows:

2019	Floating interest rate	Fixed interest maturing in: One year or less	Over 1 to 5 years	More than 5 years	Non-interest bearing	Total
Financial assets						
Cash and cash equivalents	540,925	11,900,000				12,440,925
Trade and other receivables					1,079,019	1,079,019
Accrued revenue					37,046	37,046
Investment in water corporation					51,687,317	51,687,317
Total financial assets	**540,925**	**11,900,000**	**0**	**0**	**52,803,382**	**65,244,307**
Financial liabilities						
Trade and other payables					1,068,102	1,068,102
Trust funds and deposits					157,295	157,295
Interest-bearing loans and borrowings	0	115,936	504,363	365,811	0	986,110
Total financial liabilities	**0**	**115,936**	**504,363**	**365,811**	**1,225,397**	**2,211,507**
Net financial assets (liabilities)	**540,925**	**11,784,064**	**(504,363)**	**(365,811)**	**51,577,985**	**63,032,800**

2018	Floating interest rate	Fixed interest maturing in: One year or less	Over 1 to 5 years	More than 5 years	Non-interest bearing	Total
Financial assets						
Cash and cash equivalents	1,549,513	9,000,000				10,549,513
Trade and other receivables					870,368	870,368
Accrued revenue					98,535	98,535
Investment in water corporation					45,117,782	45,117,782
Total financial assets	**1,549,513**	**9,000,000**	**0**	**0**	**46,086,685**	**56,636,198**
Financial liabilities						
Trade and other payables					1,181,865	1,181,865
Trust funds and deposits					154,104	154,104
Interest-bearing loans and borrowings	0	112,139	487,839	498,271	0	1,098,249
Total financial liabilities	**0**	**112,139**	**487,839**	**498,271**	**1,335,969**	**2,434,218**
Net financial assets (liabilities)	**1,549,513**	**8,887,861**	**(487,839)**	**(498,271)**	**44,750,716**	**54,201,980**

(c) Fair Value

The aggregate net fair values of financial assets and financial liabilities, both recognised and unrecognised, at balance date are as follows:

Fair Values	30 June 2019 Carrying amount	30 June 2019 Fair Value	30 June 2018 Carrying amount	30 June 2018 Fair Value
	$	$	$	$
Financial assets				
Cash and cash equivalents				
Cash at bank and on hand	540,925	540,925	1,549,513	1,549,513
Short term investments	11,900,000	11,900,000	9,000,000	9,000,000
Receivables	1,079,019	1,079,019	870,368	870,368
Investment in Water Corporation	51,687,317	51,687,317	45,117,782	45,117,782
Accrued revenue	37,046	37,046,	98,535	98,535
	65,244,307	**65,244,307**	**56,636,198**	**56,636,198**
Financial liabilities				
Payables	1,068,102	1,068,102	1,181,865	1,181,865
Interest bearing liabilities	986,110	1,035,948	1,098,249	1,098,886
Other liabilities			0	0
	2,054,212	**2,104,050**	**2,280,114**	**2,280,751**
Net financial assets	**63,190,095**	**63,140,257**	**54,356,084**	**54,355,447**

(d) Risks and mitigation

The risks associated with our main financial instruments and our policies for minimising these risks are detailed below:

Market Risk

Market risk is the risk that the fair value or future cash flows of our financial instruments will fluctuate because of changes in market prices. Council's exposures to market risks are primarily through interest rate risk with only insignificant exposure to other price risks and no exposure to foreign currency risk. Component of market risk to which we are exposed are discussed below.

Interest rate risk

Interest rate risk refers to the risk that the value of a financial instrument or cash flows associated with the instrument will fluctuate due to changes in market interest rates. Interest rate risk arises from interest bearing financial assets and liabilities that we use. Non-derivative interest-bearing assets are predominantly short-term liquid assets. Our interest rate liability risk arises primarily from long term loans and borrowings at fixed rates which exposes us to fair value interest rate risk.

Our loan borrowings are sourced from Tascorp. Overdrafts are arranged with major Australian banks.

We manage the interest rate exposure on our debt portfolio by appropriate budgeting strategies and obtaining approval for borrowings from the Department of Treasury and Finance each year.

Investment of surplus funds is made with the approved institutions under the *Local Government Act 1993*. We manage interest rate risk by adopting an investment policy that ensures:

- Conformity with State and Federal regulations and standards,
- Capital protection,
- Appropriate liquidity,
- Diversification by credit rating, financial institution and investment product,
- Monitoring of return on investment,
- Benchmarking of returns and comparison with budget.

Maturity will be staggered to provide for interest rate variations and to minimise interest rate risk.

	Actual 2019 $	Actual 2018 $

Credit risk
Credit risk is the risk that a contracting entity will not complete its obligations under a financial instrument and cause Council to make a financial loss. Council have exposure to credit risk on some financial assets included in our Statement of Financial Position. To help manage this risk:

- we may require collateral where appropriate; and
- we only invest surplus funds with financial institutions which have a recognised credit rating specified in our Investment policy.

Credit risk arises from Council's financial assets, which comprise cash and cash equivalents, and trade and other receivables. Council's exposure to credit risk arises from potential default of the counterparty, with a maximum exposure equal to the carrying amount of these instruments. Exposure at balance date is addressed in each applicable policy note. Council generally trades with recognised, creditworthy third parties, and as such collateral is generally not requested, nor is it Council's policy to securitise its trade and other receivables.

It is Council's policy that some customers who wish to trade on credit terms are subject to credit verification procedures including an assessment of their credit rating, financial position, past experience and industry reputation.

In addition, receivables are monitored on an ongoing basis with the result that Council's exposure to bad debts is not significant.

Council may also be subject to credit risk for transactions which are not included in the Statement of Financial Position, such as when Council provides a guarantee for another party. Details of our contingent liabilities are disclosed in note 9.1.

Not later than one year	1,417,786	562,489
Financial assets		
Cash at bank and on hand	540,925	1,549,513
Short term investments	11,900,000	9,000,000
Total	**12,440,925**	**10,549,513**
Financial liabilities		
Interest bearing liabilities	986,110	1,098,249
Total	**986,110**	**1,098,249**
Net Total	**11,454,815**	**9,451,264**

Ageing of Trade and Other Receivables
At balance date other debtors representing financial assets were past due but not impaired. These amounts relate to a number of independent customers for whom there is no recent history of default. The ageing of the Council's Trans and Other Receivables was:

	30 June 2019		30 June 2018	
Trade receivables	**Gross**	**Impairment**	**Gross**	**Impairment**
Not past due	412,162	0	359,649	0
Past due 0-30 days	21,862	0	14,731	0
Past due 31-60 days	11,054	0	15,087	0
Past due 61-90 days	27,800	0	4,726	0
More than 90 days	91,534	0	23,958	0
Total trade receivables	**564,412**	**0**	**418,153**	0
Rates receivable	**514,607**	**0**	**452,217**	0
Total receivables	**1,079,019**	**$0**	**870,370**	**$0**

An allowance for impairment loss is recognised under an expected credit loss model whilst in the comparative period, an impairment loss was recognised when there was objective evidence that an individual receivable is impaired. No allowance for impairment in respect of trade receivables has been recognised at 30 June 2019.

All rates receivable are in excess of 90 days. No allowance for impairment loss is recognised as unpaid rates represent a charge against the rateable property that will be recovered when the property is next sold.

Liquidity risk
Liquidity risk includes the risk that, as a result of our operational liquidity requirements:
- we will not have sufficient funds to settle a transaction on the date;
- we will be forced to sell financial assets at a value which is less than what they are worth; or
- we may be unable to settle or recover a financial asset at all.

To help reduce these risks we:
- have readily accessible standby facilities and other funding arrangements in place;
- monitor budget to actual performance on a regular basis; and
- forecasting to maintain adequate liquidity levels and cash holdings.

The Council's exposure to liquidity risk is deemed insignificant base on prior periods' data and current assessment of risk. The following tables detail the undiscounted cash flows payable by the Council by remaining contractual maturity for its financial liabilities. It should be noted that as these are undiscounted and include estimated interest payments, totals may not reconcile to the carrying amounts presented in the Statement of Financial Position:

	Less than 1 year	1-5 years	More than 5 years	Total contractual cash flows	Carrying amount
30 June 2019					
Payables	1,225,397			1,225,397	1,225,397
Financial liabilities	148,229	592,916	386,039	1,127,184	986,110
Total	**1,373,626**	**592,916**	**386,039**	**2,352,581**	**2,211,507**
30 June 2018					
Payables	1,335,969			1,335,969	1,335,969
Financial liabilities	148,229	592,916	534,267	1,275,412	1,098,249
Total	**1,484,198**	**592,916**	**534,267**	**2,611,381**	**2,434,218**

(e) Sensitivity disclosure analysis
Taking into account past performance, future expectations, economic forecasts, and management's knowledge and experience of the financial markets, the Council believes the following movements are 'reasonably possible' over the next 12 months (base rates sources from the Reserve Bank of Australia):

- A parallel shift of +1% and -0.50% in market interest rates (AUD) from year-end rates of 2.62%

The table below discloses the impact on the net operating result and equity for each category of financial instruments held by Council at year-end, if the above movements were to occur.

	Surplus/(Deficit)		Equity	
	2019	2018	2019	2018
+ 1% (100 basis points)	114,548	94,513	114,548	94,513
- 0.5% (50 basis points)	(57,274)	(47,256)	(57,274)	(47,256)

6.7 Fair value measurement

Council measures and recognises the following assets at fair value on a recurring basis:
Investment in water corporation
Property, infrastructure plant and equipment
- Land
- Buildings
- Roads, including footpaths
- Bridges

Council does not measure any liabilities at fair value on a recurring basis.

Council also has assets measured at fair value on a non-recurring basis as a result of being reclassified as assets held for sale. These comprise land held for resale as disclosed in note 6.1. A description of the valuation techniques and the inputs used to determine the fair value of this land is included below under the heading 'Land held for sale'.

(a) Fair Value Hierarchy
AASB 13 Fair Value Measurement requires all assets and liabilities measured at fair value to be assigned to a level in the fair value hierarchy as follows:

Level 1	Unadjusted quoted prices in active markets for identical assets or liabilities that the entity can access at the measurement date.
Level 2	Inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly or indirectly.
Level 3	Unobservable inputs for the asset or liability.

The table below shows the assigned level for each asset and liability held at fair value by the Council. The table presents the Council's assets and liabilities measured and recognised at fair value at 30 June 2019.

The fair values of the assets are determined using valuation techniques which maximise the use of observable data, where it is available, and minimise the use of entity specific estimates. If one or more of the significant inputs is not based on observable market data, the asset is included in level 3. This is the case for Council infrastructure assets, which are of a specialist nature for which there is no active market for similar or identical assets. These assets are valued using a combination of observable and unobservable inputs.

As at 30 June 2019	Note	Level 1 $'000	Level 2 $'000	Level 3 $'000	Total $'000
Recurring fair value measurements					
Land	6.1		26,128		26,128
Buildings	6.1			13,219	13,219
Roads, including footpaths	6.1			77,152	77,152
Bridges	6.1			14,658	14,658
Drainage	6.1			18,193	18,193
Available for sale financial assets	6.3			51,687	51,687
			26,128	174,909	201,037
Non-recurring fair value measurements					
Assets held for sale			110		110
			110		110

Transfers between levels of the hierarchy
There were no transfers between levels 1 and 2 during the year, nor between levels 2 and 3.

(b) Highest and best use
All assets valued at fair value in this note are being used for their highest and best use.

Investment in Water Corporation
Refer to notes 4.1 and 6.3 respectively for details of valuation techniques used to derive fair values.

Land
The Council valuation was carried out by the Valuer General, as at 1 July 2017 – based on current market value. The fair value of the land was determined using the market approach.

Land held for sale
Land held for resale is valued at the lower of the carrying amount and fair value less costs to sell. It comprises residential blocks of land in Wynyard and Sisters Beach that is surplus to council's requirements and is expected to be sold in the next accounting period.

Land under roads
Land under roads has been valued based upon Waratah-Wynyard Municipal Area land values supplied by the Office of the Valuer General in July 2014. Total area of land under roads (being the entire road reserve where a Council-maintained road is constructed) was calculated separately for Urban and Rural areas. The VG's land value for the Primary Production land use class was used to value Rural land under roads. For Urban land under roads a weighted average of the Valuer Generals' values for Commercial, Industrial and Residential land use classes was used with the weighting being the proportion of all urban land in each class as recorded in Council's property and rates system.

Buildings
The Council valuation was carried out by the Valuer General, as at 1 July 2017 – The most significant input into this valuation approach was based on current market value.

Where Council buildings are of a specialist nature and there is no active market for the assets, fair value has been determined on the basis of replacement with a new asset having similar service potential.

While the unit rates-based valuation by the Valuer General can be supported by market evidence (level 2), the estimates of useful life that are used to calculate accumulated depreciation comprise unobservable inputs (level 3). Where these other inputs are significant to the valuation the overall valuation has been classified as level 3. The table at (c) below summarises the effect that changes in the most significant unobservable inputs would have on the valuation.

Infrastructure assets
All Council infrastructure assets were fair valued using written down current replacement cost (CRC). This valuation comprises the asset's gross replacement cost less accumulated depreciation calculated on the basis of such cost to reflect the already consumed or expired future economic benefits of the asset. Council first determined the gross cost of replacing the full-service potential of the asset and then adjusted this amount to take account of the expired service potential of the asset.

CRC was measured by reference to the lowest cost at which the gross future economic benefits of the asset could currently be obtained in the normal course of business. The resulting valuation reflects the cost of replacing the existing economic benefits based on an efficient set of modern equivalent assets to achieve the required level of service output.

The unit rates (labour and materials) and quantities applied to determine the CRC of an asset or asset component were based on a "Greenfield" assumption meaning that the CRC was determined as the full cost of replacement with a new asset including components that may not need to be replaced, such as earthworks.

The level of accumulated depreciation for infrastructure assets was determined based on the age of the asset and the useful life adopted by Council for the asset type. Estimated useful lives are disclosed in note 3.3.

The calculation of CRC involves a number of inputs that require judgement and are therefore classed as unobservable. While these judgements are made by qualified and experienced staff, different judgements could result in a different valuation.

The methods for calculating CRC are described under individual asset categories below.

Roads, including footpaths
Council categorises its road infrastructure into urban and rural roads and then further sub-categorises these into sealed and unsealed roads. Urban roads are managed in segments of variable length, generally based on urban blocks, while rural roads are managed in variable lengths according to intersections. All road segments are then componentised into formation, pavement, sub-pavement and seal (where applicable). Council assumes that environmental factors such as soil type, climate and topography are consistent across each segment. Council also assumes a segment is designed and constructed to the same standard and uses a consistent amount of labour and materials.

CRC is based on the road area multiplied by a unit price; the unit price being an estimate of labour and material inputs, services costs, and overhead allocations. Council assumes that pavements are constructed to depths of 30 cm irrespective of traffic conditions. Where construction is outsourced material and services prices are based on existing supplier contract rates or supplier price lists and for internal construction estimates, CRC is based on the average of completed similar projects over the last few years.

Council have revalued roads at 1 July 2014 at current replacement rates.

Bridges
The Council valuation was carried out by Auspan, as at 30 June 2014 – based on depreciated replacement cost. Each bridge is assessed individually and componentised into sub-assets representing the deck and sub-structure where applicable. The valuation is based on the material type used for construction and the replacement rates.

Drainage
The Council valuation was carried out by Council's Engineer as at 1 July 2018 – based on depreciated replacement cost. Similar to roads, drainage assets are managed in segments; pits and pipes being the major components.
Consistent with roads, Council assumes that environmental factors such as soil type, climate and topography are consistent across each segment and that a segment is designed and constructed to the same standard and uses a consistent amount of labour and materials.

CRC is based on the unit price for the component type. For pipes, the unit price is multiplied by the asset's length. The unit price for pipes is based on the construction material as well as the depth the pipe is laid.

(c) Observable inputs and sensitives

Asset Category	Carrying Amount (at fair value) $000	Valuation Basis
Investment in Water Corporation	$51,687	Refer to note 1.3 for a description of the valuation basis.

The changes in level 3 assets with recurring fair value measurements are detailed in note 6.1 (Property, plant and equipment).

There have been no transfers between level 1, 2 or 3 measurements during the year.

(d) *Changes in recurring level 3 fair value measurements*
The changes in level 3 assets with recurring fair value measurements are detailed in note 6.1 (Property plant and equipment).

There have been no transfers between level 1, 2 or 3 measurements during the year.

(e) *Valuation process*
Council's current policy for the valuation of property, infrastructure, plant and equipment, investment in water corporation is set out in note 6.1 and 6.3 respectively.
Non-recurring fair value measurements are made at the point of reclassification by a registered valuer.

(f) *Assets and liabilities not measured at fair value but for which fair value is disclosed*
Council has assets and liabilities which are not measured at fair value, but for which fair values are disclosed in other notes. (refer note 9.6)

Council borrowings are measured at amortised cost with interest recognised in profit or loss when incurred. The fair value of borrowings disclosed in note 9.6 equates to the carrying amount as the carrying amount approximates fair value (level 2).

The carrying amounts of trade receivables and trade payables are assumed to approximate their fair values due to their short-term nature (Level 2).

9.8 Related party transactions

(a) Councillor Remuneration

2019	Allowances	Vehicles[1]	Superannuation	Total Compensation	Expenses	Total
	$	$	$	$	$	$
Mayor	53,566	9,654		63,220		63,220
Deputy Mayor	30,286			30,286	584	30,870
Councillors	90,856			90,856	1,524	92,381
	174,708	**9,654**	-	**184,362**	**2,108**	**186,470**

2018	Allowances	Vehicles[1]	Superannuation	Total Compensation	Expenses	Total
	$	$	$	$	$	$
Mayor	52,389	7,187	-	59,576	-	59,576
Deputy Mayor	29,631	-	-	29,631	925	30,556
Councillors	90,153	-	-	90,153	1,758	91,911
	172,173	**7,187**	-	**179,360**	**2,683**	**182,043**

[1]Vehicle expenses – Mayor is provided with a vehicle, for predominately Council business, which is charged at the plant fleet rate at $0.45 per kilometre. Councillor's travel expenses are reimbursed on a monthly basis, accordingly to the prevailing Australian Taxation Office specified rate.

(b) Transactions with related parties

Nature of Transaction	Amount of the transactions during the year $	Outstanding balances at year end $	Terms and Conditions
Acquisition of Materials & Services[1]	59,977	230	30 days
Total	**59,977**	**230**	-

[1]Council purchased $59,977 worth of materials from Bramich's Concrete, a company operated by declared close family members (nephews) of Councillor Bramich. Goods were purchased based on a schedule of rates used, accepted by Council as part of its normal two-year public tender process.

(c) Register of interests
Section 54 of the *Local Government Act* 1993 (the Act) requires the General Manager to keep a register of interests notified by councillors under section 48(4) of the Act. Section 48 requires that councillors not participate in discussion nor vote on a matter, in any meeting, in which the councillor or a close associate has an interest. Section 49 of the Act defines an interest as an expectation of receiving a pecuniary benefit or detriment if the matter where decided in a particular way.

The definition of close associates under section 51 of the Act differs from the definition of close family members under AASB124, and the Act only requires declarations in relation to items for decision at a council meeting. Declarations under the register may be different to those under the third-party disclosure standard.

Council maintains a register of conflicts of interests and pecuniary interests in relation to Council meetings, the majority of these are perceived conflicts in relation to associations councillors have with external groups rather than pecuniary interests as defined under section 49.

(d) Executive Remuneration

2019	Number of Employees	Salary[1] $	Vehicles[2] $	Other Allowances[3] $	Super-annuation[4] $	Non-Monetary Benefits[5] $	Total $
$80,000 - $100,000	1	74,340	0	5,563	6,541	0	86,444
$140,000 - $160,000	1	117,936	15,600	53	15,318	841	149,748
$220,000- $240,000	1	173,772	15,600	2,283	22,556	6,762	220,973
	3	**366,048**	**31,200**	**7,899**	**44,415**	**7,603**	**457,165**

2018	Number of Employees	Salary[1] $	Vehicles[2] $	Other Allowances[3] $	Super-annuation[4] $	Non-Monetary Benefits[5] $	Total $
$80,000 - $100,000	1	75,576	4,844	1,995	10,655	0	93,110
$120,000 - $140,000	1	90,884	8,890	3,989	10,965	17,346	132,074
$140,000 - $160,000	2	252,026	15,600	12,520	32,763	(8,994)	303,915
	4	**418,486**	**29,334**	**18,504**	**54,893**	**8,352**	**529,099**

[1] Gross effective annual salary includes all forms of consideration paid and payable for services rendered, compensated absences during the period and salary sacrifice amounts.
[2] Contractual notional allowances for full private use of a vehicle.
[3] Other allowances include notional contractual allowance for mobile phone use, memberships and professional development.
[4] Superannuation means the contribution to the superannuation fund of the individual. Superannuation benefits are calculated at 13.0% of actual salary.
[5] Non-monetary benefits mean the change in value of the annual and long service leave entitlements at the end of the financial year.

Council's Director Infrastructure & Development Services is a resource shared employee of Circular Head Council, this position has authority and responsibility for planning, directing and controlling the activities of the Council, but the occupant cannot be disclosed as Key Management Personnel under Australian Accounting Standards as they are not an employee of Waratah-Wynyard Council. The Director Infrastructure & Development Services is not directly remunerated by Waratah-Wynyard Council; payments for services provided are paid directly to Circular Head Council on a contract basis, totalling $106,667 (2017/18 $121,011), these costs are accounted for as materials & contracts. The Director's time is split 55% Waratah Wynyard Council and 45% Circular Head Council.

The General Manager and the three Directors are designated as the key management personnel having the authority and responsibility for planning, directing and controlling the activities of the Council.

Resource Sharing
Waratah-Wynyard Council has had a formal resource sharing arrangement with Circular Head Council since 2008, which initially shared a General Manager and a couple of the existing Executive Managers. Separate General Managers were appointed in late 2013, and further changes in management structures resulted in only the Executive Manager of Engineering Services being resourced shared 50:50 between the two Councils.

As a result of the review and management restructure in October 2015 two of the Directors at Waratah-Wynyard Council are now resourced shared with Circular Head Council. The Director of Infrastructure and Development is shared 55:45, while the Director Corporate & Community Services is shared 80:20.

8.8 Management Indicators

(a) Underlying surplus or deficit

	Benchmark	2019 $'000	2018 $'000	2017 $'000	2016 $'000
Recurrent income* less		18,357	18,538	17,616	17,090
Recurrent expenditure		17,781	18,108	17,482	17,300
Underlying surplus/deficit	0	**576**	**430**	**134**	**(210)**
Reconciliation to Comprehensive Result					
Capital Grants		1,894	1,367	958	1,658
Capital Reimbursement**		0	0	1,353	0
Recognition of Assets		0	0	0	0
De-recognition of Assets		0	0	0	0
Financial Assistance Grant Offset***		60	61	1,426	(1,426)
Flood Damaged Assets#		0	0	(443)	(145)
NRM ALRS Project Income##		0	421	0	0
NRM ALRS Project Expense##		0	(421)	0	0
Net Surplus (Deficit)	0	**2,530**	**1,858**	**3,294**	**(123)**
Other Comprehensive Income					
Fair Value Revaluation of NCA		2,247	2,689	0	(206)
Fair Value Adjustment on Available for Sale Assets		6,569	578	290	741
Comprehensive Result		**11,346**	**5,125**	**3,718**	**412**

The intent of the underlying result is to show the outcome of a council's normal or usual day to day operations.

*Recurrent income excludes income received specifically for new or upgraded assets, physical resources received free of charge or other income of a capital nature.
**Reimbursement for TRAA Flood Recovery Claim. This income is considered capital in nature and non-recurrent.
***Grants received in advance have been adjusted for purpose of underlying position to align with the year the grants are attributable to.
#One off operational costs associated with repairs to assets resulting from Flood Damage are not considered recurrent expenditure and are excluded from the Underlying Surplus calculation. Consistent with the National Disaster Relief guidelines, only additional plant and materials costs are excluded. Labour costs are not excluded as they would still be incurred, just re-allocated to other activities.
##Grant funding provided by Northern Tas Natural Resource for the Agricultural Land Rehabilitation Scheme. Funding provided for rehabilitation of land and mitigation of future flooding in response to the floods of June 2016. This grant was fully acquitted and is not considered recurrent.

(b) Underlying surplus ratio

Underlying surplus or deficit		567	430	134	(210)
Recurrent income*		18,357	18,538	17,616	17,090
Underlying surplus ratio %	0%	3%	2%	1%	(1%))

This ratio serves as an overall measure of financial operating effectiveness.

(c) Net financial liabilities

Liquid assets less		13,520	11,420	8,379	8,895
Total liabilities		4,188	4,602	4,859	3,993
Net financial liabilities	0	9,332	6,818	3,520	4,902

This measure shows whether Council's total liabilities can be met by its liquid assets. An excess of total liabilities over liquid assets means that, if all liabilities fell due as once, additional revenue would be needed to fund the shortfall.

	Benchmark	2019	2018	2017	2016
		$'000	$'000	$'000	$'000
(d) Net financial liabilities ratio					
Net financial liabilities		9,332	6,818	3,520	4,902
Recurrent income*		18,357	18,538	17,616	17,090
Net financial liabilities ratio 0%	0 – (50%)	51%	37%	20%	29%

This ratio indicates the net financial obligations of Council compared to its recurrent income.

(e) Asset consumption ratio

An asset consumption ratio has been calculated in relation to each asset class required to be included in the long-term strategic asset management plan of Council.

Roads					
Depreciated replacement cost		77,152	77,055	77,534	75,046
Current replacement cost		140,750	138,760	138,916	135,234
Asset consumption ratio %	40%-80%	55%	56%	56%	55%
Buildings					
Depreciated replacement cost		13,219	13,352	11,496	11,903
Current replacement cost		13,876	13,606	13,382	13,328
Asset consumption ratio 0%	40%-80%	95%	98%	86%	89%
Bridges					
Depreciated replacement cost		14,658	15,018	15,247	13,752
Current replacement cost		26,410	26,399	26,418	24,585
Asset consumption ratio %	40%-80%	56%	57%	58%	56%
Drainage					
Depreciated replacement cost		18,193	16,158	16,294	16,493
Current replacement cost		34,869	29,747	29,540	29,388
Asset consumption ratio %	40%-80%	52%	54%	55%	56%

This ratio indicates the level of service potential available in Council's existing asset base.

(f) Asset renewal funding ratio

An asset renewal funding ratio has been calculated in relation to each asset class required to be included in the long-term strategic asset management plan of Council.

Roads					
Projected capital funding outlays**		19,886	19,687	14,612	19,693
Projected capital expenditure funding***		19,886	19,687	14,612	19,693
Asset renewal funding ratio %	90%-100%	100%	100%	100%	100%
Buildings					
Projected capital funding outlays**		341	349	762	497
Projected capital expenditure funding***		341	349	762	497
Asset renewal funding ratio %	90%-100%	100%	100%	100%	100%
Bridges					
Projected capital funding outlays**		1,192	1,245	1,715	2,244
Projected capital expenditure funding***		1,192	1,245	1,715	2,244
Asset renewal funding ratio %	90%-100%	100%	100%	100%	100%

	Benchmark	2019 $'000	2018 $'000	2017 $'000	2016 $'000
Drainage					
Projected capital funding outlays**		1,976	1,829	1,274	1,853
Projected capital expenditure funding***		1,976	1,829	1,274	1,853
Asset renewal funding ratio %	90%-100%	100%	100%	100%	100%

** Current value of projected capital funding outlays for an asset identified in Council's long-term financial plan.

*** Value of projected capital expenditure funding for an asset identified in Council's long-term strategic asset management plan.

This ratio measures Council's capacity to fund future asset replacement requirements.

(g) **Asset sustainability ratio**

Capex on replacement/renewal of existing assets		2,626	2,784	5,249	3,676
Annual depreciation		3,841	4,145	3,991	4,076
Asset sustainability ratio %	100%	68%	67%	132%	90%

This ratio calculates the extent to which Council is maintaining operating capacity through renewal of their existing asset base.

(h) Asset sustainability ratio

	Capital renewal expenditure $'000	Capital new/upgrade expenditure $'000	Total Capital Expenditure $'000
Land Improvements	258	555	813
Buildings	97	110	207
Furniture	24	32	59
Plant	454	131	585
Roads	1,717	532	2,249
Bridges	11		11
Drainage	62	197	259
Intangibles		157	157
Total	**2,626**	**1,714**	**4,340**

Certification of the Financial Report

The financial report presents fairly the financial position of the Waratah Wynyard Council as at 30 June 2019 and the results of its operations and cash flows for the year then ended, in accordance with the *Local Government Act 1993* (as amended), Australian Accounting Standards and other authoritative pronouncements issued by the Australian Accounting Standards Board.

Shane Crawford
General Manager

Date 27 September 2019