

TASMANIAN PLANNING COMMISSION



DECISION

Permit	MPP2201 – New Bridgewater Bridge – construction of a new bridge to replace the existing two lane bridge forming part of the Midland Highway at Bridgewater.
Proponent	The Crown in Right of Tasmania (represented by the Department of State Growth)
Date of decision	18 May 2022

Under section 60ZZM of the *Land Use Planning and Approvals Act 1993* the Development Assessment Panel (the Panel) has determined to grant a major project permit for the New Bridgewater Bridge Major Project (major project) subject to the conditions and restrictions set out in the major project permit. The Panel finds that the major project is an effective and appropriate use and development of the project land.

Ann Cunningham
Chairperson

Kate Partenio
Member

Roger Howlett
Member

Richard Jamieson
Member

REASONS FOR DECISION

Background

Major project

On 30 December 2020 the Minister for Planning declared the New Bridgewater Bridge a major project under section 600(1) of the *Land Use Planning and Approvals Act 1993* (the Act).

The declaration sets out a description of the project and the use and development that are proposed to occur in relation to the major project and includes:

- a new four lane bridge for motor vehicles, and shared pathway for cyclists and pedestrians connecting the Brooker Highway and Midland Highway, and surrounding roads;
- grade separation of the Lyell Highway and Black Snake Road junctions at Granton and connecting ramps with Gunn Street, Boyer Road and Old Main Road at Bridgewater;
- a minimum air draft clearance for vessels consistent with the clearance under the Bowen Bridge;
- demolition of the existing bridge (including existing road and rail lift span) and other existing structures;
- construction of a jetty;
- consequential changes to existing utilities, and modifications to existing intersections;
- alterations and reuse of the existing causeway;
- earthworks, waste material (contamination or Acid Sulfate Soils) handling, treatment and/or disposal or reuse from both terrestrial and marine construction activities;
- temporary works to facilitate the bridge construction, such as public information booth, site storage, site offices, concrete batching or bridge component construction; and
- temporary works including but not limited to, conversion of the boat ramp for barges, temporary traffic lanes during construction, storage areas such as lay down areas and site offices.

Assessment criteria

The Panel determined assessment criteria in relation to the major project under section 60ZM of the Act on 26 May 2021.

The assessment criteria set out the matters to be addressed in the major project impact statement (MPIS) in relation to the New Bridgewater Bridge Major Project.

Major project impact statement

The Proponent provided the Panel with a MPIS on 25 August 2021 as required by section 60ZQ of the Act.

After receiving further information and an amended MPIS from the Proponent, and preliminary condition advice from participating regulators, the Panel prepared an initial assessment report.

Exhibition

The Panel exhibited the initial assessment report and the Proponent's MPIS, as well as other supporting documents, under section 60ZZB of the Act, from 19 January 2022 until 17 February 2022.

Sixteen representations were received in relation to the major project and submissions were made during the hearing process. A list of representors is at Attachment 1.

No representations requested refusal of the major project permit.

In accordance with section 60ZZE of the Act, the Panel held hearings.

Date and place of hearing

Hearings were held at the Commission's office on Level 3, 144 Macquarie Street, Hobart on:

- 15 March 2022 to 18 March 2022;
- 25 March 2022; and
- 31 March 2022.

One hearing was held via Microsoft Teams on 30 March 2022.

Participating regulators

The participating regulators for the major project are:

- the Tasmanian Environmental Protection Authority;
- Tas Gas;
- TasWater;
- the Tasmanian Heritage Council; and
- the Department of Natural Resources and Environment Tasmania (formerly called the Department of Primary Industries, Parks, Water and Environment)

Consideration of the major project permit

1. In deciding whether to grant a major project permit under section 60ZZM(1) of the Act, the Panel must:
 - have regard to the matters specified in section 60ZM(6); and
 - consider any representations made under 60ZZD(1) in relation to the major projects; and
 - consider any matters raised in hearings in relation to the major project; and
 - consider all final advices.
2. Under section 60ZZM(3), the Panel may only grant a major project permit in relation to the major project if it is satisfied that the major project is an effective and appropriate use or development of the land to which the major project relates.
3. Under section 60ZZM(4), the Panel may only grant a major project permit in relation to the major project if it is satisfied that:

- (a) the assessment criteria in relation to the project have been satisfied; and
 - (b) the project would be consistent with furthering the objectives specified in Schedule 1 of the Act; and
 - (c) the project would not be in contravention of a State Policy; and
 - (d) the project would not be in contravention of the Tasmanian Planning Policies; and
 - (e) the project would not be inconsistent with a regional land use strategy that applies to the land to which the project is to be situated; and
 - (f) the relevant fee required under section 60ZZZB, and any other fee required under any other Act to be paid for the assessment of the project, have been paid; and
 - (g) the Panel has received a final advice under section 60ZZF(1) from each participating regulator.
4. Under section 60ZZM(5), the Panel may grant a major project permit in relation to a major project even though the use and development would not be permitted under a relevant planning scheme.
 5. Under section 60ZZM(6), the Panel must refuse to grant a major project permit if the Panel has received, from a relevant regulator referred to in section 60ZZP(4), a final advice under section 60ZZF(1) that requests the Panel to refuse to grant a major project permit in relation to the major project.

Assessment criteria

Policy and strategy context

Representation: Brighton Council (11), Department of State Growth (16)

6. Brighton Council submitted that to provide fair, orderly and sustainable use and development, property boundaries need to be modified to remove small titles and align with the new road corridor within six months of project completion.
7. At the hearing the Proponent did not object to a requirement to consolidate property boundaries.

Panel consideration

8. The Panel notes that any transfer of properties to the ownership or management of a council, for a local highway, open space or similar will likely require modification to property boundaries, and that the Proponent's powers for consolidating property boundaries are set out under the *Roads and Jetties Act 1935*.
9. The Panel notes the MPIS sets out that the major project:
 - is consistent with furthering the Schedule 1 objectives of the Act;
 - is not in contravention with the *State Coastal Policy 1996*, *State Policy on Water Quality Management 1997* and the *National Environment Protection Measures*;
 - is not inconsistent with the Southern Tasmanian Regional Land Use Strategy;
 - is not inconsistent with local strategies, including the Brighton Structure Plan 2018, Glenorchy Paths, Tracks and Trails Report May 2020, Derwent Valley Community Strategic Plan 2030, and Derwent Valley Recreation Plan and Open Space Strategy May 2020;
 - will create social and economic benefits at a whole of state level for freight transport

and will provide benefits at regional and local levels for commuters, pedestrians, cyclists and vessels navigating the river; and

- has been designed and can be managed to achieve the above objectives in a manner that substantially avoids or minimises impacts to ecological processes and biodiversity, the operation or amenity of adjacent land uses, impacts to Aboriginal heritage and increased hazards from coastal and natural processes.
10. The Panel considers that relevant elements of:
- State Policies have been given effect to through the assessment criteria; and
 - the Southern Tasmanian Regional Land Use Strategy has been given effect to through the operation of the assessment criteria.
11. The Panel notes, with the exception of the Brighton Council representation, no evidence was provided that the major project is not consistent with furthering the objectives of Schedule 1 of the Act, in contravention of a State Policy, inconsistent with the Southern Tasmanian Regional Strategy or any relevant local strategy. Generally representors did not raise any specific concerns related to Policy or strategy context matters in the assessment criteria. Instead representors raised concerns about matters dealt with in specific assessment criteria, such as the degree to which:
- impacts on residential amenity or local heritage could be avoided or mitigated; or
 - the design could be modified to better cater to local road users.
12. The Panel notes that there are no Tasmanian Planning Policies.
13. The Panel considers that the *State Policy on the Protection of Agricultural Land 2009* is not applicable.
14. The Panel finds:
- it is unreasonable to impose conditions related to the alignment of property boundaries where the Proponent has powers it can exercise under another enactment;
 - at a strategic level, the road and bridge is part of the National Land Transport Network and considers that it is important that the infrastructure is designed to cater for and give priority to the forecast north south road transport task – specifically as it relates to heavy vehicle and peak commuter use;
 - the project is consistent with furthering the objectives specified in Schedule 1 of the Act;
 - the project is not in contravention of a State Policy;
 - the project is not in contravention of the Tasmanian Planning Policies;
 - the project is not inconsistent with the Southern Tasmanian Regional Land Use Strategy or any relevant local strategy; and
 - the assessment criteria in clause 4.1.1 Policy and Strategy context have been satisfied.

Panel decision

15. The Panel finds that there are no specific conditions or restrictions required.

Sustainable transport and pedestrian and cyclist safety

Representation: Tasmanian Active Living Coalition (7), Derwent Valley Council (10), Department of State Growth (16)

16. Representors:

- supported the inclusion of a shared pedestrian and cycle path and recommended the application of active living principles in design and development of the pedestrian and cycle ways;
- considered that further assessment was required for pedestrian and cyclist crossing points (sightlines, traffic volumes, gaps in traffic and waiting times), and cyclists transitioning to the road at the Lyell Highway and Old Main Road intersection;
- noted it was unclear what arrangements will be put in place for pedestrians to cross and access bus stops on the Lyell Highway;
- recommended pedestrian refuges be installed at crossings on Gunn Street, Bridgewater;
- recommended an expansion or upgrade of footpaths on both sides of Gunn Street and along Gunn Street to connect to Weily Park Road;
- were concerned that only one metro bus stop was identified as being retained, and considered that bus stops needed to be provided to replace existing stops;
- noted it is unclear how the project will encourage the use of public transport, as public transport impacts within the MPIS only consider improved travel time;
- were concerned that consideration had not been given to how buses exit off highways and whether they had adequate turning areas; and
- questioned why innovative opportunities such as park and ride facilities, encouraging public use of transport, had not been included, and other representors recommended park and ride facilities be included.

17. The Proponent submitted:

- that the December 2021 Traffic Impact Statement (the December 2021 TIA) combined with requirements for road safety audits provided adequate consideration of pedestrian and cyclist safety;
- that as progress on the design has not yet determined whether there is room on Gunn Street for pedestrian refuges or a footpath on the northern side of the road under the highway, these should not be reflected in a condition as it is unknown if an engineering solution can provide for these matters;
- that an extension of the shared path along Gunn Street and Old Main Road to Weily Park Road was an upgrade to existing footpath facilities and outside the scope of the project;
- the existing bus stops need to be relocated, subject to consultation with the Proponent's Passenger Transport team through their relevant process, and replaced at locations that consider safety without reducing pedestrian catchments;
- the specific locations of replacement bus stops should not be a planning permit condition, as they will be determined through further design work and consultation with relevant stakeholders;
- the project will improve travel times and travel time reliability for users of public transport and also improve active transport infrastructure in the area, which in turn, would be expected to encourage the use of public transport; and
- the consideration of park and ride facilities and innovative opportunities are outside the scope of the project and acknowledges that the project may provide opportunities for

councils to pursue park and ride facilities and welcomes further discussion of these matters outside of the project assessment process.

18. At the hearing the Panel set out the contents of the December 2021 TIA, safety audit report, and explained that the preliminary conditions required the design to:
 - respond to previous road safety audit reports; and
 - provide safe pedestrian and cyclist crossing where they meet roadways and other paths, and to provide access to bus stops.
19. The parties agreed preliminary conditions were relevant to pedestrian and cyclist safety.
20. At the hearing, representors maintained their position that providing bus stops was important to encourage public transport, but advised they were broadly satisfied with the preliminary conditions.

Panel consideration

21. The Panel notes:
 - preliminary conditions set out in the initial assessment report are relevant to pedestrian and cyclist safety;
 - the parties agreed that the proposed design encourages cycling and walking through:
 - provision of a 3.0m wide shared user path across the bridge,
 - separating cyclists from other vehicle traffic,
 - identifying the footpaths that will be provided connecting the Lyell Highway, Black Snake Road, Main Road and Gunn Street, and
 - providing for the creation of a foreshore trail beneath the Bridge at Bridgewater;
 - the Proponent contends with representors that the placement of bus stops and a footpath on the Northern side of Gunn Street beneath the Bridge should not form part of a permit; and
 - road safety audits will inform if there is a need for pedestrian refuges at pedestrian and cycle crossings.
22. The Panel finds:
 - preliminary conditions in the initial assessment report should be applied to a major project permit to give effect to the commitments and recommendations in the MPIS;
 - the preliminary condition requiring creation of a foreshore path requires modification for clarity of how it connects to existing and proposed paths;
 - providing bus stops is an integral part of how the major project encourages public transport;
 - the relationship between pedestrian and cycle paths, crossing points, and location of bus stops is an important consideration of pedestrian and cyclist safety, as well as how the major project encourages public transport;
 - design plans need to show the location of bus stops in consultation with public transport operators;
 - the assessment criteria in clause 4.2.1 Sustainable transport have been satisfied, subject to application of conditions in a major project permit;
 - minimising the number of road crossings required to access the shared pathway over

the New Bridgewater Bridge, will minimise safety risks to pedestrians and cyclists;

- a footpath should be provided on both sides of Gunn Street beneath the Bridge to minimise road crossings;
- the assessment criteria on clause 4.2.2 Safety and efficiency of the road and rail network have been satisfied in relation to pedestrians and cyclists, subject to application of conditions in a major project permit;
- there is no nexus between the major project and park and ride facilities as the use and development creates no demand for park and ride facilities; and
- that general improvements to existing footpath infrastructure, such as along Gunn Street and Old Main Road, Bridgewater would be unreasonable given the limited change to the road formation along the existing parts of these roads.

Panel decision

23. The major project permit is subject to condition and restriction numbers 4, 5, 6, 11, 13 and 14.

Safety and efficiency of the road and rail network

Representation: Lucas, G (5), Seath, A (6), Glenorchy City Council (9), Derwent Valley Council (10), Brighton Council (11), Department of State Growth (16)

24. Representors:

- considered that grade separation of the Black Snake Road interchange cannot be made to work despite many redesigns, and that there are negative impacts on traffic from Black Snake Road, the Lyell Highway and Main Road, such as increased waiting and travel times, and safety;
- considered changes to local roads are too complicated, illogical and fail to solve the problems they are intending to, instead they make them worse and create new problems;
- considered that travel between New Norfolk and Bridgewater was long and complicated;
- noted alternative designs had not been adequately considered, or that adequate reasons had not been given for why alternative arrangements were not appropriate, and presented alternative designs;
- raised concern that the Traffic Impact Assessment misrepresented the potential for crashes, given the substantial changes to the projected numbers of traffic using the southern interchange;
- considered the findings in the initial assessment report were not correct, citing issues such as, local traffic is not made safer or more efficient, and the introduction of additional conflict points;
- raised concerns over the sufficiency of the Traffic Impact Statement and design in terms of the Black Snake Road / Old Main Road roundabout at Granton, right hand turn onto the Lyell Highway, Black Snake Road and Old Main Road, Granton, the Boyer Road intersection, and steep on and off ramps;
- raised concerns that the Traffic Impact Assessment, did not consider the Rusts Road / Lyell Highway intersection, and that the Boyer Road traffic count from 2018 did not consider heavy vehicle traffic to and from Norske Skog;

- raised concern that the December 2021 TIA did not provide for consideration of the impacts of potential development of land within the Future Urban Zone accessing the Black Snake Road and Boyer Road junctions;
 - considered arrangements for access to the Lyell Highway were undesirable;
 - considered that recommendations of the Traffic Impact Assessment should be implemented to the satisfaction of the relevant council and the State Road manager; and
 - considered that for certainty, conditions should reference the exact date of previous road safety audits.
25. The Proponent submitted:
- a history of designs considered in relation to the southern interchange;
 - only left hand turns would be permitted from Rusts Road and a P-turn at the location of the current Granton roundabout would provide for vehicles to travel to Brighton or Hobart via the southern interchange;
 - plans showing draft lane alignment and the road markings of right hand turn onto the Lyell Highway, Black Snake Road and Old Main Road, Granton and the Boyer Road intersection; and
 - it intended to close the intersection of Old Main Road and the Midland Highway at Bridgewater, and detail of this design would be provided as part of design development, with approval for the road closure to be sought through another Act.
26. At the hearing the Panel established:
- that there was uncertainty in intersection location descriptions in the December 2021 TIA; and
 - that the TIA had not considered the impact of the future urban zone in assessment of the Black Snake Road and Boyer Road junctions.
27. The Proponent submitted additional material at the hearing to respond to these issues.

Panel consideration

28. The Panel notes:
- preliminary conditions set out in the initial assessment report are relevant to safety and efficiency of the road and rail network;
 - submissions have clarified uncertainties in the December 2021 TIA, and show that the Black Snake Road junction and Boyer Road intersection have the capacity to meet the potential future demand;
 - rezoning of future urban land to a residential zone would require consideration of the capacity of roads to service development potential, at that time;
 - alternate designs and arrangements for the southern interchange that seek to balance the potential for a range of consequential impacts have been considered by the Department of State Growth;
 - the Panel must consider the proposed development before it, as set out in the MPIS, and there is insufficient evidence on safety or other consequential impacts before the Panel to support alternative designs proposed by representors;
 - plans showing potential arrangements of the Boyer Road intersection may impact on

areas outside the project land;

- the closure of the Old Main Road at the Midland Highway is subject to a separate approval process.

29. The Panel finds:

- preliminary conditions in the initial assessment report should be applied to a major project permit to give effect to the commitments and recommendations in the MPIS;
- the safety and efficiency of the road network will be increased with the proposed development when compared to the existing road network, in particular with the modelled traffic increases in 2040;
- while there will be increased journey and waiting times for some road users, such as, when entering from Black Snake Road and Rusts Road, an adequate level of service is maintained for these users;
- plans submitted showing the P turn and road design should be specified in conditions;
- any design plans approved under a permit need to show the boundary of the project land to clarify the extent of works approved under a major project permit; and
- the assessment criteria on clause 4.2.2 Safety and efficiency for the road and rail network have been satisfied, subject to application of conditions in a major project permit.

Panel decision

30. The major project permit is subject to condition and restriction numbers 4, 5, 6, 11, 12 and 13.

Safety and efficiency of the road, rail and public transport network during construction

Representation: Roberts, S (1), Department of State Growth (16)

31. The representor was concerned about the impact of contractor parking and continued access to Nielsen Esplanade, Bridgewater, noting the need to have access for support workers/nurses.

32. The Proponent submitted:

- project vehicles would not be parked outside of temporary fencing surrounding the constructions area, and they would consult with local residents over parking during construction and provide a 24/7 contact for managing issues;
- that the MPIS and the preliminary conditions satisfy the assessment criteria for safety and efficiency of the road, rail and public transport network during construction;
- the road authority should be the relevant decision-maker for determining compliance with the *Austroads Guide to Road Safety 2006* and a Construction Traffic Management Plan;
- that a Construction Traffic Management Plan was a dynamic document, requiring both continual change to respond to emerging issues, and a level of detail that would not be informative to the achievement of the assessment criteria;
- requiring a Construction Traffic Management Strategy, rather than a plan, would meet the requirements of the assessment criteria while not requiring continual approval that would impact on the ability to respond to emerging issues in a plan;
- a range of modifications to preliminary conditions, citing preliminary conditions were

overly restrictive or prescriptive and did not allow for delays or changes to the construction program, such as, specifying timing of detours, requiring 1 lane of traffic to be open at all times, and specifying desired speed limits; and

- that they will maintain residents' access to Nielsen Esplanade and all of the individual properties at all times.

33. At the hearing:

- the representor was satisfied with the commitment to retaining reasonable access to properties, noting there may be periods when access would be controlled for safety; and
- clarification was provided on proposed modifications of preliminary conditions.

Panel consideration

34. The Panel notes:

- the broad agreement that conditions are required to give effect to commitments in the MPIS and satisfy the assessment criteria;
- preliminary conditions related to the Construction Traffic Management Plan were developed from commitments and recommendations in the MPIS and its supporting reports;
- the intent of preliminary conditions was targeted at a level that could be considered a strategy for managing traffic during construction, rather than details of day to day operations; and
- the Proponents commitment requiring contractors to park outside of temporary fencing around construction areas.

35. The Panel finds:

- that the preliminary conditions that are restrictive or prescriptive on the speed limits or diversion of traffic are not reasonable;
- modified preliminary conditions proposed by the Proponent, with minor modification, achieve the intent of the conditions while providing reasonable flexibility to undertake day-to-day operations;
- the assessment criteria on clause 4.2.3 Safety and efficiency for the road and rail network during construction have been satisfied, subject to application of conditions in a major project permit; and
- an additional condition is required to give effect to the commitments for contractor parking.

Panel decision

36. The major project permit is subject to condition and restriction numbers 4, 5, 6, 13, 31 and 32.

Air emissions

Representation: Department of State Growth (16)

37. The Proponent:

- submitted it was unreasonable and unachievable to impose conditions to minimise emissions from passing vehicle traffic during construction and demolition;
- questioned the reasoning for the monitoring of vehicle emissions for a replacement

project of an existing infrastructure asset;

- noted that calibration requirements and material shortages would result in set-up of an onsite monitoring station taking 10 weeks potentially delaying the project start;
- considered that air quality and meteorological monitoring conditions are inappropriate and should be deleted;
- noted that the requirement to undertake 6-12 months of pre-construction monitoring as proposed in the preliminary conditions, would delay the project, and that this would be partially resolved by replacing the term 'construction phase commencement' in conditions with 'significant emitting activities' to focus on commencement of substantial works;
- noted it was unreasonable and costly to require that monitoring be undertaken 'throughout construction works'; and
- submitted the use of the term 'project land' in the context of air monitoring was too broad, and provided a suggested amendment.

38. In a submission prior to the hearing, the Proponent:

- maintained its position that air quality and meteorological monitoring conditions are onerous, especially in light of air emission modelling demonstrating that the existing vehicle emissions will reduce over time;
- submitted that the bridge works are similar to projects routinely undertaken throughout Tasmania, without the requirement for vehicle emission air quality monitoring;
- advised that the program of monitoring required by the draft conditions may result in delays to work of up to 12 months and estimated costs between \$850,000 and \$1,000,000; and
- submitted an updated version of the air emissions assessment, noting a calculation error had been found in the previously submitted version.

39. At the hearing, the EPA advised that baseline monitoring was necessary to verify the modelled air quality levels.

40. The parties collaborated and agreed in principle on modified conditions that meet the operational needs of the Proponent and monitoring requirements of the EPA.

41. The EPA final advice recommended conditions and restrictions consistent with those agreed in principle by the parties.

42. The EPA final advice sets out that the reasons for recommending the Panel impose conditions and restrictions, is to avoid causing environmental nuisance or harm to sensitive receptors, verify the air dispersion model and to inform management measures for dust deposition if particular levels are found to be excessive.

Panel consideration

43. The Panel notes:

- the updated air emissions assessment correcting errors of calculation;
- the Proponent and EPA agreed in principle on draft modifications to preliminary conditions;
- conditions and restrictions recommended in the final advice from the EPA are

consistent with the agreed modifications; and

- the EPA's final advice and reasons applicable to the mitigation of impacts from air emissions.

44. The Panel finds:

- it necessary and reasonable to impose the conditions and restrictions recommended by the EPA in their final advice for the reasons specified by the EPA; and
- the assessment criteria on clause 5.1.1 Air emissions have been satisfied, subject to application of conditions in a major project permit.

Panel decision

45. The major project permit is subject to condition and restriction numbers A1 to A5.

Aboriginal heritage

Representation: None

46. At the hearing the Department of Natural Resources and Environment Tasmania (DNRET) submitted that preliminary conditions in relation to Aboriginal heritage would require modification so that conditions are limited to permitting the interference with Aboriginal relics.
47. The Proponent submitted it had no concerns with the proposed modifications.
48. The DNRET final advice sets out the reasons for recommending the Panel impose conditions and restrictions to address the requirement to avoid, mitigate and manage Aboriginal heritage in accordance with the *Aboriginal Heritage Act 1975*.
49. DNRET also noted that conditions agreed with the Proponent, preventing works on AH13880 and requiring fencing and identification of the site on plans, are best practice management of Aboriginal heritage and are not inconsistent with the final advice.

Panel consideration

50. The Panel notes:

- conditions and restrictions preventing works on AH13880 and requiring fencing and identification of the site on plans, are not inconsistent with conditions recommended to be imposed under the *Aboriginal Heritage Act 1975*;
- the DNRET final advice and reasons applicable to the interference with a relics under the *Aboriginal Heritage Act 1975*;
- it is required under section 60ZZP(4) of the Act, to impose the conditions and restrictions recommended in the final advice in relation to the *Aboriginal Heritage Act 1975*; and
- section 60ZZZD of the Act, sets out that a major project permit that authorises interference with Aboriginal relics, is taken to be a project-related permit issued under the *Aboriginal Heritage Act 1975*.

51. The Panel finds:

- preventing works on AH13880 and requiring fencing and identification of the site on plans are reasonable conditions and restrictions to impose in a major project permit;
- the conditions and restrictions recommended in the final advice in relation to the *Aboriginal Heritage Act 1975* must be imposed; and

- the assessment criteria for clause 5.5.4 Aboriginal heritage have been satisfied, subject to the application of conditions in a major project permit.

Panel decision

52. The major project permit is subject to condition and restriction numbers 15, 16 and AH1.

Dredging and reclamation works

Representation: Department of State Growth (16)

53. The Proponent submitted:

- that design plans of the reclamation would be included as part of design plans approved or endorsed under the permit;
- the methodology for construction will be detailed within a construction environmental management plan;
- the design of reclamation set out in Appendix AA of the MPIS and the methodology set out in the MPIS are expected to represent the method to be employed;
- conditions should specify the amount of reclamation that is the above water area as the reclamation will have sloped batters and be larger than the area above the water;
- that the temporary reclamation, on the northern site, should not be subject to the same requirements as the permanent reclamation at the southern site;
- that provision should be made for use of concrete and lime in reclamation, to achieve the proposed construction methodology and to treat any acid sulfate soils;
- that conditions are needed to make provision for using soil in the reclamation where it was excavated within the project land; and
- the construction methodology for reclamation appeared to be covered by preliminary conditions from the EPA and conditions should be consistent between regulators.

54. Following the hearing the EPA provided further information advising:

- that there appeared to be overlap between preliminary conditions in relation to reclamation and preliminary conditions of the EPA in relation to water quality and environment management plans;
- there is some merit in having conditions focused specifically on reclamation as it requires specific methodology and raises its own issues regarding the type of material used, the method and location of placement and removal;
- the overlap of conditions is manageable and preferable to having gaps; and
- the *Landfill Sustainability Guide 2004* (DPIWE, 2004) was written for the purpose of guiding on land waste disposal activities.

55. The EPA also noted there is a definition of clean fill, type 1 and type 2, in the *Environmental Management and Pollution Control Act 1994*, and suggested it would be appropriate to reference clean fill type 1 and incorporate a mechanism for the EPA Director to approve use of alternative material with consideration of the stability and potential for environmental nuisance or harm.

Panel consideration

56. The Panel notes:

- no dredging is proposed;
- the use of the term reclamation is intended to apply to the area of land reclaimed from the River Derwent above the high water mark;
- minimising overlap between conditions that control impacts on water quality and construction methodology is reasonable;
- the extent and method of reclamation informs how reclamation minimises adverse impacts on natural coastal processes and natural assets;
- the definitions of solid inert fill or clean fill type 1 may preclude the use of cement in the construction methodology, and lime in the treatment of onsite acid sulfate soils; and
- the potential impacts of the use of cement or lime in reclamation have not been assessed.

57. The Panel finds:

- it is necessary to clarify the description and extent of reclamation to improve certainty in interpretation;
- it is reasonable to differentiate the requirements to minimise the risk of predicted erosion events between permanent and temporary reclamation;
- the definition of clean fill type 1 set out in the *Environmental Management and Pollution Control Act 1994* is the appropriate definition;
- it is reasonable for the EPA Director to determine if alternative fill, is suitable, considering the overlap with water quality conditions and the potential impacts on water quality; and
- the assessment criteria for clause 4.6.1 Dredging and reclamation works have been satisfied, subject to application of conditions in a major project permit.

Panel decision

58. The major project permit is subject to condition and restriction numbers 4, 5, 6, 18, 19, 20, 30, 36, WQ1 and WQ5.

Flood-prone areas

Representation: State Emergency Service (SES) (13), Department of State Growth (16)

59. The SES submitted:

- it supported the recommended modified mitigation works set out in the MPIS Appendix BB including the need to undertake further investigations prior to construction to ensure appropriate mitigation measures are included in the design and project management plans;
- it recommended that the Proponent be required to prepare flood emergency management arrangements for use during construction stages of the project; and
- risk isn't directly related to flood height, but it was a function of depth and velocity, and the capacity for increased flow paths that may represent and increase flood risk.

60. The Proponent submitted:

- minor modifications to the preliminary conditions in the assessment report related to the flood management plan;

- it had no objection to preparing flood emergency management arrangements for use during construction stages of the project;
- further modelling of the design is required prior to construction of the bridge;
- the design life of roads is 20 years and it is unnecessary to design the road height that is not a bridge to 2090 height requirements, and that there may be more effective and appropriate ways to mitigate this risk of future flooding that can be considered in lieu of raising road levels at this time;
- the extent of the preliminary condition requiring the height of roads on the south side of the River Derwent, near the intersection of Main Road and Black Snake Road, is unclear and may require the raising of existing roads;
- 1% annual exceedance probability in 2090 should be defined to include the impact of climate change expected at 2090; and
- the terms 'no increase in flood risk' should be qualified by flood level.

61. At the hearing the parties agreed:

- flood risk should be qualified by depth and velocity; and
- to collaborate and provide modified wording of conditions applicable to a flood management plan.

Panel consideration

62. The Panel notes:

- the parties agreed that a flood management plan is necessary to deal with impacts following completion of construction (and demolition of the exiting bridge) and during construction/demolition;
- modified wording of conditions relevant to a flood management plan has been agreed by SES and State Growth;
- Appendix BB of the MPIS recommends lifting the design levels above the 1% annual exceedance flood levels based on 2090 climate modelling and / or protection works to achieve the same (or provision for future works in current design as part of an adaptive strategy to climate change);
- no evidence of alternative ways to mitigate this risk of future flooding in lieu of raising road levels or provision for future works has been put to the Panel;
- currently the existing Lyell Highway at Granton and parts of Main Road are subject to flood that is unsafe for vehicles and people, and buildings are vulnerable to failure at a 1% annual exceedance probability based on the 2090 climate modelling;
- the MPIS sets out that as inundation of the Lyell Highway is expected to occur more frequently over the life of the development due to climate change, the proposed design of the New Bridgewater Bridge and associated roadworks should consider future design solutions of the roads external to the project land; and
- existing dwellings on the northern side of the River Derwent are currently subject to flood at a 1% annual exceedance probability based on 2090 climate modelling.

63. The Panel finds:

- conditions requiring provision and implementation of a flood management plan to set out how the impact of flood will be mitigated during construction and after the

completion of construction/ demolition are necessary to achieve and maintain a tolerable risk from flood;

- the terms 'no increase in flood risk' require clarification to consider depth and velocity;
- it is prudent for the design of the New Bridgewater Bridge and associated roads in the vicinity of the Main Road / Black Snake Road intersection to be able to accommodate design levels above the 1% annual exceedance flood levels based on 2090 climate modelling; and
- the assessment criteria for clause 4.8.1 Development in flood-prone areas have been satisfied, subject to application of conditions in a major project permit.

Panel decision

64. The major project permit is subject to condition and restriction numbers 4, 5, 6, 40 and 41.

Flora and fauna

Representation: Department of Natural Resources and Environment Tasmania (8), Department of State Growth (16)

65. The Department of Natural Resources and Environment Tasmania (DNRET) representation set out clarifying modifications to preliminary conditions on terrestrial flora, aquatic flora, and terrestrial fauna.

66. The Proponent submitted it did not object to the proposed modifications, but considered further modifications were needed including:

- setting an upper limit on numbers or areas of threatened flora species taken to allow for seasonal variation in individual plants;
- that conditions should reference project land to not unintentionally constrain the major project;
- that requirements to not operate vessels within certain depths of water or specifying the use of vessels with short shaft motors at other depths is extremely prescriptive due to seasonal and tidal fluctuations in water depths, should instead deal with mitigating sedimentation; and
- extending the period for conducting survey and clearance activities for nests, eggs and nestlings from May onwards, rather than August, to account for varied breeding seasons of different species.

67. Following an initial hearing and collaboration between DNRET and the Proponent, modified conditions were agreed in principle and submitted at the hearing.

68. The DNRET final advice set out the reason for recommending the Panel impose conditions and restrictions, is to ensure impacts to threatened species are minimised.

Panel consideration

69. The Panel notes:

- the parties agreed in principle to modified to the wording of conditions and the DNRET final advice was substantially consistent with agreed modifications;
- the DNRET final advice and reasons applicable to taking threatened species listed under the *Threatened Species Protection Act 1995* and protected and partially protected bird species listed under the *Nature Conservation (Wildlife) Regulations 2021*;
- it is required under section 60ZZP(4) of the Act, to impose the conditions and

restrictions recommended in the final advice in relation to the *Threatened Species Protection Act 1995*;

- section 60ZZZD of the Act, sets out that a major project permit that authorises the taking of threatened species and protected and partially protected bird species, is taken to be a project-related permit issued under the *Threatened Species Protection Act 1995* and the *Nature Conservation (Wildlife) Regulations 2021*.

70. The Panel finds:

- it necessary and reasonable to impose the conditions and restrictions recommended by the DNRET in their final advice in relation to the *Nature Conservation (Wildlife) Regulations 2021*; and
- the conditions and restrictions recommended in the final advice in relation to the *Threatened Species Protection Act 1995* must be imposed; and
- the assessment criteria on clause 5.5.1 Aquatic and terrestrial flora and 5.5.3 Threatened fauna have been satisfied, subject to application of conditions in a major project permit.

Panel decision

71. The major project permit is subject to condition and restriction numbers TSP1, TSP2 and NCA1.

Heritage Council requirements

Representation: Kernke, D (12), Glenorchy City Council (9), Madsen, G (15), Department of State Growth (16)

72. Representors:

- were concerned that it was unclear if parts of the existing Bridgewater Bridge were to be relocated to a park, and considered the relocated parts may pose a safety risk to the public or be subject to vandalism;
- considered that the major project must respect the heritage values of the former Black Snake Inn and surrounds;
- suggested that the convict constructed causeway could be altered to allow flow of water to alleviate the silt build up problem; or
- supported preliminary conditions related to historic heritage places.

73. The Proponent submitted:

- that flood impacts on the former Black Snake Inn building were slightly reduced by the project;
- the flood risk near the Watch House , could change but would be informed by further modelling;
- preliminary conditions related to the timber outbuilding at the former Black Snake Inn, should be modified as the building is in poor condition and may not be salvageable;
- retention of all 4 caissons of the existing Bridgewater Bridge may adversely impact on safe navigation vessels and 1 caisson would likely need to be removed, subject to final design;
- relocation of the entire lift span for interpretive purposes was excessive and

impractical, and that retention of representative parts of the existing Bridgewater Bridge would inform interpretation while being physically and economically more practical;

- the location and information used in interpretation could be managed through requiring an interpretation plan, to allow flexibility in responding to design requirements; and
- it considered conditions should be caveated to prior to relevant construction, and that the demolition construction management plan should stand alone to allow for staging, noting the demolition of the bridge is separate from other construction activities.

74. At the hearing the Heritage Council:

- advised it had considered flood impacts in preparing preliminary advice, and had no specific concerns or requirements in relation to changes in flood impacts on the registered places;
- advised that they were satisfied in principle with retaining as many of the caissons as possible, noting the competing safe navigation issues;
- advised there was sufficient setback to the former Black Snake Inn building and all works seemed to be outside the area of concern;
- noted it is likely that a sound barrier in front of the former Black Snake Inn would not be feasible as the creation of a defensible / definable space would impact upon the heritage values;
- noted it was concerned with the fabric of registered places, and while supportive of maximising future uses of the site had a greater concern over impact of a noise wall compared to the property no longer being suitable for residential use due to noise impacts;
- acknowledged while the timber outbuilding at the former Black Snake Inn was in poor condition the preference was to firstly conserve the building and further work was needed to determine if this is feasible;
- advised it was generally agreeable to the Proponent's proposed modifications to conditions addressing interpretation and retention of representative portions of the existing Bridgewater Bridge; and
- noted there is risk of impact on the historic cultural heritage significance if early works ignore heritage requirements, however some demarcation may be achievable to provide for staging.

75. Following collaboration on modifications to conditions, at the hearing the parties advised they broadly agreed in principle on modified conditions.

76. The Heritage Council final advice set out the reasons for recommending the Panel impose conditions and restrictions, as follows:

- to ensure the heritage values of the Bridgewater Bridge are appropriately considered, protected and interpreted.
- to ensure the heritage values of the former Black Snake Inn and its landscape setting are appropriately considered, protected and conserved; and
- to ensure the heritage values of the heritage places within or adjacent to the project land are appropriately considered, protected and conserved.

Panel consideration

77. The Panel notes:

- general issues related to flood are discussed under the heading Development in flood-prone areas;
- the Heritage Council has no specific requirements in relation to flood impacts on registered places;
- the parties agreed in principle to modifications of conditions on the retention of caissons, the timber outbuilding at the former Black Snake Inn, and an interpretation strategy and relocation of representative sections of the existing Bridgewater Bridge;
- the risk that early works may have adverse impacts on the values of a registered place; and
- use of the terms 'works' and 'heritage place' in the Heritage Council recommended conditions could be confused with the definition of works under the Act or references to local historic heritage places.

78. The Panel finds:

- no additional specific conditions are necessary to minimise the potential impact of flood on the historic cultural heritage significance of a registered place;
- a noise wall is not required to be constructed at the frontage of the former Black Snake Inn;
- it necessary and reasonable to impose the conditions and restrictions recommended by the Heritage Council in their final advice for the reasons specified by the Heritage Council;
- it is necessary to define registered place and works in a permit, along with minor modifications to recommended conditions, in order to clarify and give effect to the Heritage Council conditions; and
- the assessment criteria in clause 5.4 Tasmanian Heritage Council requirements have been satisfied, subject to application of conditions in a major project permit.

Panel decision

79. The major project permit is subject to condition and restriction numbers THC1, THC2 and THC3.

Local historic heritage values – 37 Black Snake Road

Representation: Glenorchy City Council (9), Department of State Growth (16)

80. The Glenorchy City Council:

- supported preliminary conditions requiring assessment of the local historic heritage significance; and
- supported that there should be no development or works, including demolition of 37 Black Snake Road.

81. The Proponent:

- provided a heritage impact statement by Purcell Asia Pacific Limited dated 16 February 2022 which noted that:

- the house and old coach house would be directly impacted by the proposed design and the blacksmith shop may be impacted by cuttings; and
 - adaptive reuse had not been formally assessed, but considered the present condition and low ceilings of the Blacksmith shop and workers cottages may make compatible uses hard to identify; and
 - provided justification for the demolition of all structures on the site, by setting out:
 - retaining buildings cannot be accommodated without creating a severe impact on the project;
 - that alternative designs would have consequential impacts on Aboriginal heritage values, the Black Snake Inn, the extent of earthworks required, standards for road design, and the safety and efficiency of the interchange; and
 - the former and current planning scheme specifically provided for demolition of farm outbuildings, if required as part of the replacement of the Bridgewater Bridge; and
 - outlined that earlier community and council feedback on the initial reference design resulted in a request for a more direct connection from the Brooker Highway to Lyell Highway, and design changes to achieve this change requires direct impact on features of local historic heritage significance; and the limited capacity for adaptive reuse of the structures would likely lead to those structures falling into disrepair.
82. At the hearing the parties agreed:
- the house and coach house had been significantly altered and the ability to interpret heritage features is difficult because of those alterations;
 - where possible the fig and cherry trees should be retained in situ, in preference to relocation, to act as a marker to the site;
83. The Proponent submitted that contrary to recommendations in the heritage impact statement to retain as many heritage features as practical, they proposed to demolish all structures and to prepare archival records of the structures prior to demolition, for the following reasons:
- any redesign to provide more room for the interchange such as moving the Brooker Highway to the north would result in greater impacts on the Black Snake Inn, a registered place on the Tasmanian Heritage Register;
 - indicative costs to change the on ramp to avoid any demolition would be in the order of 5 to 10 million dollars greater than the chosen design, and it did not consider the heritage values warrant that expenditure;
 - the culvert would potentially be impacted by stormwater management works;
 - while the blacksmith shop could be retained at its current location, it would be impractical to protect it from flood events; and
 - any buildings not demolished would be on land that would be surplus to requirements and the limited adaptive use of any retained buildings, would lead to a loss of the values over time due to lack of maintenance.
84. The Proponent also submitted:
- they would prefer a condition requiring relocation of the old railway shed, rather than a condition requiring retention;
 - that a condition assessment of buildings had not been undertaken; and

- the cherry tree is dead.
85. At the hearing Glenorchy City Council submitted:
- the planning scheme states that demolition of outbuildings can occur only where it is found to be unavoidable;
 - the Proponent had not demonstrated that demolition is unavoidable;
 - it supported conditions that resulted in the greatest retention of heritage values as practicable;
 - demolition of heritage features should not be based on the view that they may fall into disrepair, as heritage features display contextual value even as they fall into disrepair;
 - it is important to understand the original value of this type of land use as representing the rural character of Glenorchy which has been eroded through residential and industrial development;
 - the railway shed has intrinsic heritage value as it is a rare surviving example of this type of structure; however, it is not associated with the land use or rural character of the other buildings on the site; and
 - relocation of the railway shed would be preferable to demolition.
86. After the hearing the Proponent submitted photographs confirming the condition of the cherry tree and fig tree, and a plan showing varied designs of the Brooker Highway off ramp and Black Snake Road intersection.

Panel consideration

87. The Panel notes:
- the assessment criteria, while having regard to the planning scheme, establish a different test and it is not necessary to demonstrate that impacts are unavoidable. Instead, the definition of heritage impact statement requires a finding as to whether it will impact on a place's historic heritage values, and how impacts might be avoided or ameliorated;
 - the house, coach house and culvert will be directly impacted by road and stormwater works;
 - the blacksmith shop will be impacted by modelled flood events;
 - the cottage, due to its proximity to the interchange and noise levels, would not be suitable for residential use, as noise modelling of the reference design, that is located further away from the site than the chosen design, would exceed acceptable levels for a dwelling;
 - the local historic heritage significance of the site is primarily due to its characteristic of a working farm complex, its association with the locally prominent Dickson family, and evident techniques of stone masonry in the culvert;
 - some alternative interchange designs would impact upon Aboriginal heritage values, or would change impacts to the Black Snake Inn which is on the Tasmanian Heritage Register;
 - the Proponent's heritage impact statement recommends retention of the cottage, culvert, cherry tree and fig tree, and that in determining retention / removal of other features not directly impacted (pickers hut, workers huts, stable, and relocated railway shed) it is necessary to assess the viability of long term use, maintenance and

security; and

- the relocated structures (railway shed and workers huts) have less associative heritage value with the farm complex (house, old coach house, cottage, stable and blacksmiths shop), as they have been relocated.

88. The Panel finds:

- demolition of the main house, old coach house and culvert are not reasonably avoidable, given topographical site constraints, and subsequent consequential impact on Aboriginal heritage and State listed heritage values;
- demolition of the main house, old coach house and culvert will reduce the local historic heritage significance of the site, both due to the site no longer forming characteristics of a working farm complex and the limited potential for adaptive reuse where the structures cease to be associated with a dwelling;
- the relocated structures (rail building and workers huts) have less heritage integrity as they are not directly associated with the development of the site;
- while relocation of heritage features such as, the railway shed or workers hut / pickers hut may be possible and provide opportunity for adaptive reuse, there is no evidence that they can be relocated, where they might be relocated to, and who would be responsible for maintenance;
- the development of the interchange will impact on the site's local historic heritage significance, and the contextual heritage values of the site as a working farm complex will be lost;
- given that the local historic heritage significance of the site will be lost due to direct impacts, retention of the other heritage features on the site is not considered necessary, as these have not been shown to have intrinsic standalone local historic heritage significance;
- preparation of archival records of the site, prior to demolition is appropriate; and
- the fig tree should be retained as a marker to the site and development and works should be excluded from its tree protection zone.

Panel decision

89. The major project permit is subject to condition and restriction numbers 24, 33 and 34.

Local Historic heritage values – other local heritage places

Representation: Glenorchy City Council (9), Department of State Growth (16)

90. The Glenorchy City Council representation considered that potential impacts on heritage values of the adjacent local heritage place should be managed consistent with the Tasmanian Heritage Council preliminary conditions for registered places, including requirements for:

- management of vibration impacts; and
- sympathetic treatment of footpaths and landscaping.

91. The Proponent submitted:

- a heritage impact statement for Parkview, Fairfield (formerly Hayfield) and Duke of York Hotel;
- a vibration risk assessment for some registered places and local heritage places within

and adjacent to the project land; and

- it had no comment on preliminary conditions that prevent works on the Bridgewater railway station platform and require vehicle crossings into and out of the Watch House.
92. The vibration risk assessment defined relevant vibration risks and identified relevant management and mitigation measures to be implemented during works, including monitoring procedures.
93. In a submission prior to the hearing, the Tasmanian Heritage Council advised it considered the Glenorchy City Council request that landscaping and vibration plans be prepared to mitigate adverse impacts on the local heritage place, to be a prudent and reasonable request.
94. At the hearing the Proponent submitted:
- that undertaking a condition assessment of existing local heritage places prior to undertaking works would be an expected action as it would minimise risk from future claims;
 - it did not raise objection to requiring sympathetic treatment of footpaths and landscaping where works are proposed adjacent to local heritage places; and
 - design drawings showing there was insufficient room to construct a shared pedestrian cycleway in front of the Watch House, unless the shared path was allowed to be closer to the Watch House than the exiting path.

Panel consideration

95. The Panel notes:
- preliminary conditions restricting work on the Bridgewater railway station platform is not in contention;
 - the vibration risk assessment identifies it is based on limited information regarding ground conditions;
 - the proposed vibration risk assessment does not extend to considering all relevant local heritage places;
 - an existing condition assessment is considered by the Proponent to a routine part of undertaking vibration risk assessments and monitoring;
 - relevant local heritage places not also addressed in the Tasmanian Heritage Council final advice, include Parkview and Fairfield, formerly Hayfield and the Bridgewater railway station platform;
 - the Tasmanian Heritage Council in its final advice provided conditions applicable to vibration risk management and monitoring and landscaping; and
 - the submitted plans show the existing footpath to be within approximately 0.5m of the Watch House boundary.
96. The Panel find that:
- the preliminary conditions in the initial assessment report restricting work on the Bridgewater Railway station platform should be applied to a major project permit to give effect to the commitments and recommendations in the MPIS;
 - vibration risk mitigation strategies and monitoring should be applied to all relevant local heritage places;
 - the required vibration mitigation strategies and monitoring should be consistent with

the final advice from the Tasmanian Heritage Council;

- the required landscaping strategies applied to the adjoining local heritage places are to be consistent with the final advice of the Tasmanian Heritage Council; and
- given the 0.5m clearance between the Watch House property boundary, the intention of the preliminary condition that restricts construction of a footpath closer to the boundary to maximise the sites available curtilage, is considered to provide minimal benefit and is unnecessary.

Panel decision

97. The major project permit is subject to condition and restriction numbers 23 and 37, 38 and 39.

Marine infrastructure

Representation: Brighton Council (11), Madsen, K (14), Madsen, G (15), Department of State Growth (16)

98. Representors:

- considered that removing the boat ramp for up to three years during construction was unreasonable and that another boat ramp needed to be supplied close by; or
- considered that commitment 24 of the MPIS, requiring a jetty and boat ramp at equivalent or superior standard and functionality should be a condition of the permit and that a new jetty must be built to modern standards to accommodate a future passenger ferry service.

99. The Proponent submitted that:

- while there was no objection to including a condition requiring reinstatement of the boat ramp and jetty, providing for future ferry services went beyond the scope of the major project;
- reinstatement of a boat ramp and jetty needed to be agreed by Brighton Council and Parks and Wildlife;
- impacts on the safe operation of a future boat ramp would be better explored at the time of considering this location with Brighton Council and Parks and Wildlife, noting the current location may be unsuitable and does not present the best outcome for safe navigation;
- any expansion of the facility required further investigations, consideration of costs and should form the basis of a separate development application; and
- there is potentially better use of the foreshore area rather than a boat ramp and jetty.

100. Prior to the hearing the Panel sought and obtained further information from Marine and Safety Tasmania (MAST) whether the use of a temporary boat ramp near to the existing bridge would be feasible or desirable given the safe navigation requirements during construction.

101. MAST advised and noted that:

Nearby locations have been investigated for a temporary boat ramp but are not feasible. A temporary boat ramp near to the existing bridge could also result in safety issues, particularly in relation to safe navigation during construction.

The Old Beach boat ramp is less than 8 kilometres from the existing Bridgewater ramp. This ramp has recently been upgraded with MAST funding.

102. At the hearing, representors:

- noted the boat ramp was managed by Brighton Council and that changes would be subject to approval of the Parks and Wildlife Service as landowner of the in water portion of any jetty and ramp;
- considered reinstatement required approval of those organisations; and
- agreed the parking area associated with the boat ramp and jetty should also be reinstated.

Panel consideration

103. The Panel notes:

- the MAST advice that there are no feasible nearby locations to construct a temporary boat ramp and jetty, that would not present safety issues;
- there is no nexus between the major project and a ferry facility as the use and development creates no demand for a ferry service; and
- Brighton Council and the Proponent are relevant land owners.

104. The Panel finds that:

- requiring construction of a jetty and ancillary services suitable for ferry berthing would alter the major project beyond what is envisaged in the major project declaration;
- it would be unreasonable to require reinstatement of the boat ramp or jetty in circumstances Brighton Council, as a landowner, did not agree;
- the Proponent's commitment to reinstate the boat ramp jetty should form a condition of the major project permit;
- there are no feasible locations for the construction of a temporary boat ramp and jetty; and
- the assessment criteria on clause 4.12.1 Marine safety and infrastructure have been satisfied, subject to application of conditions in a major project permit.

Panel decision

105. The major project permit is subject to condition and restriction number 25.

Marine safety

Representation: Department of State Growth (16)

106. The Proponent submitted that considering the low volume of vessels that utilise the area, having a manned vessel is not necessary, and should be limited to assisting with the safe navigation of vessels.

107. The Proponent submitted it had no comment on preliminary conditions relevant to temporary and permanent navigation aids and markers.

Panel consideration

108. The Panel notes no substantive issues were put forward in relation to preliminary conditions related to navigation aids.

109. The Panel finds that:

- it would be unreasonable to require a vessel to be manned during construction in the River Derwent;
- preliminary conditions relevant to temporary and permanent navigation aids and

markers, in the initial assessment report, should be applied in a major project permit; and

- the assessment criteria for clause 4.12.1 Marine safety and infrastructure have been satisfied, subject to application of conditions in a major project permit.

Panel decision

110. The major project permit is subject to condition and restriction numbers 26 and 27.

Noise Emissions

Representation: Wojcik, D (3), Seath, A (6), Madsen, K (14), Madsen, G (15), Department of State Growth (16)

111. Representors:

- were concerned that the removal of existing vegetation and the repositioning of the road associated with the modified design of Black Snake Road and interchange, will result in an increased level of noise being emitted onto the residences of Dickenson Drive, Granton;
- considered that noise barriers may be required to replace the lost “natural” noise barriers at Granton and Bridgewater;
- were concerned that the design did not incorporate noise barriers near Hayton Place;
- were concerned that the proposed tree plantings do not have sufficient width or level of growth to provide effective means of noise mitigation;
- noted that there is a need for permanent sound barriers to be in place; and
- were concerned that the methodology used for modelling noise impact in relation to particular areas would not provide a sufficient baseline noise measurement.

112. The Proponent submitted:

- that the MPIS showed the potential locations of noise walls;
- that the *Tasmanian State Road Traffic Noise Management Guidelines 2015* should be the reference point in determining appropriate mitigation for noise in relation to the major project;
- operational hours for noise impacts was unreasonably short and should not exclude Sundays;
- that the reported noise assessment forming part of the MPIS was assessed on the reference design and that further modelling should be carried out to consider the chosen design; and
- consolidated plans, based on figures of the Noise Impact Assessment of the MPIS, that showed potential noise wall locations relative to their chosen design.

113. At the hearing the Panel noted that the EPA’s condition N6 Post-construction traffic noise monitoring report, did not include a specific outcome requirement or set any noise levels not to be exceeded.

114. At the hearing the Proponent committed to providing noise monitoring at 29 Hayton Place, Bridgewater.

115. Following collaboration between the EPA and the Proponent, matters such as, monitoring periods, noise levels being triggers rather than limits, and arrangements were agreed in

principle. The EPA and the Proponent submitted that construction and operational noise levels and requirements that remained in contention were as follows:

- the Proponent considering levels and requirements reference the Tasmanian State Road Traffic Noise Management Guidelines 2015 as setting management levels in conditions; and
- the Proponent's and EPA's noise experts considered that potential increases in noise could have an unreasonable impact if it was only controlled by an upper noise level trigger, and that changes between existing and operational noise levels needed to be managed to prevent environmental nuisance or harm to sensitive receptors, particularly at night time; and
- the EPA also considered it was reasonable for sensitive receptors to have respite from elevated noise impacts during construction, by requiring reduced levels of noise emissions due to construction during non-standard hours.

116. The EPA final advice set out the reasons for recommending the Panel impose conditions and restrictions, as follows:

- N1 Management of noise emissions and vibration during construction is to ensure that noise and vibration levels during construction are managed to prevent environmental nuisance or harm to sensitive receptors;
- N2 Hours of construction and noise emission management levels is to minimise the potential for construction to cause environmental nuisance and provide respite to sensitive receptors;
- N3 Ground vibration management levels is to minimise the potential for construction to cause human discomfort or damage structures;
- N4 Noise and vibration monitoring method is to give guidance for appropriate monitoring methodology for the purpose of other noise conditions;
- N5 Pre-construction operational traffic noise impact assessment is to ensure that adequate mitigation measures are planned for and constructed as part of the Project, to mitigate potential operational noise nuisance to sensitive receptors;
- N6 Post-construction traffic noise monitoring report is to ensure that the operational noise target levels for the Project have been met, with the provision for further mitigation works to be considered if necessary; and
- FF1 Underwater noise management is to ensure that noise-generating works in the aquatic environment are undertaken in a way that minimises impact on aquatic fauna.

Panel consideration

117. The Panel notes:

- that the need for, and form of, noise walls has not been determined;
- the submission of the Proponent indicates potential locations of noise walls and should be referenced in a permit condition;
- the parties agreed in principle to minor modifications to the wording of many conditions;
- the EPA's final advice and reasons applicable to the mitigation of impacts from noise emissions; and
- conditions and restrictions in a permit require a level of clarity and the EPA's

recommended conditions provide a nuanced approach to dealing with potential noise impacts, while also clarifying relevant noise levels.

118. The Panel finds:

- it necessary and reasonable to impose the conditions and restrictions recommended by the EPA in their final advice for the reasons specified by the EPA; and
- the assessment criteria on clause 5.1.2 Noise emissions have been satisfied, subject to application of conditions in a major project permit.

Panel decision

119. The major project permit is subject to condition and restriction numbers N1 to N6 and FF1.

Public open space

Representation: Brighton Council (11), Department of State Growth (16)

120. The Brighton Council submitted:

- that the MPIS contains a large range of opportunities for open space, however, the MPIS lists no commitments;
- that there will be significant disturbance of the foreshore and a large amount of land will be left over after development;
- that opportunities relating to open space listed in the MPIS should be included as permit conditions, such as, the landscaping plan should be extended to include all of the project land, the upgrade of Nielsen Park, and provisions for a foreshore trail;
- that any landscape plan must be to the satisfaction of Brighton Council and constructed as part of the project; and
- that any landscape plan should include the entire foreshore to account for all areas impacted by construction.

121. The Proponent submitted:

- that it commits to landscaping over areas impacted by the project, but prefers to avoid conditions that imply the bridge building project is responsible for landscaping areas not impacted by the project;
- an overview of the extent of construction between Nielsen Esplanade and the waterline noting that the Nielsen Park playground land will not be disturbed as part of the project; and
- minor variations to preliminary conditions could be made for clarity.

Panel consideration

122. The Panel notes that:

- connectivity of the open space network is primarily via footpaths and the shared pedestrian/ cycle path set out in the proposed design;
- landscaping plans in the MPIS show the extent of landscaping proposed, but it is unclear if this coincides with all areas of earthworks and soil disturbance;
- there is no nexus between the major project and the broader redevelopment of the foreshore;
- the councils have no relevant role in approving the landscaping plan; and

- preliminary conditions set out in the initial assessment report are relevant for implementing the commitments set out in the MPIS.

123. The Panel finds:

- requiring the redevelopment of the foreshore beyond areas that are impacted by works, would alter the major project beyond what is envisaged in the major project declaration;
- landscaping of public open space should extend to all areas of earthworks, soil disturbance and the like;
- the assessment criteria on clause 4.13 Private Open Space in relation to formal open space areas such the playground at Nielsen Esplanade, walking trails and improved foreshore accessibility have been satisfied, subject to application of conditions in a major project permit; and
- conditions relating to design plans, a construction traffic management strategy and landscaping plans address matters relevant to connectivity and landscaping of the open space network.

Panel decision

124. The major project permit is subject to condition and restriction numbers 29, 35, 36, 44 and 45.

Siting and scale

Representation: Lucas, G (5), Brighton Council (11), Department of State Growth (16)

125. One representor questioned if the proposed height of the bridge was necessary considering the channel of the Derwent River to New Norfolk may not be navigable by keel boats.
126. The Brighton Council representation considered that commitment 26 of the MPIS to require landscaping measures be applied to avoid unreasonable overlooking to Nielson Esplanade, Gunn Street and the Black Snake Inn, should be a condition of the permit and include that mature trees are planted to provide instant screening.
127. The Proponent submitted:
- a report that addressed the potential impacts of the setback, height, bulk and form of the new bridge on nearby residences;
 - that the proposed bridge height will provide more reliable means of access for river traffic;
 - that commitment 26 of the MPIS should be included as a condition of the permit;
 - that the Proponent is satisfied with the requirement of mature tree plantings to deal with privacy issues in the Nielsen Esplanade area; and
 - that the proposed height of the bridge meets the relevant performance criteria of the Tasmanian Planning Scheme.
128. Prior to the hearing the Panel sought and obtained further information from Marine and Safety Tasmania (MAST) that advised it understood the depth of the channel will not change and there is sufficient clearance under the New Bridgewater Bridge.
129. At the hearing the Panel raised a concern that the impact of proposed noise walls on amenity of adjacent properties had not been considered.
130. At the hearing the Proponent:

- submitted consolidated plans showing anticipated potential noise wall locations;
- noted that the noise wall adjacent to the Black Snake Inn has not been included in the consolidated plans considering the advice of the Tasmanian Heritage Council; and
- advised that the necessity for and design of the potential noise walls are yet to be determined as further study is required as per the preliminary conditions of the EPA.

131. At the hearing parties agreed that preliminary conditions setting out that the landscape plan requiring vegetation screening incorporated the outcomes in commitment 26 of the MPIS.

Panel consideration

132. The Panel notes:

- the MAST advice indicates the clearance under the New Bridgewater Bridge, and as a consequence the proposed height of the bridge, is adequate for navigation of vessels;
- the preliminary conditions for landscaping are required to implement commitments and recommendations in the MPIS;
- the need for and form of noise walls, mounds or similar associated with mitigating noise emissions, has not been determined; and
- treatment of noise walls, to mitigate potential for visual impact, or if they are required to meet noise limits, has not been determined.

133. The Panel finds that:

- preliminary conditions in the initial assessment report that are relevant to mitigating visual impact should apply to the major project permit;
- it is reasonable to impose conditions in order to protect the amenity of properties adjacent to the project land from the potential for overshadowing and visual impacts of noise walls;
- treatments to mitigate visual impact of noise walls should be addressed in landscape plan conditions; and
- the assessment criteria on clause 4.14.1 Siting and Scale in relation to the design and siting of the development have been satisfied, subject to application of conditions in a major project permit.

Panel decision

134. The major project permit is subject to condition and restriction numbers 4, 5, 6, 44 and 45.

Tas Gas requirements

Representation: None

135. At the hearing the Proponent raised concerns around the meaning of the Tas Gas conditions being unclear.

136. The Tas Gas final advice set out the reasons for recommending the Panel impose conditions and restrictions, as follows:

- costs incurred by Tas Gas for activity relating to the project must be paid by the Proponent;
- the Hobart High Pressure Transmission Pipeline must be protected as per AS 2885 and Tas Gas procedure requirements; and

- the gas reticulation network must be protected as per AS 4645 and Tas Gas procedure requirements.

Panel consideration

137. The Panel notes:

- the Tas Gas final advice and reasons applicable to impose conditions;
- that final advice of Tas Gas clarifies conditions applicable to the project; and
- no matters of contention were raised in representations or at the hearing.

138. The Panel finds:

- it necessary and reasonable to impose the conditions and restrictions recommended by Tas Gas in their final advice for the reasons specified by Tas Gas; and
- the assessment criteria for clause 5.2 Tas Gas requirements have been satisfied, subject to the application of conditions in a major project permit.

Panel decision

139. The major project permit is subject to condition and restriction numbers TG1 and TG2.

TasWater requirements

Representation: Department of State Growth (16)

140. The Proponent submitted:

- it should not be required to provide a service tray for future TasWater services, as it is beyond the scope of the major project and should be undertaken under an arrangement between TasWater and the Proponent in line with obligations under the *Roads and Jetties Act 1935*;
- the size of pipes has been referred to as 300mm and 500mm;
- many preliminary conditions appeared to reflect standard conditions applicable to private developers and considered that they are inappropriate and should be revisited by the TasWater;
- some terminology used in the TasWater preliminary conditions was inconsistent with other preliminary conditions and suggested conditions should be modified for consistency;
- that some conditions could be relocated under other conditions related to management plan requirements; and
- that easements are not appropriate for TasWater infrastructure in the public road corridor.

141. Prior to the hearing, TasWater:

- clarified a 300mm internal pipe had a 500mm external diameter when pipe thickness and associated fittings was accounted for; and
- advised it was willing to reach an agreement on the provision of service trays and considered the remaining preliminary conditions were necessary to set out how the Proponent's contractor would need to work with TasWater.

142. At the hearing, the parties discussed and dismissed the option of a permit condition that would require the entering into of an agreement between the Proponent and TasWater to deal with the service tray and associated matters.
143. Following collaboration the parties agreed in principle to modified conditions, noting that the requirement for provision of a service tray as a permit remained a matter of contention; with:
- the Proponent raising concern that the provision of a service tray will limit and impact on design of the bridge, and the need to TasWater to pay associated costs; and
 - TasWater suggesting the design costs should have been known from the start, and that the assessment criteria consider the capacity to provide for the orderly provision of future infrastructure.
144. The TasWater final advice set out the reasons for recommending the Panel impose conditions and restrictions, as follows:
- the service tray condition is required for the orderly provision of services and will provide for TasWater and the Proponent to reach agreement on service provision;
 - the asset creation and infrastructure works condition reflects the conditions TasWater would impose on any other development that will impact its infrastructure and provide a formal framework for development; and
 - the 56W consent condition reflects the uncertainty about the final location of bridge piers and similar structures that may be built within 2.0m of its infrastructure.

Panel consideration

145. The Panel notes:
- the parties agreed in principle to minor modifications to the wording of many conditions;
 - the TasWater final advice and reasons applicable to impose conditions; and
 - that objective (h) in part 2 of Schedule 1 of the Act is *'to protect public infrastructure and other assets and enable the orderly provision and co-ordination of public utilities and other facilities for the benefit of the community'*.
146. The Panel finds:
- the service tray condition is consistent with the Schedule 1 objectives of the Act;
 - the service tray condition is not unreasonable given that TasWater will bear its costs;
 - it is necessary and reasonable to impose the conditions and restrictions recommended by the TasWater in their final advice for the reasons specified by TasWater; and
 - the assessment criteria on clause 5.3 TasWater requirements have been satisfied, subject to application of conditions in a major project permit.

Panel decision

147. The major project permit is subject to condition and restriction numbers TW1, TW2, TW3 and TW4.

Vegetation Communities

Representation: Department of State Growth (16)

148. The Proponent submitted that:

- the area of threatened Wetland community listed under the *Nature Conservation Act 2002*, allowed to be taken should be an upper limit of 3.2ha, rather than 2.5ha, noting the MPIS sets out a range of 2.5-3.2ha;
 - conditions applied to the control of impacts on the Wetland community should be consistent with those required by the participating regulator under the *Threatened Species Protection Act 1995*, as the community is primarily composed of the listed *Ruppia Spp.*; and
 - requirements for a Weed Disease and Hygiene Management Plan should be qualified to prior to the commencement of 'relevant' construction.
149. Prior to the hearing the Panel sought advice from the Department of Natural Resources and Environment Tasmania (DNRET) to confirm whether they recommended modifications to preliminary conditions after considering the Proponent's submission.
150. DNRET recommended making the modifications suggested by the Proponent, and that it considered no further conditions beyond the limitation on area of clearance and conversion of the Wetland, were necessary.

Panel consideration

151. The Panel notes:

- the DNRET advice that the proposed modifications to preliminary conditions are reasonable;
- preliminary conditions relevant to how works occur in the area of the threatened native vegetation community of Wetland, such as the use of short shaft motors and the like, duplicates conditions and restrictions recommended by DNRET; and
- the preliminary condition requiring the area of the threatened native vegetation community excluded from clearance and conversion to be identified in the Construction Environmental Management Plan remains relevant.

152. The Panel finds:

- preliminary conditions limiting conversion and clearance of the wetland and identifying areas excluded from clearance and conversion should be included in a major project permit;
- preliminary conditions requiring a Weed, Disease and Hygiene Management Plan to minimise impacts on the threatened community should be included in a major project permit;
- it is unnecessary to duplicate conditions relevant to both species listed under the *Threatened Species Protection Act 1995* and communities listed under the *Nature Conservation Act 2002*; and
- the assessment criteria for clause 5.5.2 Vegetation communities have been satisfied, subject to the application of conditions in a major project permit.

Panel decision

153. The major project permit is subject to condition and restriction numbers 30, 36, 48 and 49.

Visual impact

Representation: Brighton Council (11), Madsen, K (14), Department of State Growth (16)

154. Representors:

- considered that the sheer blank walls should be treated to provide visual interest, which may include changes in materials and colours, textures or murals;
- raised concern over the long term management of vegetation screening; and
- suggested mature trees, or a combination of established trees and tube stock should be required as part of landscaping provisions to more quickly mitigate visual impacts.

155. At the hearing Brighton Council:

- noted that the exhibited design plans submitted by the Proponent indicated the treatment of walls associated with the project; and
- suggested that a permit condition be included to require that a materials schedule be integrated into the final landscaping design and approved by Council.

156. At the hearing the Proponent:

- noted it commits to liaising with Council on the finishes of the blank sheer walls however, they prefer to avoid incorporating conditions that requires the Proponent to seek council approval for the treatment of the sheer wall surfaces; and
- considered requiring a combination of tube stock and established trees was not unreasonable.

Panel consideration

157. The Panel notes preliminary conditions in the initial assessment report include measures for mitigating adverse impacts upon the visual amenity including lighting, a materials and finishes schedule, and design plans showing treatment of blank walls.

158. The Panel finds:

- preliminary conditions related to landscaping and lighting are required to give effect to commitments to mitigate adverse impacts;
- preliminary conditions do not clearly consider treatment of hard surfacing areas, a landscape management program, the use of established trees, or treatment of noise walls to mitigate visual impacts, and conditions in a major project permit should deal with these matters; and
- the assessment criteria for clause 4.15.1 Visual impact in relation to minimising adverse impact of visual amenity have been satisfied, subject to the application of conditions in a major project permit.

Panel decision

159. The major project permit is subject to condition and restriction numbers 4, 5, 6, and 44, 45, 46 and 47.

Other land use planning requirements

Representation: Department of State Growth (16)

160. The Proponent submitted that proposed conditions and restrictions require minor modification in relation to a range of matters, including:

- preliminary conditions for bushfire-prone areas should be limited to activities undertaken by the Proponent, as they could not be responsible for activities of private landowners within the project land;
- to clarify the timing of preliminary conditions; and

- to clarify the intent of preliminary conditions; or
- that they had no comment on preliminary conditions.

Panel consideration

161. The Panel notes:

- the submission by the Department of State Growth;
- that preliminary conditions set out in the initial assessment report are relevant for implementing the commitments and recommendations set out in the MPIS;
- the assessment criteria related to coastal erosion are adequately managed by the application of preliminary conditions relevant to dredging and reclamation;
- the flood risk incorporates the risks of coastal inundation and is addressed by preliminary conditions related to flood; and
- there are no potential impacts of the major project that would cause an unreasonable impact on the safety, security, operation of, or access to, existing or future electricity infrastructure, as determined by TasNetworks' advice provided to the Panel under section 60ZW of the Act.

162. The Panel finds:

- minor modifications to permit conditions and restrictions are required for certainty of applications and clarity;
- the assessment criteria have been satisfied for the following clauses, subject to the application of conditions in the major project permit:
 - clause 4.3.1 Storing of materials in bushfire-prone areas;
 - clause 4.4.1 Use within a coastal erosion hazard area;
 - clause 4.4.2 Development within a coastal erosion hazard area;
 - clause 4.5.1 Development within a coastal inundation hazard area areas;
 - clause 4.9.1 Geoconservation; and
 - clause 4.10.1 Development subject to landslip hazard;
- the assessment criteria on clause 4.7.1 Electrical entity infrastructure protection are not required to be satisfied by the application of conditions in a major project permit as confirmed in TasNetworks' advice provided to the Panel under 60ZW of the Act.

Panel decision

163. The major project permit is subject to condition and restriction numbers 17, 21, 22, 35, 36, 42 and 43.

Other EPA requirements

Representation: Department of State Growth (16)

164. The Proponent proposed a number of minor modifications to preliminary conditions: for alignment of conditions to specific construction activities, to increase clarity, and so that conditions only apply to activities undertaken by the Proponent.

165. At the hearing the EPA advised it was happy in principle with the modifications proposed by the Proponent.

166. No matters of contention or identification that conditions were not reasonably necessary, where raised in representations or at the hearing.
167. The EPA final advice sets out the reasons for recommending the Panel impose conditions and restrictions, which in summary includes:
- to prevent emissions of pollutants that could result in environmental nuisance or environmental harm;
 - to minimise the potential for adverse impact on sensitive receptors;
 - to stipulate water quality requirements and indicators for pollutant levels; and
 - to validate impact models, monitor trigger levels and require appropriate mitigation and management measures are imposed.

Panel consideration

168. The Panel notes:
- the parties agreed in principle to minor modifications to the wording of many conditions; and
 - the EPA's final advice and reasons applicable to water quality, stormwater, hydrogeology, contaminated land and light pollution.
169. The Panel finds:
- it necessary and reasonable to impose the conditions and restrictions recommended by the EPA in their final advice for the reasons specified by the EPA; and
 - the assessment criteria on clauses 5.1.3 Water quality, 5.1.4 Stormwater, 5.1.5 Hydrogeology, 5.1.6 Contaminated land, and 5.1.7 Light pollution have been satisfied, subject to application of conditions in a major project permit.

Panel decision

170. The major project permit is subject to condition and restriction numbers G1 to G7, GW1, H1, L1, L2, M1, S1, S2, WM1, and WQ1 to WQ8.

Asset ownership and maintenance

Representation: Glenorchy City Council (9), Brighton Council (11)

171. Representors:
- considered that future asset ownership and management of land and infrastructure including roads, footpaths, stormwater, and the like, needed to be clearly defined and form part of endorsed documents;
 - considered that any assets to be owned or managed by councils needed to be designed and constructed to the council's satisfaction;
 - considered prior to approval of the design the Department of State Growth will need to enter into maintenance agreements; and
 - noted approvals may be required for works on any council owned and managed land.
172. The Proponent submitted:
- that ongoing asset ownership and maintenance boundaries are important to determine and has no objection to defining project ownership and management arrangements of

the road and trail network on a plan to the satisfaction of a council and the Crown prior to Project completion;

- plans should be finalised no later than six months prior to the completion of construction of the relevant section, to take into account changes that may occur during the construction program; and
- guidance for asset ownership and maintenance responsibilities should be taken from the *Roads and Jetties Act 1935*.

173. At the hearing parties:

- noted they would need to reach agreement on the ongoing maintenance and management responsibility of assets including funding and design requirements as required by relevant legislation outside of the Act.
- agreed that the Proponent would provide councils with a letter of commitment on their intention to negotiate both the ownership of assets and agreed specifications and standards for acceptance of assets.

Panel consideration

174. The Panel notes the agreement of the parties and that the matters raised in representations are either outside the scope of its assessment or managed by the operation of relevant legislation.

175. The Panel finds that there are no specific conditions or restrictions required.

Mechanics and operation of a permit

Representation: Department of State Growth (16)

176. Representors raised concerns with the mechanics of preliminary conditions for design plans and management plan, and staging.

Design Plans and Management Plans

177. During the hearing process representors indicated that the task of understanding what development was being proposed for approval was difficult to understand.

178. The Proponent indicated that due to the delivery process being used to design and construct the project:

- some aspects of the design have evolved considerably since the initial MIPS was submitted; and
- further consultation and detailed design is required to finalise some aspects of the project.

179. The Proponent and relevant regulators discussed the need for management plans and other plans to be prepared in order to confirm the detailed response to some aspects of the assessment criteria. The Proponent raised concerns around the capacity of some of these plans to be approved within a permit condition.

Staging

180. The Proponent indicated that it was possible that major construction activity may be proceed on some elements of the project prior to works in other areas commencing. An example of this may be commencing the construction of the road interchanges on one side of the river prior to any works commencing on the other side of the river.

181. The Proponent outlined options to enable staging to occur in a clear and structured manner.
182. The Proponent also requested that low impact work be permitted prior to providing various plans that are required to be provided before construction. This is because low impact works include activities necessary to provide those plans.
183. The Proponent submitted that low impact work could mean:
- Topographical or feature survey work including installation of controls and markers, dilapidation surveys, underground service location including potholing, geotechnical investigations including drilling, coring, test pitting and hand testing, collection of samples for analysis including of contaminated materials, installation of monitoring stations, installation of mitigation measures for sediment and erosion control, installation of temporary fencing, establishment of temporary facilities to support construction (e.g. site offices and laydown areas), establishment of exclusion zones for protected areas, property demolition completed in line with normal environmental controls, archaeological investigations, geoheritage investigations, maintenance of existing facilities under the control of the Proponent.

Panel consideration

Design Plans and Management Plans

184. The Panel notes that:
- there is substantial merit for all parties in a consolidated set of design plans being provided and endorsed prior to major construction works commencing. The provision of these design plans can be responsive to the staging proposed, so that all design plans for the entire project are not required for construction to commence in a specific area.
 - infrastructure projects of significant scale and complexity are able to be assessed with the knowledge that some aspects of detailed design or management responses to some aspects of planning objectives are yet to be finalised.
185. The Panel finds it reasonable to enable design plans, management plans and other plans required by the permit, to be:
- prepared to the satisfaction of the Commission or a relevant regulator; and
 - able to be altered or modified through a secondary process.
186. The Panel finds preliminary conditions relevant to design plans and management plans require modification to improve clarity and provide for flexibility in staging.

Staging

187. The Panel notes that while a complex staging process may increase both risk and the duplication of activity, these are matters for the Proponent to manage.
188. The Panel finds:
- it is reasonable for the development of the project to be staged in a variety of different ways. Provided a stage or part of the project complies with relevant permit conditions there is no reason to defer the commencement of construction of one element of the project until compliance with permit conditions on another aspect of the project has occurred;
 - it is reasonable to clarify development and works does not include low impact work, necessary for developing or implementing plans required under a major project permit; and
 - preliminary conditions relevant to staging, require modification to give effect to these findings.

Panel decision

189. The major project permit is subject to condition and restriction numbers 1, 2, 3, 7, 8, 9 and 10.

Other matters raised in representations

Representation: Roberts, S. (1), Datlan, M and M (2), Norris, D (4), Glenorchy City Council (9), Brighton Council (11)

190. Representors raised a number of matters, including:

- seeking retention of existing palm trees;
- erosion of an existing road embankment on the Lyell Highway adjacent to 4 Forest Road, Granton;
- use of land adjacent to 1 Wallace Street, Bridgewater;
- that utility easements may preclude building adjacent to 1 Wallace Street, Bridgewater;
- that the project should mandate a percentage of local people to be employed;
- consideration should be given to the installation of public art that identifies the land as the entrance to greater Hobart; and
- that the Bridgewater interchange master plan should be included as a condition of a planning permit.

191. The Proponent submitted:

- they would consult with stakeholders to facilitate relocation of the palm trees;
- no works were identified to impact on the Lyell Highway embankment adjacent to 4 Forest Road, Granton. However, if works impacted on the embankment it would be treated consistent with landscaping requirements;
- no works were proposed adjacent to 1 Wallace Street, Bridgewater;
- while consideration is being given to the inclusion of public art, its provision should not be a condition applied under a permit;
- Government procurement policies set out the requirements for local employment; and
- any master planning, and implementation of actions, such as revitalisation of the foreshore or similar at Bridgewater is outside the scope of the proposal.

Panel consideration

192. The Panel notes the submission by the Proponent, and that the matters raised in representations are either outside the scope of its assessment or are only incidentally associated.

193. The Panel finds that there are no specific conditions or restrictions required.

Rail corridor

Representation: Lucas, G (5), Glenorchy City Council (9), Madsen, G (15)

194. Representors:

- noted that the scope of works does not provide for light rail across the new bridge;

- noted it seemed ridiculous that there is no option for suburban or freight rail and a rail connection is likely to be required in the future;
 - commitments to preserve a rail corridor spatially are not shown on plans; and
 - requested that the design plans be required to show the rail corridor.
195. The Proponent submitted it could provide design plans that showed the existing rail corridor is retained, including showing a useable clearance was available both under and beside the proposed bridge.
196. The Department of State Growth noted provision of a new rail connection was outside the scope of the major project proposal.

Panel consideration

197. The Panel notes:
- the existing South Line attached to the Bridgewater Bridge and the causeways and extending into Hobart is non-operational; and
 - the MPIS sets out the existing non-operational South Line over the River and the existing rail corridor will be preserved, so that a rail line could be reinstated in the future.
198. The Panel finds that
- preserving the non-operational South Line rail corridor for potential future rail connections is sound strategic planning and consistent with the furthering of objectives specified in Schedule 1 of the Act;
 - conditions or restrictions are required to implement the Proponent's commitment to retain the rail corridor for future use; and
 - the assessment criteria on clause 4.2.2 Safety and efficiency of the road and rail network in relation to rail network have been satisfied for the non-operational portion of the South Line.

Panel decision

199. The major project permit is subject to condition and restriction numbers 6 and 14.

Attachments

Attachment 1 – List of representations and submissions

Attachment 2 – Major project permit

List of representations and submissions

No	Name
1.	Roberts, S
2.	Datlan, M and M
3.	Wojcik, D
4.	Norris, D
5.	Lucas, G
6.	Seath, A
7.	Tasmanian Active Living Coalition
8.	Department of Natural Resources and Environment Tasmania
9.	Glenorchy City Council
10.	Derwent Valley Council
11.	Brighton Council
12.	Kernke, D
13.	State Emergency Service
14.	Madsen, K
15.	Madsen, G
16.	Department of State Growth

TASMANIAN PLANNING COMMISSION



MAJOR PROJECT PERMIT

MAJOR PROJECT PERMIT GRANTED BY THE DEVELOPMENT ASSESSMENT PANEL UNDER SECTION 60ZZM(1)(a) OF THE *LAND USE PLANNING AND APPROVALS ACT 1993*

MAJOR PROJECT NAME:	New Bridgewater Bridge Major Project
PERMIT NUMBER:	MPP2201
PERMIT HOLDER:	The Crown in Right of Tasmania
PROJECT LAND:	The land subject to the major project permit includes all of the land shown in Schedule 2 of this permit.
THE PERMIT ALLOWS:	<ol style="list-style-type: none">1. Use of the land for a transport network;2. Development of the land for a bridge and road between Bridgewater and Granton with a four lane connection (2 in each direction) and all associated and ancillary development including works, reclamation, and the demolition of the existing Bridgewater Bridge and buildings at 37 Black Snake Road, Granton.
THE PERMIT INCLUDES:	All conditions and restrictions set out in the permit; Schedule 1 – Definitions; and Schedule 2 – Project Land.

CONDITIONS AND RESTRICTIONS

Approved plans

1. Design plans, management plans and other plans that are required and approved under a condition of this permit, form part of the permit.
2. Use and development must be undertaken generally in accordance with the required, approved design plans, management plans and other plans.
3. Approved design plans, management plans and other plans must not be altered or modified without the written consent of the Commission, or the relevant regulator responsible for enforcement of a management plan or other plan.

Design plans

4. Prior to the commencement of relevant construction, design plans prepared by a suitably qualified person, must be provided to the satisfaction of the Commission.
5. Design plans must be fully dimensioned, drawn to a scale, and be generally in accordance the following plans:
 - 5.1. New Bridgewater Bridge – Master Plan – Sheet No 0002(dated 11-Nov-21);
 - 5.2. New Bridgewater Bridge – finishes schedule – Sheet No 0003 (dated 15-Nov-21);
 - 5.3. New Bridgewater Bridge – General Arrangement – Sheet 1 to 5 of 5 - Sheet No 0005 to 0008 (dated 11 Nov-21) and Sheet No 0009 (dated 10-Nov-21);
 - 5.4. New Bridgewater Bridge – Main Bridge details Sheet 06 – Sheet No. 0015 (dated 10-Nov-21);
 - 5.5. New Bridgewater Bridge – Black Snake Bridge Sheet 02 – Sheet No. 0020 (dated 10-Nov-21);
 - 5.6. New Bridgewater Bridge – Perspective Sheet 01 to 03 and 05 – Sheet No. 0030, 0031, 0032, 0034 (dated 10-Nov-21);
 - 5.7. New Bridgewater Bridge – Typical cross sections Sheet 1 and 5 – Sheet No. 1101 and 1105 (dated 9-Nov-21);
 - 5.8. New Bridgewater Bridge – Shared use path general arrangements Sheet 1 to 4 – Sheet No. 1401, 1402, 1403, 1404(dated 9-Nov-21);
 - 5.9. New Bridgewater Bridge – Chosen Design – 3 sheets (undated);
 - 5.10. New Bridgewater bridge project – Potential locations of noise walls (sheets 1 to 3 of 3), (undated); and
 - 5.11. the location and dimensions for reclamation set out in the Existing and Future Public Open Space and Access Paths – Bridgewater and Granton (on or near project land), Burbury Consulting (2 sheets), dated 11/11/2021.
6. The design plans must be modified from the plans listed in condition 5:
 - 6.1. so that the height of roads on the south side of the River Derwent, at the intersection of Main Road and Black Snake Road, and Main Road passing under the New Bridgewater Bridge, are capable of accommodating a road height higher than a 1% annual exceedance probability from a flood event in 2090;
 - 6.2. to respond to issues identified in previous road safety audit reports;
 - 6.3. to include plans of access provisions for land impacted by the new works;
 - 6.4. to provide reasonable provision for U-turns to accommodate local traffic requirements on roads with turning limitations to or from intersecting roads or properties;
 - 6.5. to provide *Disability Discrimination Act 1992* (Cth) compliant paths;
 - 6.6. to provide bus stops in consultation with public transport providers;
 - 6.7. to provide safe pedestrian and cyclist crossing points where paths meet roadways and other paths, and to provide access to bus stops;

- 6.8. to provide for the creation of a foreshore trail beneath the new bridge at Bridgewater, connecting the path from folios of the Register 176642/4 and 176642/5 to Gunn Street;
- 6.9. to include footpaths on both sides of Gunn Street;
- 6.10. with a materials and finishes schedule that has:
 - 6.10.1. a colour palette of natural and muted hues; and
 - 6.10.2. low reflectivity to avoid glint and glare;
- 6.11. to include the final location and general arrangements of all structures;
- 6.12. to include the works or structures associated with any operating stage noise mitigation measures required by this permit;
- 6.13. to identify the areas of land to be reclaimed from the River Derwent above the high water mark, that does not exceed:
 - 6.13.1. 5500m² at the southern site; and
 - 6.13.2. 2500m² at the northern site;
- 6.14. to show the existing rail corridor, including showing a useable clearance available under and beside the bridge;
- 6.15. to include a vehicle crossing for access to the Watch House property; and
- 6.16. to be consistent with the requirements of any other permit condition.

Staging

7. Use and development may be completed in stages. The corresponding obligations arising under this permit may be completed in accordance with the approved staging report.
8. Where staging is proposed, a staging report must be provided to the satisfaction of the Commission.
9. A staging report must set out for the whole of the project:
 - 9.1. how relevant aspects of construction and operation shall be staged and sequenced; and
 - 9.2. the location and details of associated development and works within each stage.

General conditions and restrictions

Low impact work

10. Low impact work may occur prior to construction.

Transport

11. New or modified local roads, parking, pedestrian and cycle infrastructure must be designed to meet relevant design, engineering and safety guidelines including Austroads Guide to Traffic Management, with new roads joining existing roads in a smooth and continuous fashion, in accordance with advice from the road authority.

12. Independent Road Safety Audits, must be undertaken in accordance with advice from the road authority and the Austroads Guide to Road Safety, Part 6, 2019, for all stages of the Project development, including pre-opening.
13. Safe pedestrian and cyclist access must be maintained at all times. Where pre-existing engineered pedestrian and/or bicyclist pathways, including all surface types (asphalt, concrete or gravel) are impacted, alternative routes are to be provided using temporary pathways. All temporary pathways must be of a standard not less than that of pre-existing pathways, including the standard of lighting. All temporary pathways and crossings must be clearly delineated, signed and fenced to prevent easy access to the remainder of the Construction Site.
14. Changes to bus stops and routes must be determined in consultation with relevant public transport operators.

Aboriginal heritage

15. Works must not occur within 2m of site AH13880.
16. Prior to the commencement of works, highly visible and durable barricading must be placed around site AH13880 at a distance of not less than a 2m radial buffer.

Bushfire-prone areas

17. The following must not be stored by the permit holder and its contractors on the project land during construction or operation:
 - 17.1. hazardous chemicals of a manifest quantity;
 - 17.2. explosives in a classified explosives location, or large explosives location under the *Explosives Act 2012*.

Reclamation

18. Reclamation must use one or more of the following fill types:
 - 18.1. clean fill type 1 as defined under the *Environmental Management and Pollution Control Act 1994*; and
 - 18.2. an alternative fill approved by the Director, EPA.
19. Reclaimed land at the southern site must be armoured with rock or similar erosion protection measures to minimise the risk of predicted 1% AEP erosion events in 2090.
20. Reclaimed land at the northern site must have erosion protection measures installed, commensurate with the duration of usage.

Landslip risk

21. For all cuttings identified on New Bridgewater Bridge – General Arrangement - Sheet 4 and 5 of 5 – Sheet No 0008 (dated 11 Nov-21) and Sheet No 0009 (dated 10-Nov-21):
 - 21.1. construct catch drains above new cuttings and install drape netting; or
 - 21.2. apply alternative strategies as determined by a suitably qualified person to mitigate rock fall.

22. For all new cuttings identified on the eastern side of the New Bridgewater Bridge – Master Plan - Sheet No 0002 (dated 11-Nov-21):
- 22.1. construct catch drains above each cutting;
 - 22.2. install drape netting; or
 - 22.3. apply alternative strategies to mitigate rock fall.

Local Heritage

23. There are to be no works on the Bridgewater railway station's concrete platform identified as 4.01 on Figure 23: identified sites – Map 13 on page 45 of Appendix L of the MPIS.
24. The fig tree at 37 Black Snake Road shown as 18.10 on Figure 15: identified sites – Map 5 Bridgewater Bridge Replacement – Preliminary Heritage Impact Assessment (undated), must be retained and protected and works within the tree protection zone of the fig tree excluded.

Marine safety and infrastructure

25. Within 1 year of the New Bridgewater Bridge being open to traffic, reinstate the Bridgewater boat ramp and jetty, and adjoining parking area, to an equivalent or better standard than existing, unless agreed in writing with Brighton Council.
26. Prior to and during construction works within the River Derwent:
- 26.1. install and maintain temporary navigation aids and markers during construction of the New Bridgewater Bridge, in accordance with advice from MAST; and
 - 26.2. have a vessel available to be deployed within the project land in the River Derwent to assist with the safe navigation of vessels.
27. Prior to the completion of the development, install permanent navigation aids and markings for the ongoing safe navigation of vessels, in accordance with advice from MAST.

Noise walls

28. Noise walls must not reduce sunlight to the private open space of a dwelling to less than 3 hours between the hours of 9:00am and 3:00pm on 21 June.

Public Open Space

29. An open space network must be provided substantially in accordance with the future public open space, shown in:
- 29.1. Existing and Future Public Open Space and Access Paths – Bridgewater (on or near project land), dated 1/11/2021; and
 - 29.2. Existing and Future Public Open Space and Access Paths – Granton (on or near project land), dated 1/11/2021.

Vegetation Communities

30. Clearance and conversion of the wetlands threatened native vegetation community listed under the *Nature Conservation Act 2002* is to be not more than 3.2ha.

Plans reports and strategies

Construction Traffic Management Strategy

31. Prior to the commencement of works that impact on traffic, a Construction Traffic Management Strategy prepared by a suitably qualified person, must be provided to the satisfaction of the Commission, and provided to Derwent Valley, Glenorchy and Brighton councils for information.
32. The Construction Traffic Management Strategy must include:
 - 32.1. details of how advice of delays to motorists will be communicated;
 - 32.2. consideration of all property access and road users including vehicles, light and heavy, public transport, pedestrians and cyclists;
 - 32.3. how contractor parking will be managed to minimise impact on public on street parking;
 - 32.4. measures to minimise adverse impact on access for commercial and residential properties;
 - 32.5. detail of the staging of construction outside and within the existing road network;
 - 32.6. a requirement to maintain at least 1 lane of traffic flow in each direction along the Midland Highway, except that traffic may be stopped for the purposes of raising the lifting span on the existing bridge for operational and maintenance purposes, and traffic may be stopped in one or both directions for short periods for the purposes of construction of specific work (including installation of bridge spans, street lighting, gantries and other overhead structures) which cannot safely be constructed without affecting traffic, in which case such periods shall be minimised to the maximum extent permissible;
 - 32.7. utilising existing road corridors (such as Old Main Road), new road corridors, or Crown land located between existing and new road corridors, as detour routes whilst interchanges are under construction;
 - 32.8. advanced warning signage placed on the southern approach to the Bowen Bridge on the Brooker Highway (prior to Elwick Road junction) and Midland Highway on the northern approach to the East Derwent Highway roundabout to provide a detour route and reduce traffic flow through the construction site;
 - 32.9. a requirement that a construction traffic management plan be prepared in accordance with Australian Standard, AS1742.3:2019; and
 - 32.10. details of how public access to the playground and informal walking track at Nielson Esplanade will be retained during construction.

Archival records

33. Prior to demolition or removal of any buildings or structures at 37 Black Snake Road, Granton provide archival records of the site prepared by a suitably qualified person to the satisfaction of the Commission, and to the Glenorchy City Council for information.
34. The archival records must include:
 - 34.1. illustrated archival record of the key attributes;
 - 34.2. detailed descriptions and annotated photographs of the:

- 34.2.1. house;
- 34.2.2. old coach house;
- 34.2.3. cottage;
- 34.2.4. stable;
- 34.2.5. railway shed;
- 34.2.6. blacksmith shop;
- 34.2.7. workers huts;
- 34.2.8. pickers hut; and
- 34.2.9. sandstone culvert; and
- 34.3. an inventory of moveable heritage items;
- 34.4. detail recording and measured drawings of the sandstone culvert;
- 34.5. a full description of the setting; and
- 34.6. an annotated overlay of key plantings.

Construction Environmental Management Plan

- 35. Prior to the commencement of relevant construction a Construction Environmental Management Plan must be prepared by a suitably qualified person and provided to the satisfaction of the Commission.
- 36. The Construction Environmental Management Plan must:
 - 36.1. for land reclamation works:
 - 36.1.1. set out the methodology for reclamation works, including the type of fill required by condition 18;
 - 36.1.2. set out the erosion protection measures to be used at the southern site and northern site; and
 - 36.1.3. set out the methodology of how reclamation at the northern site will be removed;
 - 36.2. for works on the causeway, set out the management strategies, including monitoring, to be applied to minimise the risk to causeway embankment failure;
 - 36.3. for wetlands work, include construction diagrams and maps that identify areas of the wetlands threatened native vegetation community to be excluded from clearance and conversion; and
 - 36.4. include construction diagrams and maps that identify the location of the site AH13880 to be excluded from works.

Construction Heritage Management Plan

- 37. A Construction Heritage Management Plan must be prepared by a suitably qualified person, to the satisfaction of the Commission, for the following local heritage places:
 - 37.1. Bridgewater railway station's concrete platform, listed as BRI-C6.1.1 in the Brighton Local Provisions Schedule;

- 37.2. Parkview listed as BRI-C6.1.20 in the Brighton Local Provisions Schedule; and
 - 37.3. Fairfield, formerly Hayfield, listed as BRI-C6.1.70 in the Brighton Local Provisions Schedule.
38. The Construction Heritage Management Plan must:
- 38.1. include protection zones and vibration management around structures and areas of local historic heritage significance, to avoid damage to these items during construction activity; and
 - 38.2. specify the surface treatments for footpaths and shared paths adjacent to the Bridgewater railway station's concrete platform in consideration of the historic cultural landscape setting of the place.

Construction Noise and Vibration Management Plan

39. A Construction Noise and Vibration Management Plan must be prepared by a suitably qualified person and must include a vibration risk assessment for the local heritage places listed below:
- 39.1. Bridgewater railway station's concrete platform, listed as BRI-C6.1.1 in the Brighton Local Provisions Schedule;
 - 39.2. Parkview listed as BRI-C6.1.20 in the Brighton Local Provisions Schedule; and
 - 39.3. Fairfield, formerly Hayfield, listed as BRI-C6.1.70 in the Brighton Local Provisions Schedule.

Flood Management Plan

40. Prior to commencement of works that will impact flood risk, a flood management plan prepared by a suitably qualified person, must be provided to the satisfaction of the Commission.
41. The flood management plan must:
- 41.1. set out:
 - 41.1.1. the flood mitigation or reduction measures to be put in place so that there is no increase in flood risk from development to the Watch House, 1, 2, 4, 5 and 7 Wallace Street, 1 to 5 Riverside Drive, and the former Black Snake Inn, from a 1% annual exceedance probability flood event in 2090;
 - 41.1.2. how flood risk from temporary works during construction will be managed to ensure the safety of workers and public during construction; and
 - 41.1.3. how existing access to utility services is to be maintained during flood events that may reasonably occur during construction; and
 - 41.2. be based on a hydrologic or hydraulic model of the design plans.

Geodiversity values study

42. Prior to the commencement of construction at the Brooker sub-site of the Granton to New Norfolk Quaternary Stratigraphic Sites a study, prepared by a suitably qualified person that details the geodiversity values of that sub-site, must be provided to the Commission.
43. Within 1 year after the new Bridgewater Bridge being open to traffic, an addendum to the study of the Brooker sub-site of the Granton to New Norfolk Quaternary Stratigraphic Sites, prepared by a

suitably qualified person, that documents the geodiversity values encountered during works and those remaining post construction, must be provided to the Commission.

Landscape plan

44. Prior to the commencement of relevant construction a landscape plan prepared by a suitably qualified person must be provided to the satisfaction of the Commission.
45. The landscape plan must:
 - 45.1. be generally in accordance with:
 - 45.1.1. New Bridgewater Bridge – Landscaping Plan – Sheet No. 7903 and 1902, (undated); and
 - 45.1.2. drawings of Existing and Future Public Open Space and Access Paths – Bridgewater and Existing and Future Public Open Space and Access Paths – Granton dated 1/11/2021; and
 - 45.2. include the vegetation screening, using mature trees and tube stock, shown in:
 - 45.2.1. New Bridgewater Bridge – Landscaping Plan, Sheet No 1902 adjacent to the former Black Snake Inn; and
 - 45.2.2. New Bridgewater Bridge – Landscaping Plan, Northern, sheet No 7903 adjacent to Nielson esplanade, Gunn Street, and Hayton Place; and
 - 45.3. include the areas of earthworks, soil disturbance and the like, that is not being treated with an impervious surface, such as roads footpaths;
 - 45.4. include details of hard surfacing areas, materials and finishes including retaining structures and pedestrian and cycle circulation areas;
 - 45.5. include a schedule of the plants and grasses to be used, noting tree, hedge and shrub sizes at planting and maturity;
 - 45.6. set out the extent of tree protection zones and work exclusion zones around existing vegetation to be retained;
 - 45.7. include details that implement the recommended mitigation measures for treatment of cut rock faces, and landscaping set out in section 4.15.7 of the MPIS, dated November 2021;
 - 45.8. show the finished level or contours of works, any structures or mounds associated with mitigating noise emissions and how this relates to adjoining properties;
 - 45.9. include a landscape management program detailing management responsibilities and maintenance schedules for landscaped areas incorporating trees and vegetation protected/retained during construction; and
 - 45.10. show any staging and the timing, commencement and completion of landscaping.

Lighting design plan

46. Prior to the commencement of relevant construction a lighting design plan prepared by a suitably qualified person must be provided to the satisfaction of the Commission.

47. The lighting design plan must:

- 47.1. identify if there is any proposed decorative lighting;
- 47.2. provide illumination at the minimum required to achieve road safety;
- 47.3. set out the location and height of light poles; and
- 47.4. minimise the height of light poles.

Weed Disease and Hygiene Management Plan

48. Prior to the commencement of relevant construction, a Weed, Disease and Hygiene Management Plan prepared by a suitably qualified person must be provided to the satisfaction of the Commission.

49. The Weed, Disease and Hygiene Management Plan must be consistent with the Weed and Disease Planning and Hygiene Guidelines - Preventing the spread of weeds and diseases in Tasmania.

ENVIRONMENT PROTECTION AUTHORITY TASMANIA

For the purpose of section 60ZZP(9) of the *Land Use Planning and Approvals Act 1993*, the Environment Protection Authority is the relevant regulator responsible for enforcement of conditions and restrictions G1 to G7, A1 to A5, FF1, GW1, H1, L1 to L2, M1, N1 to N6, S1 to S2, WM1, and WQ1 to WQ8.

General

G1 Access to and awareness of conditions and associated documents

1. A copy of these conditions and any associated documents referred to in these conditions must be held in a location that is known to and accessible to the person responsible for the project. The person responsible for the construction and demolition phases of the project must ensure that all persons who are responsible for undertaking work in association with this permit, including contractors and sub-contractors, are familiar with these conditions to the extent relevant to their work.

G2 Incident response

1. If an incident, not otherwise permitted by this approval, causing or threatening environmental nuisance, serious environmental harm or material environmental harm from pollution occurs in the course of the project, then the person responsible for the project must immediately take all reasonable and practicable action to minimise any adverse environmental effects from the incident.

G3 No changes without approval

1. The following changes from that already approved under this permit or any of its conditions, if they may cause or increase the emission of a pollutant which may cause material or serious environmental harm or environmental nuisance, must only take place in relation to the construction and demolition phases of the project if such changes have been approved in writing by the EPA Board, or by the Director:
 - 1.1. a change to a process used in the course of carrying out the project; or
 - 1.2. the construction, installation, alteration or removal of any structure or equipment used in the course of carrying out the project; or

- 1.3. a change in the quantity or characteristics of materials used in the course of carrying out the project.

G4 Change of responsibility

1. If the person responsible for the construction and demolition phases of the project intends to or ceases to be responsible, that person must notify the Director in writing of the full particulars of any person succeeding him or her as the person responsible before such cessation.

G5 Notification prior to commencement

1. The Director must be notified in writing of the commencement of construction, demolition stages and operation stages of the project, at least 14 days before each stage commences.

G6 Complaints register

1. A public complaints register must be maintained for the duration of the construction and demolition phases of the project. The public complaints register must, as a minimum, record the following detail in relation to each complaint received in which it is alleged that environmental nuisance and/or harm has been caused by the project:
 - 1.1. the date and time at which the complaint was received;
 - 1.2. contact details for the complainant (where provided);
 - 1.3. the subject matter of the complaint;
 - 1.4. any investigations undertaken with regard to the complaint; and
 - 1.5. the manner in which the complaint was resolved, including any mitigation measures implemented.
2. Complaint records must be maintained for a period of at least three (3) years.

G7 Environmental Management Plans

1. A minimum of one month prior to the planned commencement of construction, or by a date otherwise specified in writing by the Director, relevant Environmental Management Plans (EMPs) as listed in Condition G7.4 must be submitted to the Director for approval, addressing all proposed upcoming construction works for the project. This requirement will be deemed to be satisfied only when the Director indicates in writing that the submitted documents adequately address the requirements of these conditions (as relevant) to their satisfaction. Construction cannot commence until the Director has approved all EMPs applicable to the commencing works.
2. A minimum of one month prior to the planned commencement of the existing bridge demolition phase of the project, or by a date otherwise specified in writing by the Director, Environmental Management Plan (EMPs) as listed in Condition G7.4 must be submitted to the Director for approval, addressing all proposed demolition works. This requirement will be deemed to be satisfied only when the Director indicates in writing that the submitted documents adequately address the requirements of these conditions (as relevant) to their satisfaction. Demolition cannot commence until the Director has approved all EMPs applicable to the commencing works.

3. The EMPs must be prepared in accordance with these conditions and any reasonable guidelines provided by the Director, and otherwise consistent with the MPIS, with the purpose of preventing environmental nuisance and/or harm. EMPs must be updated as necessary to reflect staging of works or other changes as the project progresses, and updates provided to the Director for approval.
4. Unless otherwise approved in writing by the Director, without limitation, the following EMPs must be provided for the construction phase of the project and, as relevant, for the demolition phase of the project:
 - 4.1. an Air Quality Management Plan, addressing both dust and emissions;
 - 4.2. a Noise and Vibration Management Plan, including consideration of underwater noise management;
 - 4.3. an Estuarine Water Quality Monitoring Plan;
 - 4.4. an Estuarine Water Quality Management Plan;
 - 4.5. a Contingency Management Plan for construction in the Derwent;
 - 4.6. a Stormwater Management Plan;
 - 4.7. an Environmentally Hazardous Materials Management Plan;
 - 4.8. a Waste Materials Management Plan;
 - 4.9. a Lighting Plan; and
 - 4.10. a Decommissioning and Rehabilitation Plan.
5. The EMPs must include the following:
 - 5.1. staging of proposed works, including consideration of management changes as works progress;
 - 5.2. best practice environmental management measures;
 - 5.3. processes for adaptive management and incident response;
 - 5.4. an implementation timetable for key aspects of the plans; and
 - 5.5. a reporting program to regularly advise the Director of the results of the plans.
6. The person responsible must implement and act in accordance with the approved EMPs.
7. In the event that the Director, by notice in writing to the person responsible, either approves a minor variation to the approved EMPs or approves new plans in substitution for the EMPs originally approved, the person responsible must implement and act in accordance with the varied EMPs or the EMPs, as the case may be.

Atmospheric

A1 Management of air emissions during construction and demolition

1. Construction and demolition phases for the project must be managed using best practice environmental management measures to minimise air emissions and dust to avoid environmental nuisance and/or harm, in accordance with the Air Quality Management Plan required under these conditions.

2. Without limitation, unless otherwise approved in writing by the Director, the Air Quality Management Plan(s) required under these conditions must include:
 - 2.1. measures to minimise dust generation;
 - 2.2. measures to minimise emissions from vehicles, heavy machinery and generators; and
 - 2.3. monitoring plans for dust and emissions, in accordance with the requirements of these conditions, including nomination of construction phases during which low levels of construction air emissions are anticipated.

A2 Air Quality and Meteorological Monitoring

1. Monitoring Station

- 1.1. Unless otherwise approved in writing by the Director, an ambient air quality and meteorological monitoring station must be established at a suitable location in a residential area in close proximity to the project.
- 1.2. The location of the station must be:
 - 1.2.1. chosen in accord with guidance provided in AS/NZS 3580.1.1:2016; and
 - 1.2.2. approved in writing by the Director.
- 1.3. The air quality monitoring and meteorological station must be operational and measure the ambient concentrations of the nominated pollutants listed in Table 1 and the meteorological parameters detailed in this condition as follows:
 - 1.3.1. as soon as practicable prior to the commencement of the construction phase;
 - 1.3.2. throughout construction works undertaken on land in Bridgewater; and
 - 1.3.3. for at least 12 months starting at the commencement of the operational phase of the project.

2. Air Quality Monitoring

- 2.1. Unless otherwise approved in writing by the Director, the ambient air quality monitoring of the nominated air pollutants must be conducted using reference level continuous monitoring instrumentation that meets the requirements of the Australian Standards Methods for Pollutant Monitoring set out in Schedule 3 of the Ambient Air Quality NEPM.
- 2.2. Unless otherwise approved in writing by the Director, monitoring must be undertaken in accordance with the requirements set out in Table 1 as follows: the ambient concentration of the pollutant listed in Column 1 must be measured at the sampling frequency listed in Column 2 over the averaging time listed in Column 3 using the measurement technique listed in Column 5 and the reference method listed in Column 6.

Table 1. Ambient Air Quality Monitoring Parameters

Column 1	Column 2	Column 3	Column 4	Column 5	Column 6
Pollutant	Frequency of sampling	Averaging time	Australian Air Quality Standards (Air NEPM)	Measurement technique	Reference method
Nitrogen dioxide	Continuous	One hour One year ²	0.08 ppm 0.015 ppm	Chemiluminescence	AS 3580.5.1:2011
Particles as PM ₁₀	Hourly	One hour One day ¹ One year ²	- 50 µg/m ³ 25 µg/m ³	Beta Attenuation Monitor	AS/NZS 3580.9.11:2016
Particles as PM _{2.5}	Hourly	One hour One day ¹ One year ²	- 25 µg/m ³ 8 µg/m ³	Beta Attenuation Monitor	AS/NZS 3580.9.12:2013

Note 1: calendar day average

Note 2: calendar year average

3. Meteorological Monitoring

3.1. Unless otherwise approved in writing by the Director, the meteorological station co-located and operating simultaneously with the ambient air monitoring instrumentation must operate in accordance with the requirements of AS/NZS 3580.14:2014 and measure the following meteorological parameters:

- 3.1.1. temperature at the height of 2m and 10m;
- 3.1.2. relative humidity at the height of 2m and 10m;
- 3.1.3. vector averaged wind speed direction at the height of 2m and 10m;
- 3.1.4. rainfall;
- 3.1.5. barometric pressure; and
- 3.1.6. solar radiation.

3.2. All meteorological parameters specified in this condition, with the exception of rainfall, together with the computed standard deviation of wind direction (sigma theta), must be reported as 5 minute and 1 hour averaged values.

4. Reporting of Air Quality and Meteorological Monitoring

- 4.1. Real-time access to the air monitoring and meteorological measurements collected at the monitoring station must be made available to the Director.
- 4.2. Unless otherwise approved in writing by the Director, the measured ambient concentration of the air pollutants listed in Table 1 and the measured meteorological parameters specified in this condition must be reported quarterly to the Director and submitted no later than 30 days after the end of the quarterly reporting period.

5. Exceedance of Australian Air Quality Standards

- 5.1. Unless otherwise approved in writing by the Director, in the event that measured ambient concentrations of the air pollutants listed in Column 1 of Table 1 exceed any of the corresponding Australian air quality standards specified in Column 4 of the table, the Director must be notified of the exceedance within 48 hours.
- 5.2. The exceedance notification must include the following information:
 - 5.2.1. the name of the pollutant, the time of the exceedance and the ambient concentration of the pollutant at that time;
 - 5.2.2. the nature of the activities being conducted by the proponent at the time of the exceedance;
 - 5.2.3. the meteorological conditions prevailing in the vicinity of the monitoring station at the time of the exceedance;
 - 5.2.4. an assessment of the potential for the exceedance to cause environmental nuisance and/or harm;
 - 5.2.5. measures applied to minimise the occurrence of further exceedances; and
 - 5.2.6. any other relevant information.

A3 Validation of Air Dispersion Model

1. Unless otherwise approved in writing by the Director, within three (3) months after completion of the pre-construction monitoring period, a report must be submitted to the Director assessing the validity of the air dispersion model used to predict the impact of traffic related pollutants from operation of the project on sensitive receptors in the vicinity of works undertaken under this permit.
2. The report must include a comparison of all ambient pollutant concentrations measured at the monitoring station with those predicted by the air dispersion model. This will require the model to be re-run using the meteorological data collected from the station during the pre-construction monitoring period.

A4 Construction Dust Deposition Monitoring and Reporting

Unless otherwise approved in writing by the Director:

1. During the entire construction phase of the project, and during the demolition phase as relevant, a number of dust deposition gauges must be in place and maintained at several locations in residential areas in the near vicinity of works undertaken under this permit, the number and location of which are to be approved by the Director. Monthly samples must be collected from each location and analysed in accordance with the requirements of AS/AZS 3580.10.1:2016, Methods for sampling and analysis of ambient air - Deposited matter – Gravimetric method.
2. Monthly deposition measurements must be adjusted to account for background deposition rate. For each sampling month, the background is defined as the minimum of the dust loadings recorded at all of the deposition gauge sites during that month. For each deposition gauge measurement, the following information should be recorded:
 - 2.1. location;
 - 2.2. month/year;

- 2.3. total insoluble solids (mg);
 - 2.4. total insoluble solids above background (g/m²/month); and
 - 2.5. deposited dust (g/m²/month).
3. The person responsible must investigate each exceedance of the dust deposition trigger levels specified in Column 2 of Table 2 as soon as it is reasonably possible to do so after becoming aware of the event. The investigation must determine the likely cause(s) of the exceedance and identify and implement any reasonable remedial actions required to prevent it from recurring. A record must be kept of these actions for a minimum of three (3) years.
 4. The level of dust fallout must not exceed the annual compliance limits specified in Column 3 of Table 2. Any such exceedance must be reported to the Director within 24 hours of the results being obtained.
 5. Dust deposition gauges must not be relocated unless approved by the Director in writing prior to the proposed relocation.

Table 2 Dust Deposition Gauge Annual Compliance Limits and Monthly Trigger Levels

All figures are to be measured at or beyond the boundary of the project land

Column 1	Column 2	Column 3
Parameter	Monthly trigger levels	Annual compliance limits
Deposited dust	Increase above background: 2.0 g/m ² /month	Annual averaged increase above background: 2.0 g/m ² /month
Deposited dust	Total deposition experienced: 4.0 g/m ² /month	Annual average: 4.0 g/m ² /month

A5 Real-time Construction Dust Monitoring

1. Without limitation, unless otherwise approved in writing by the Director, the Air Quality Management Plan required under these conditions must include provisions for real-time construction dust monitoring, to be implemented and operational for the entire construction phase of the project, and include the following:
 - 1.1. identification and description of suitable instruments for the continuous monitoring of ambient dust concentrations at several sites located near the boundary of the project land;
 - 1.2. description of simple weather stations which must be equipped with continuous monitoring anemometers co-located with the dust monitors and installed at a height of at least 2.5 m;
 - 1.3. identification and description of a system to transmit and display near real-time continuous data from the dust monitoring instruments and data from the co-located meteorological monitoring stations, to the assigned person(s) identified in the plan;
 - 1.4. description of the criteria used to identify the likely occurrence of dust events at any of the continuous dust monitoring sites in near real-time;

- 1.5. description of the response process to occur when dust events are identified at any of the sites; and
 - 1.6. a table containing all of the major commitments made in the plan.
2. Continuous dust monitors cannot be relocated unless approved by the Director in writing prior to the proposed relocation.

Decommissioning and Rehabilitation

D1 Decommissioning and Rehabilitation Plan

1. Without limitation, unless otherwise approved in writing by the Director, the Decommissioning and Rehabilitation Plan(s) (DRP) required under these conditions must include the following (as relevant):
 - 1.1. nomination of key stages of works at which the DRP will need to be implemented;
 - 1.2. consideration of potential for contaminated material or controlled waste to be present after completion of works, and any associated remediation required (including consideration of groundwater);
 - 1.3. removal of all equipment used during the works, temporary structures created for the purpose of undertaking the works and waste materials generated through the works unless they are considered by the Director to be beneficial to a future use of the project land;
 - 1.4. grading and levelling/recontouring and revegetating (or other approved method of soil stabilisation) of the surface of the disturbed area;
 - 1.5. management of drainage on the project land so as to reduce erosion and prevent release of a pollutant from the project land;
 - 1.6. maintenance of the rehabilitated area for a period of not less than three years from the date of cessation of works;
 - 1.7. specific management and monitoring measures for the area between the Watch House at Granton and the foreshore; and
 - 1.8. any other detail requested in writing by the Director.
2. If requested by the Director, stage-specific DRPs must be provided to the Director, prior to implementation.

Flora and Fauna

FF1 Underwater noise management

1. Unless otherwise approved in writing by the Director, to minimise noise impact of construction of the project on sensitive aquatic fauna species;
 - 1.1. a soft start procedure must be implemented for piling works, commencing at low energy levels with slow build-up to allow fauna to vacate the area;
 - 1.2. once a piling method for the construction of the project is finalised, a stop-work zone area must be calculated based on anticipated sound pressure and exposure levels, in accordance with the Underwater Piling Noise Guidelines; and

- 1.3. during piling works, a suitable qualified or trained marine fauna observer must be deployed at piling locations, to instigate a stop work order in the event that marine mammals are observed within the pre-determined stop-work zone.
2. The provisions of this condition must be incorporated into the Noise and Vibration Management Plan for the construction phase of the project as approved in writing by the Director.

Groundwater

GW1 Groundwater encountered during construction

Unless otherwise approved in writing by the Director, where groundwater is encountered during construction works for the project, the groundwater must be managed to the extent necessary to prevent and minimise environmental harm.

Hazardous Substances

H1 Storage and handling of environmentally hazardous materials

1. Without limitation, unless otherwise approved in writing by the Director, the Environmentally Hazardous Materials Management Plan(s) required under these conditions must include provision for storage, handling and mobile containment of environmentally hazardous materials by the person responsible on the project land including:
 - 1.1. storage within impervious bunded areas, spill trays or other containment systems; and
 - 1.2. management to prevent unauthorised discharge, emission or deposition of pollutants in a manner that is likely to cause serious or material environmental harm:
 - 1.2.1. to soils;
 - 1.2.2. to groundwater;
 - 1.2.3. to waterways; and/or
 - 1.2.4. beyond the boundary of the project land.
2. Management measures may include spill kits, spill trays/bunds or absorbent pads, and automatic cut-offs on any pumping equipment. Management equipment must be kept in appropriate locations near areas of work.

Lighting

L1 Artificial lighting design and use

1. Unless otherwise approved in writing by the Director, lighting for construction, demolition, and operational phases of the project, must be selected and used on the basis of achieving the minimal artificial lighting required to meet design and safety requirements and standards, while minimising adverse impact on sensitive receptors including fauna, with consideration of the light pollution analysis and relevant management measures recommended in the MPIS.
2. Without limitation, unless otherwise approved in writing by the Director, the Lighting Plan(s) required under these conditions must specify principles and parameters for selection and use of lighting during the construction and demolition phases of the project, in accordance with the MPIS.

L2 Light surveys and audits

1. Unless otherwise approved in writing by the Director, light surveys and audits of the project must be undertaken as follows, consistent with the relevant survey measures recommended in the MPIS, and the analysed results submitted to the Director within 30 days of completion of each survey and audit:
 - 1.1. Pre and post construction light surveys, in accordance with the method used in the baseline light survey as presented in the MPIS, to assess the impact of the project on sky glow and sky quality;
 - 1.2. A post construction light survey, in accordance with the method used in the baseline light survey as presented in the MPIS, to assess the impact of the project in regard to obtrusive light on sensitive receptors including fauna;
 - 1.3. Audits must be undertaken both during construction and after completion of light installation to ensure all commitments regarding light management have been met;
 - 1.4. Audits must be undertaken by personnel experienced in environmental auditing and in consultation with an appropriately qualified biologist or ecologist; and
 - 1.5. The audit analysis must include:
 - 1.5.1. any identified additional risks; and
 - 1.5.2. adaptive management measures to be undertaken if additional risks are identified, or it is discovered that risks have not been assessed correctly.

Monitoring

M1 Samples and measurements for monitoring purposes

1. Unless otherwise approved in writing by the Director, any sample or measurement required under these conditions must be taken and processed in accordance with the following:
 - 1.1. sampling and measuring must be undertaken by a person with training, experience, and knowledge of the appropriate procedure;
 - 1.2. the integrity of samples must be maintained prior to delivery to a testing facility;
 - 1.3. sample analysis must be conducted by a testing facility accredited by the National Association of Testing Authorities (NATA), or a testing facility approved in writing by the Director, for the specified test;
 - 1.4. details of methods employed in taking samples and measurements and results of sample analysis, and measurements must be retained for at least three (3) years after the date of collection; and
 - 1.5. sampling and measurement equipment must be maintained and operated in accordance with manufacturer's specifications and records of maintenance must be retained for at least three (3) years.

Noise and Vibration Control

N1 Management of noise emissions and vibration during construction

1. Unless otherwise approved in writing by the Director, construction and demolition phases of the project must be managed using such measures as are necessary to prevent noise emissions and vibration from causing environmental nuisance and/or harm, in accordance with the Noise and Vibration Management Plan required under these conditions.
2. Without limitation, unless otherwise approved in writing by the Director, the Noise and Vibration Management Plan(s) required under these conditions must include the following:
 - 2.1. proposed staging of works;
 - 2.2. A list of equipment and activities associated with each stage of work area;
 - 2.3. sound power levels, duration and hours of operation for each activity that is likely to cause noise and vibration impacts at noise and/or vibration sensitive receptors;
 - 2.4. identification of noise and vibration sensitive receptors that may be affected by construction and demolition activities;
 - 2.5. identification of any buildings or structure of heritage significance that may be affected by vibration generated by construction and demolition works;
 - 2.6. determination of appropriate noise and vibration management levels for sensitive receptors;
 - 2.7. prediction of noise levels at sensitive receptors during works;
 - 2.8. identification of activities likely to cause noise and vibration nuisance at sensitive receptors;
 - 2.9. identify locations near noise and vibration sensitive receptors where regular construction noise and vibration monitoring will be required;
 - 2.10. mitigation measures planned to be deployed and able to be deployed where noise and vibration levels are expected to exceed noise project specific criteria;
 - 2.11. where there is insufficient knowledge available to predict noise and vibration impact with a reasonable level of confidence, trial monitoring and assessment must be undertaken, covering discrete periods of work to allow measurements;
 - 2.12. a detailed community engagement plan including procedures for notification of noise and vibration generating activities, and for receiving and responding to complaints regarding noise disturbance;
 - 2.13. mitigation measures to manage impact on sensitive aquatic fauna species. and
 - 2.14. provision of regular noise and vibration monitoring at sensitive receptors, including as needed to enable accurate and timely response to complaints.
3. Unless otherwise approved in writing by the Director, monthly monitoring reports must be provided to the Director for review.

N2 Hours of construction and noise emission management levels

1. Unless otherwise approved in writing by the Director, standard and non-standard hours for the purpose of this condition are defined as follows:
 - 1.1. Standard hours - 0700 hours to 1800 hours on weekdays
- 0800 hours to 1800 hours on Saturdays; and
 - 1.2. Non-standard hours – all other hours outside of standard hours, and public holidays observed Statewide (Easter Tuesday excepted).
2. Unless otherwise approved in writing by the Director, the person responsible must implement management actions to ensure that noise emissions from construction and demolition for the project, when measured at any noise sensitive receptor and expressed as the equivalent continuous A-weighted sound pressure level, do not exceed the noise management levels calculated based on the following formula:
 - 2.1. Rating background level (RBL) + 10 dB for standard hours; and
 - 2.2. Rating background level (RBL) + 5 dB for non-standard hours.
3. Where approval is sought to exceed the management levels prescribed in this permit, an activity/site-specific construction noise and vibration impact report, including assessment of activities that have potential to cause environmental nuisance at sensitive receptors and provisions for monitoring during works, must be submitted to the Director for approval. Appropriate mitigation measures must be investigated and implemented to reduce environmental nuisance and to achieve the noise and vibration management levels specified in this condition as far as is practicable. Activity/site-specific construction noise and vibration impact reports may be submitted for approval as part of the Noise and Vibration Management Plan required under condition N1 or separately at a later date. An activity/site-specific report is not required where the works are necessary to respond to an emergency or to make the site safe.
4. Unless otherwise approved in writing by the Director, subject to condition N2.3, impulsive noise sources such as the use of power saws, grinding, rock drilling, vibratory rolling, jack hammering, impact piling or any other similar activities that have potential to cause sleep disturbance must be not used during the night-time (2200 hours to 0700 hours) period.
5. Unless otherwise approved in writing by the Director, subject to condition N2.3, in order to avoid sleep disturbance, the person responsible must implement management actions to ensure that night-time (2200 hours to 0700 hours) noise emissions from construction and demolition for the project when measured outside a habitable room of any noise sensitive receptor do not exceed L_{Amax} 60 dB(A).
6. The time interval over which noise levels are averaged must be 10 minutes or an alternative time interval specified by the Director.
7. Measured noise levels must be adjusted for impulsiveness, modulation and low frequency in accordance with the *Tasmanian Noise Measurement Procedure Manual*.
8. If approval is sought from the Director, an assessment of the proposed works must be provided with discussion of outcomes from community engagement already undertaken, proposed ongoing

community engagement procedures, and application of mitigation measures to minimise the potential for environmental nuisance.

N3 Ground vibration management levels

1. Unless otherwise approved in writing by the Director, the person responsible must implement management actions to ensure that ground vibration from construction and demolition for the project when measured at any sensitive receptors and expressed as peak particle velocity (PPV) do not exceed the following vibration management levels:
 - 1.1. 1mm/s PPV as human comfort vibration management level; and
 - 1.2. Values as specified in German Standard DIN 4150-3:1999 to protect vulnerability of ground-related services and structures to vibration generated by construction/demolition activities.
2. Unless otherwise approved in writing by the Director, blasting is not permitted.

N4 Noise and vibration monitoring method

1. Noise and vibration monitoring for the project must be undertaken in accordance with:
 - 1.1. these conditions; and
 - 1.2. a method approved in writing by the Director, as may be amended from time to time with written approval of the Director.
2. Measurements and data recorded during the survey must include:
 - 2.1. operational status of noise and vibration producing equipment;
 - 2.2. subjective descriptions of the sound at each location at the time of attendance;
 - 2.3. details of meteorological conditions relevant to the propagation of noise;
 - 2.4. the equivalent continuous (Leq) and Lmax, Lmin, L1, L10, L50, L90 and L99 A-weighted sound pressure levels measured over a period of 10 minutes or an alternative time interval approved by the Director;
 - 2.5. un-weighted one-third octave spectra noise data over suitably representative periods of not less than 1 minute, where required;
 - 2.6. Measurements of peak particle velocity (PPV) at a vibration sensitive building or structure. The monitoring locations will be solid and rigid to best represent the vibration entering the structure or building under investigation; and
 - 2.7. Where attended vibration monitoring is not feasible, an unattended monitoring system is to be installed with a system to warn the operators (via flashing light etc.) where there is potential to cause any cosmetic damage to buildings and structures.
3. The survey report must include the following:
 - 3.1. the results and interpretation of the measurements required by these conditions;
 - 3.2. a map showing the locations of construction/demolition activities, measurement locations, and noise/vibration sensitive receptors clearly marked on the map;

- 3.3. any other information that will assist with interpreting the results and whether the activity is in compliance with these conditions; and
 - 3.4. recommendations of appropriate mitigation measures to manage any noise or vibration problems identified by the survey.
4. All methods of noise measurements must be in accordance with the *Tasmanian Noise Measurement Procedure Manual*.

N5 Pre-construction operational traffic noise impact assessment

1. Unless otherwise approved in writing by the Director, a minimum of one month prior to commencement of the construction phase of the project, an updated operational traffic noise impact assessment report incorporating the final design operation must be submitted to the Director for approval.
2. The updated operational traffic noise impact assessment report must include the required mitigation measures (i.e. noise barriers, source treatment) to achieve, as far as is practicable, at noise sensitive receptors the design target noise criteria specified in the *Tasmanian Traffic Noise Management Guidelines* October 2015 (*Guidelines*).
3. For the purposes of post construction traffic noise review, the updated operational traffic noise impact assessment report must include the identification of all buildings where any of the following apply:
 - 3.1. the existing traffic noise ($L_{A10, 18\text{-hour}}$) for the existing road and bridge alignment is less than 63 dB(A) and the 10-year future traffic noise ($L_{A10, 18\text{-hour}}$) for the final design has been forecast to be greater than 63 dB(A);
 - 3.2. the existing traffic noise ($L_{A10, 18\text{-hour}}$) for the existing road and bridge alignment is already greater than 63 dB(A) and the 10-year future traffic noise ($L_{A10, 18\text{-hour}}$) for the final design has been forecast to be less than or equal to 68 dB(A);
 - 3.3. the existing traffic noise ($L_{A10, 18\text{-hour}}$) for the existing road and bridge alignment is already greater than 63 dB(A) and the 10-year future traffic noise ($L_{A10, 18\text{-hour}}$) for the final design has been forecast to be greater than 68 dB(A);
 - 3.4. the 10-year future night-time traffic noise ($L_{Aeq, 9\text{-hour}}$) for the final design is more than 2 dB higher than the 10-year future night-time traffic noise ($L_{Aeq, 9\text{-hour}}$) for the existing road and bridge alignment.
4. For sensitive receptors where it is not practicable for the design target noise criteria specified in the *Guidelines* and in condition N6.3 to be achieved, a site-specific operational noise impact and mitigation assessment must be submitted to the Director for approval that includes the following details:
 - 4.1. identification of the specific criteria not practicable to achieve;
 - 4.2. an overview of the justification of why it is not practicable;
 - 4.3. existing noise levels at the site;
 - 4.4. potential noise levels at the site without mitigation;

- 4.5. a comprehensive evaluation of potential mitigation measures;
 - 4.6. the noise mitigation measures proposed to be implemented (if any);
 - 4.7. the noise mitigation measures evaluated but excluded and the reasons for their exclusion;
 - 4.8. the predicted noise levels at this site 'one year' and 'ten years' after opening to traffic with the proposed mitigation measures (if any) implemented; and
 - 4.9. the stakeholder consultation undertaken in relations to the matter, including the feedback received and any agreements secured.
5. This requirement will be deemed to be satisfied only when the Director indicates in writing that the submitted document adequately addresses the requirements of this condition to their satisfaction.

N6 Post-construction traffic noise monitoring report

1. Unless otherwise approved in writing by the Director, at the commencement of the operational phase of the project, a noise monitoring report must be submitted to the Director to validate the predicted results for the 'year of opening' scenario and to compare the monitoring results with the operational noise levels for the for the existing road and bridge alignment as reported in the updated operational traffic noise impact assessment report.
2. The noise monitoring report must identify if the design target noise criteria specified in the *Guidelines* and in condition N6.3 were not achieved for any sensitive receptors, excluding those where a compliant site-specific operational noise impact and mitigation assessment approved by the Director under condition N5.4 applies. Where site-specific operational noise impact and mitigation assessments apply, the noise monitoring report must identify whether the noise levels at those sites exceed the predicted levels.
3. In addition, the noise monitoring report must specifically assess the conducted noise monitoring results against the operational target upper levels of the following:
 - 3.1. $L_{A10, 18\text{-hour}} \leq 65 \text{ dB(A)}$ generally;
 - 3.2. $L_{A10, 18\text{-hour}} \leq 68 \text{ dB(A)}$ in cases where the updated operational traffic noise impact assessment report identified the building's existing traffic noise ($L_{A10, 18\text{-hour}}$) for the existing road and bridge alignment was already greater than 63 dB(A); and
 - 3.3. the 10-year future night-time traffic noise ($L_{Aeq, 9\text{-hour}}$) for the final design is no more than 2 dB higher than the 10-year future night-time traffic noise ($L_{Aeq, 9\text{-hour}}$) for the existing road and bridge alignment.
4. Where measurements indicate any exceedance to the operational target upper levels listed above, excluding those that are the subject of a site-specific operational noise impact and mitigation assessment approved by the Director, further investigations must be undertaken to identify any appropriate mitigation measures to achieve, as far as is practicable the design noise levels specified in the *Guidelines* and in condition N6.3. Where measurements indicate any exceedance above noise levels predicted at those receptors where the site-specific operational noise impact and mitigation assessments apply, further investigations must be undertaken to identify any appropriate mitigation measures to achieve, as far as is practicable, the noise level as previously predicted.

5. This requirement will be deemed to be satisfied only when the Director indicates in writing that the submitted document adequately addresses the requirements of this condition to their satisfaction.

Stormwater Management

S1 Stormwater Management Plan

1. Without limitation, unless otherwise approved in writing by the Director, the Stormwater Management Plan(s) required under these conditions must be consistent with the *Department of State Growth Specification – Section 176, Part B – Water Quality*, and provide details of the following:
 - 1.1. measures to prevent surface runoff from entering the area used or disturbed during construction activities sufficient for a 1 in 20 year rain event;
 - 1.2. measures to retain sediment on the project land sufficient to comply with stormwater discharge quality limits imposed by these conditions;
 - 1.3. procedures for maintenance of installed controls;
 - 1.4. procedures for rehabilitation of areas disturbed during construction; and
 - 1.5. details of final road stormwater controls and maintenance requirements to ensure the overall quality of the stormwater discharged from the impervious areas created by the project to water is treated to a level which complies with treatment criteria specified by the State Stormwater Strategy.

S2 Stormwater Discharge Quality

1. Unless otherwise approved in writing by the Director, during construction and demolition phases of the project:
 - 1.1. the concentration of suspended solids in stormwater discharged from areas disturbed by activities undertaken under this Permit to water must be less than 30mg/L, except where the discharged stormwater is not visibly more turbid than the receiving environment, in which case no suspended solids concentration limits apply; and
 - 1.2. stormwater discharged from areas disturbed by activities undertaken under this Permit to water must be visibly free of oil and grease.

Waste and Contamination Management

WM1 Waste Materials Management Plan

1. Without limitation, unless otherwise approved in writing by the Director, the Waste Materials Management Plan(s) required under these conditions must include:
 - 1.1. consideration of the waste management hierarchy;
 - 1.2. any proposed or potential reuse of material;
 - 1.3. Measures for detecting, testing, classification, management and treatment of the following with consideration of IB 105 and the ASS Guidelines, and in accordance with measures recommended in the MPIS:

- 1.3.1. PASS and sediment from the River Derwent contaminated with metals, PAH and nutrients;
 - 1.3.2. PASS and sediments from PASS areas as identified in the MPIS;
 - 1.3.3. AASS as identified in the MPIS;
 - 1.3.4. contaminated soils as identified in the MPIS;
 - 1.3.5. solid wastes mixed into the soils within the embankment on the northern end of the existing Bridgewater Bridge;
 - 1.3.6. excavated soils and sediments from potentially contaminated areas; and
 - 1.3.7. unanticipated contamination, or controlled and general waste.
- 1.4. Measures for managing potential dust, odours and spills, for containment of leachate from contaminated material, PASS and ASS, and management of contaminated stormwater or groundwater.
 - 1.5. Transport, disposal and/or reuse of controlled waste and other waste materials, with consideration of any further approvals required under the *Environmental Management and Pollution Control (Waste Management) Regulations 2020* or amended versions thereof.

Water Quality

WQ1 Dredging not permitted

Unless otherwise approved in writing by the Director, no dredging is permitted to be undertaken for the project.

WQ2 Estuarine Water Quality Monitoring Plan

1. Without limitation, unless otherwise approved in writing by the Director, the Estuarine Water Quality Monitoring Plan(s) required under these conditions must include details of the following:
 - 1.1. Monitoring site locations including:
 - 1.1.1. Far field monitoring site(s) outside the area of influence of the activity;
 - 1.1.2. Intermediate monitoring sites within 700m downstream of the construction area and 300m west of the northern end of the causeway (upstream); and
 - 1.1.3. The maximum distance from areas of disturbance near-field where in situ field monitoring is to be conducted.
 - 1.2. Parameters, methods, and frequencies of monitoring at each identified location including:
 - 1.2.1. A far field monitoring program to assess large scale changes that may impact water quality at the site;
 - 1.2.2. An intermediate site monitoring program for the analysis of potential pollutants and physical parameters of concern to assess operational performance against identified water quality guideline values; and
 - 1.2.3. A near field and telemetered intermediate site monitoring program to inform management actions required to mitigate potential water quality impacts, in

accordance with the approved Estuarine Water Quality Management Plan(s) required by these conditions.

- 1.3. A reporting program to advise the Director of monitoring results including interpretation of the results in terms of construction actions, natural events, or other occurrences which may have caused exceedances of the water quality trigger levels, as determined in the approved Estuarine Water Quality Management Plan(s).
2. The Plan(s) must be reviewed and amended as necessary in response to the Water Quality Impact Studies required under these conditions within one month of the completion of each water quality impact study. Where amended, the amended Plan(s) must be resubmitted to the Director for approval.

WQ3 Estuarine Water Quality Management Plan

1. Without limitation, unless otherwise approved in writing by the Director, the Estuarine Water Quality Management Plan(s) required under these conditions must include details of the following:
 - 1.1. Relevant Community Values within the area of potential estuarine water quality impact as a result of construction and demolition works;
 - 1.2. Water quality guidelines values for the protection of identified Community Values;
 - 1.3. Water quality trigger levels and adaptive management actions for key water quality indicators at near-field and intermediate monitoring sites;
 - 1.4. Person responsible for implementation of each management action;
 - 1.5. A table containing all major commitments made in the plan; and
 - 1.6. A reporting program to advise the Director of plan implementation and outcomes.
2. The Plan(s) must be reviewed and amended as necessary in response to the water quality impact studies required under these conditions within one month of the completion of each water quality impact study. Where amended, the Plan(s) must be resubmitted to the Director for approval.

WQ4 Background water quality and management trigger levels

1. Where a management trigger level specified by the Estuarine Water Quality Management Plan is below background level, that trigger value does not apply when measured during the same monitoring event.
2. In the above case, associated management actions must instead be taken where the indicator is above the background level.

WQ5 Water quality impact studies

1. Unless otherwise approved in writing by the Director, within 14 days of initial commencement of any construction or demolition activities for the project which are likely to release sediment into the water column, estuarine Water Quality Impact Studies of those activities must be undertaken.
2. Types of construction activities to which this condition applies include:
 - 2.1. the movement of vessels to and from landing facilities;

- 2.2. sediment disturbance as a result of land reclamation activities;
 - 2.3. the installation of temporary piles for the construction of working platforms;
 - 2.4. the installation of piles associated within construction of the first pier to be constructed for the project within estuarine waters;
 - 2.5. the use of floating plant where the potential exists for sediment disturbance through placement, anchorage, vibration or settling of plant on the sediment; and
 - 2.6. other activities which have the potential to disturb sediment to the extent that water quality impacts may occur at intermediate monitoring sites;
3. The Director must be notified within 7 days of the commencement of each study.
 4. Each impact study must include the following:
 - 4.1. an estimate of the frequency of sediment disturbance caused by the construction activity through the phases of the project. This should include a discussion of factors that could cause the magnitude and spatial extent of sediment disturbance to vary from that measured in the Water Quality Impact Study;
 - 4.2. an evaluation of water quality impacts within the vicinity of the construction activity and along a gradient with the current away from the source via measurements which may include field measurements, laboratory analyses, photography and video footage;
 - 4.3. an evaluation of current direction to refine selection of assessment locations;
 - 4.4. an evaluation of water quality impacts at intermediate monitoring sites relative to the location where disturbance has or is occurring during the construction phase for the project;
 - 4.5. where the potential exists for water quality impacts at intermediate monitoring sites, an assessment of pollutant variation and secondary impacts, such as dissolved oxygen depletion, in the vicinity of the construction activity relative to the variations of water quality indicators at the intermediate monitoring sites; and
 - 4.6. recommendations as appropriate for amendments to the Estuarine Water Quality Monitoring Plan and Estuarine Water Quality Management Plan required by these conditions.
 5. For each Water Quality Impact Study, a report must be completed within one month of completion of the study and submitted to the Director within 14 days of completion. The report must be provided with the monitoring plan(s) and management plan(s) required by these conditions where amendments to these plans are required.

WQ6 Contingency management plan for construction in the Derwent estuary

1. The Contingency Management Plan for construction in the Derwent estuary required under these conditions must detail measures to prevent and mitigate environmental harm if an unplanned event occurs. Unplanned events that must be addressed by the plan include but are not limited to:
 - 1.1. Incidents, accidents, equipment failure and malfunctions with the potential to cause environmental harm as a result of:
 - 1.1.1. the release of pollutants to the aquatic environment; or

- 1.1.2. the disturbance and release of large quantities of sediment to the estuarine water column at greater rates, volume or over a larger area than otherwise planned for;
 - 1.2. the release from capture and containment facilities of extracted estuarine sediments; and
 - 1.3. weather or other environmental conditions which may result in greater levels of disturbance of sediment from areas of operations than otherwise expected.
2. The plan must include communication procedures that ensure that the general public and relevant Government agencies are informed of any unplanned event to the extent necessary to allow them to take precautions against adverse impacts upon the environment and the public.

WQ7 Final design hydrodynamic modelling

1. Unless otherwise approved in writing by the Director, within two (2) months of the issuing of these conditions:
 - 1.1. hydrodynamic modelling based on the chosen design must be undertaken over a sufficient area, timeframe and scale to determine potential changes in sediment mobilisation, deposition and general bathymetry in the Derwent estuary resulting from the project, following completion of construction; and
 - 1.2. a report on the hydrodynamic modelling results must be submitted to the Director for approval.
2. Hydrodynamic modelling undertaken must be sufficient to determine whether there is the potential for negative impacts to the aquatic ecosystem to occur, or the extent of any potential negative impacts to water quality as a result of the final bridge design, such as from scouring or other mechanisms.
3. Where potential negative impacts are identified, recommendations must be made in the report for mitigation measures and ongoing management of impacts, to be either incorporated as part of the constructed bridge or implemented post-construction.
4. This condition will be deemed to be satisfied only when the Director indicates in writing that the submitted report adequately addresses the requirements of this condition to their satisfaction.

WQ8 Aquatic sediment management

1. Unless otherwise approved in writing by the Director:
 - 1.1. all sediments extracted during construction or demolition phases of the project must be removed from the aquatic environment, such that no extracted sediment is released to the aquatic environment;
 - 1.2. any removed aquatic sediments must only be stored onshore temporarily and must be contained during storage so as to prevent such sediments becoming entrained in stormwater; and
 - 1.3. all removed aquatic sediments must be disposed of to an appropriately licenced facility.

PIPELINE LICENSEE (Tas Gas)

For the purpose of section 60ZZP(9) of the *Land Use Planning and Approvals Act 1993*, the pipeline licensee is the relevant regulator responsible for enforcement of conditions and restrictions TG1 and TG2.

TG1 Tas Gas Works

1. Costs incurred by Tas Gas for works, such as, gas main relocation, supervision of works within 25m of gas mains and pipelines, engineering review of blasting limits, and the like, for the “New Bridgewater Bridge Major Project” must be paid by the permit holder.

TG2 Protection of gas infrastructure

1. The Hobart High Pressure Transmission Pipeline must be protected as per AS 2885 and Tas Gas procedure requirements.
2. Gas reticulation network must be protected as per AS 4645 and Tas Gas procedure requirements.

RELEVANT REGULATED ENTITY (TasWater)

For the purpose of section 60ZZP(9) of the *Land Use Planning and Approvals Act 1993*, the relevant regulated entity is the relevant regulator responsible for enforcement of conditions and restrictions TW1 to TW4.

TW1 Service trays

1. The new Bridgewater Bridge must contain a service tray, or equivalent, able to accommodate 1 x nominal ID375mm Rising sewer main, to be installed as part of the bridge construction works, and 2 x nominal ID 300mm water/recycled water mains. For all three pipes, allowance must be made for associated air valves, vent, scour points as needed. Effectively, this means space for pipes with an outside diameter of 500mm must be allowed for. The additional costs of complying with this Condition will be determined based on the final agreed design of the bridge and the service tray (or equivalent) and these costs will be paid to the permit holder by TasWater as agreed between TasWater and the permit holder. Subsequent installation of future pipework on the service tray will be subject to approval by the Crown in Right of Tasmania prior to installation and may include additional requirements where relevant. Conditions TW2, TW3 and TW4 will not apply to the installation of the service trays (or equivalent) or to the subsequent installation of pipework.

TW2 Asset Creation & Infrastructure Works

1. Plans submitted with the application for any Engineering Design Approval must show, to the satisfaction of TasWater, all existing, redundant and/or proposed property services and mains. The plans must also show the relocation or protection of existing assets impacted by the proposed bridge.
2. Prior to applying for any Permit to Construct new infrastructure the permit holder must obtain from TasWater Engineering Design Approval for new TasWater infrastructure. An application for Engineering Design Approval must include engineering design plans prepared by a suitably qualified person showing how TasWater’s water and sewerage infrastructure will be relocated, to TasWater’s satisfaction.

3. Prior to infrastructure works commencing, a Permit to Construct must be applied for and issued by TasWater. All infrastructure works must be inspected by TasWater and be to TasWater's satisfaction.
4. In addition to any other conditions in this permit, all infrastructure works must be constructed under the supervision of a suitably qualified person in accordance with TasWater's requirements.
5. All additions, extensions, alterations or upgrades to TasWater's water and sewerage infrastructure required to accommodate the development, are to be completed generally as shown on, and in accordance with, the plans approved via an Engineering Design Approval, and are to be constructed at the expense of the permit holder to the satisfaction of TasWater, with live connections performed by TasWater unless agreed otherwise by TasWater.
6. After testing/disinfection, to TasWater's requirements, of newly created infrastructure works, the permit holder must apply to TasWater for connection of these works to existing TasWater infrastructure, at the permit holder's cost.
7. Following the practical completion of any water and/or sewerage infrastructure works the permit holder any the permit holder must obtain a "Certificate of Practical Completion" from TasWater for the works that will be transferred to TasWater. To obtain a Certificate of Practical Completion:
 - 7.1. written confirmation from the supervising suitably qualified person certifying that the infrastructure works have been constructed in accordance with the TasWater approved plans and specifications and that the appropriate level of workmanship has been achieved;
 - 7.2. a request for a joint on-site inspection with TasWater's authorised representative must be made;
 - 7.3. security for the twelve (12) month defects liability period to the value of 10% of the infrastructure works must be lodged with TasWater. This security must be in the form of a bank guarantee; and
 - 7.4. Work As Constructed drawings and documentation must be prepared by a suitably qualified person to TasWater's satisfaction and forwarded to TasWater.
8. After a Certificate of Practical Completion has been issued, a 12-month defects liability period applies to the new TasWater infrastructure listed in the Certificate. During this period all defects must be rectified at the permit holder's cost and to the satisfaction of TasWater. A further 12-month defects liability period may be applied to defects after rectification. TasWater may, at its discretion, undertake rectification of any defects at the permit holder's cost, provided that notice has been given by TasWater to the permit holder to rectify the defect within a timeframe that is reasonable for the nature of the defect. Upon completion of the defects liability period, the developer must request TasWater to issue a "Certificate of Final Acceptance". The newly constructed infrastructure will be transferred to TasWater upon issue of this certificate and TasWater will release any security held for the defects liability period.
9. The permit holder must take all precautions to protect existing TasWater infrastructure. Any damage caused to existing TasWater infrastructure during the construction period must be promptly reported to TasWater and repaired by TasWater at the permit holder's cost.
10. Ground levels over the TasWater assets and/or easements must not be altered without the written approval of TasWater, which may include the Engineering Design Approval provided in condition TW2, 2.

11. A construction management plan, or equivalent documentation from the permit holder outlining the methodology proposed for construction of the TasWater infrastructure, must be submitted with the application for TasWater Engineering Design Approval. The construction management plan (or equivalent) must detail how the new TasWater infrastructure will be constructed while maintaining current levels of services provided by TasWater to the community. The construction management plan (or equivalent) must include a risk assessment and contingency plans for major risks relevant to TasWater infrastructure during any works. The construction management plan (or equivalent) must be to the satisfaction of TasWater prior to TasWater's Engineering Design Approval being issued.
12. The permit holder must relocate any affected TasWater infrastructure, at its cost, to an equivalent level of service and condition. Any infrastructure requested by TasWater that would exceed the equivalent level of service or condition is only required following TasWater written agreement for reimbursement for the permit holder's costs for design and construction of the additional works.

TW3 Final plans, easements and endorsements

Conditions TW3, 1. to 6. apply where new TasWater infrastructure is installed on private land.

1. Prior to the Sealing of any Final Plan of Survey, a Consent to Register a Legal Document must be obtained from TasWater as evidence of compliance with these conditions when application for sealing is made.
2. New TasWater assets or relocation or relocated TasWater assets should ideally be installed within the road reservation, at a location agreed with the road authority subject to the relevant provisions of the *Roads and Jetties Act 1935* or the *Local Government (Highways) Act 1982*. Where TasWater infrastructure is to be located in land outside of a road reservation, pipeline easements, to TasWater's satisfaction, must be created over any existing or proposed TasWater infrastructure and be in accordance with TasWater's standard pipeline easement conditions.
3. Prior to the issue of a Certificate of Practical Completion from TasWater, the permit holder must submit a copy of the completed Transfer for the provision of a Pipeline and Services Easement(s) to cover existing/proposed TasWater infrastructure as required by condition TW3, 2.
4. All costs and expenses related to the transfer of easement(s) to TasWater are to be paid by the proponent.
5. Prior to the issue of a TasWater Consent to Register a Legal Document, the permit holder must submit a .dwg file, prepared by a suitably qualified person to TasWater's satisfaction, showing:
 - 5.1. the exact location of the existing water and sewerage infrastructure; and
 - 5.2. the easement protecting that infrastructure.
6. The proponent must locate the existing TasWater infrastructure and clearly show it on the .dwg file. Existing TasWater infrastructure may be located by a surveyor and/or a private contractor engaged at the permit holder's cost.

TW4 56W Consent

7. Prior to the issue of Engineering Design Approval by TasWater, the permit holder must make application to TasWater pursuant to section 56W of the *Water and Sewerage Industry Act 2008* for its

consent in respect of any part of the development proposed to be built within a TasWater easement or over or within two metres of TasWater infrastructure.

HERITAGE COUNCIL

For the purpose of section 60ZZP(9) of the *Land Use Planning and Approvals Act 1993*, the Heritage Council is the relevant regulator responsible for enforcement of conditions and restrictions THC1 to THC3.

THC1 Bridgewater Bridge

Conditions THC1, 1. to 8. apply to the Bridgewater Bridge, a registered place.

1. Documentation demonstrating how the following conditions are to be implemented, must be provided to Heritage Tasmania to the satisfaction of Works Manager, Heritage Tasmania prior to the commencement of works within the registered place.
2. An overarching construction heritage management plan (CHMP) must be developed for the registered place and must include the following components:
 - 2.1. A site induction protocol must be prepared by a suitably qualified person and must be implemented for all contractors working within or adjacent to the registered place. The induction protocol must explain the heritage values of the place and the relevant heritage conditions of the permit that apply, including archaeological matters;
 - 2.2. A staging plan must be prepared for the proposed works within the registered place. The staging plan for the registered place must explain how this staging plan relates to the overall staging plan for the project;
 - 2.3. A construction noise and vibration management plan (CNVMP) must be prepared by a suitably qualified person and must include a vibration risk assessment for the registered place;
 - 2.4. The CHMP must include protection zones and vibration management around structures and areas of heritage significance, including areas of archaeological significance, to avoid damage to these items during construction activity. The establishment of protection zones must include all associated uses for the registered place, such as the provision of laydown areas; and
 - 2.5. All excavation and ground disturbance within the causeway must be managed and monitored by a historical archaeologist in accordance with the *Archaeological Impact Assessment & Archaeological Method Statement - Bridgewater Bridge Replacement* by Praxis Environment dated November 2021. The CHMP must include notification protocols whereby archaeological advice is sought if unanticipated archaeological features or deposits are uncovered during excavation or where doubt exists concerning the historical cultural heritage significance of any materials uncovered during excavation or ground disturbance; that provision must be made for controlled archaeological excavation to be undertaken when and to a standard consistent with the archaeological advice received.
3. The existing causeway and the 1874 and 1893 bridge abutments must be retained.
4. Other than where it is demonstrably necessary to provide a sufficient navigation channel, the caissons of the existing Bridgewater Bridge must be retained for interpretive purposes.

5. The lift span of the existing Bridgewater Bridge, or other representative section of the bridge as agreed to by Heritage Tasmania, must be retained, conserved, and displayed in an appropriate publicly accessible location within the project land for interpretative purposes, or in an alternative location as agreed to by Heritage Tasmania.
6. Other representative samples of the bridge structure must be retained for appropriate reuse/interpretation in an appropriate publicly accessible location within the project Land for interpretative purposes, as agreed to by Heritage Tasmania.
7. Information must be produced in a range of formats and provided in a publicly accessible location near the northern abutment of the existing Bridgewater Bridge, to assist the public in understanding the history and significance of the place and, in particular, the welded-steel lift span bridge to be removed as part of the project.
8. A full landscaping plan must be prepared for the registered place and must include the following components:
 - 8.1. the landscaping plan must detail protection measures for any existing significant plantings; and
 - 8.2. the landscaping plan must detail any proposed new walls, fences or noise mitigation measures, demonstrating that these are appropriately compatible with the heritage values and character of the place.

THC2 former Black Snake Inn

Conditions THC2, 1. to 5. apply to the former Black Snake Inn at 650 Main Road, Granton, a registered place.

1. Documentation demonstrating how the following conditions are to be implemented must be provided to Heritage Tasmania and must be to the satisfaction of Heritage Tasmania's Works Manager prior to the commencement of works within the registered place.
2. An overarching construction heritage management plan (CHMP) must be developed for the registered place, and must include the following components:
 - 2.1. a site induction protocol must be prepared by a suitably qualified consultant and must be implemented for all contractors working within or adjacent to the registered place. The induction protocol must explain the heritage values of the place and the relevant heritage conditions of the permit that apply, including archaeological matters;
 - 2.2. a staging plan must be prepared for the proposed works within the registered place. The staging plan for the registered place must explain how this staging plan relates to the overall staging plan for the project;
 - 2.3. a construction noise and vibration management plan (CNVMP) must be prepared by a suitably qualified person and must include a vibration risk assessment for the registered place;
 - 2.4. the CHMP must include protection zones, site security, and vibration management around areas and structures of heritage significance, including areas of archaeological significance to avoid damage to these items during construction activity, including associated uses such as the provision of laydown areas;

- 2.5. all excavation and ground disturbance within the registered place must be managed and monitored by a historical archaeologist in accordance with the *Archaeological Impact Assessment & Archaeological Method Statement - Bridgewater Bridge Replacement* by Praxis Environment dated November 2021; and
- 2.6. the CHMP must include notification protocols whereby archaeological advice is sought if unanticipated archaeological features or deposits are uncovered during excavation or where doubt exists concerning the historical cultural heritage significance of any materials uncovered during excavation or ground disturbance; that provision must be made for controlled archaeological excavation to be undertaken when and to a standard consistent with the archaeological advice received.
3. The former Black Snake Inn and the adjacent historic timber outbuilding must be retained subject to condition THC2.4.
4. In the event that a detailed assessment of the historic timber outbuilding, which has been prepared by a suitably qualified person, can demonstrate to the satisfaction of the Works Manager, Heritage Tasmania, that it is not feasible to retain part or all of the historic timber outbuilding, then a full extant record of the structure must be prepared prior to any works to the outbuilding.
5. A full landscaping plan must be prepared for the registered place and its adjacent areas, and must include the following components:
 - 5.1. surface treatments for adjacent footpaths and shared paths must be specified in consideration of the historic cultural landscape setting of the place;
 - 5.2. if the existing hedge plantings along the frontage of the former Black Snake Inn are to be removed, appropriate replacement hedge planting will be included in the landscaping plan;
 - 5.3. landscaping plantings adjacent to the Black Snake Inn must be selected to be complementary to the historic cultural landscape setting of the place;
 - 5.4. landscaping measures to avoid unreasonable overlooking impacts to the Black Snake Inn must be included in the landscaping plan;
 - 5.5. the landscaping plan must detail protection measures for any existing significant plantings; and
 - 5.6. the landscaping plan must detail any proposed new walls, fences or noise mitigation measures, demonstrating that these are appropriately compatible with the heritage values and character of the place.

THC3 Additional matters

1. A construction noise and vibration management plan (CNVMP) must be prepared by a suitably qualified person and must include a vibration risk assessment for the other registered places adjacent to or within the project land, as listed below:
 - 1.1. the Watch House, 1 Lyell Highway, Granton;
 - 1.2. the Commandant's Cottage, 4 Forest Road, Granton;
 - 1.3. Granton (fmr South Bridgewater) Convict Site, 6 Forest Road, Granton;
 - 1.4. Granton (fmr South Bridgewater) Convict Site, 19 Tarrants Road, Granton;

- 1.5. St Mary's Anglican Church and Cemetery, 20 Old Main Road, Bridgewater;
- 1.6. Coronation Hall, 25 Old Main Road, Bridgewater.
2. A construction heritage management plan (CHMP) must be prepared for the other registered places adjacent to or within the project land and must include protection zones and vibration management around structures and areas of heritage significance, including areas of archaeological significance, to avoid damage to these items during construction activity.
3. An interpretation strategy must be prepared for the project land by suitably qualified person.
4. The interpretation strategy must include:
 - 4.1. information regarding the history and significance of the existing welded steel lift-span Bridgewater Bridge;
 - 4.2. information regarding the history and significance of the former Black Snake Inn; and
 - 4.3. information regarding the history and significance of the causeway and the historic crossing point, as well as the nearby registered places associated with the crossing, such as, the Watch House, Commandant's House, convict quarry and depot.
5. The interpretation strategy must be submitted to Heritage Tasmania at least 3 months prior to the proposed demolition of the existing Bridgewater Bridge, and must be to the satisfaction of the Works Manager, Heritage Tasmania.
6. The endorsed interpretation strategy must be fully implemented within 12 months of the demolition of the existing Bridgewater Bridge, or to an alternative timeframe as agreed to by the Works Manager, Heritage Tasmania.
7. Surface treatments for footpaths and shared paths adjacent to the Watch House must be specified in consideration of the historic cultural landscape setting of the place.
8. The Project Specifications must include notification protocols whereby archaeological advice is sought if archaeological features or deposits are uncovered during excavation or where doubt exists concerning the historical cultural heritage significance of any materials uncovered during excavation or ground disturbance; and that provision must be made for controlled archaeological excavation to be undertaken when and to a standard consistent with the archaeological advice received.

THREATENED SPECIES PROTECTION ACT 1995

Section 60ZZZD of the *Land Use Planning and Approvals Act 1993*, sets out the responsibility for enforcement of conditions and restrictions TSP1 and TSP2.

TSP1 terrestrial flora and fauna

1. The proponent (and any employees or subcontractors of a person named in this permit acting on that person's behalf on their written authority) is authorised to take the following specified terrestrial threatened flora species:
 - 1.1. *Austrostipa bigeniculata* (double jointed speargrass); and
 - 1.2. *Vittadinia gracilis* (woolly newholland-daisy),

from the Bridgewater Bridge direct project footprint, contained within the project land identified in Figure 3.2 of the New Bridgewater Bridge Major Project Impact Statement (November 2021).

2. This action is subject to the following conditions:
 - 2.1. All identified terrestrial threatened flora locations in the project land outside of, but adjacent to, the direct project footprint must be taped or fenced off by a suitably qualified person to the extent necessary to prevent incursion by machinery or personnel.
 - 2.2. Mechanical disturbance, dumping of fill, alteration of drainage patterns and soil compaction on sites known or likely to support the specified threatened flora must be avoided.
 - 2.3. Topsoil from areas known to contain the specified threatened flora must be stockpiled and used for rehabilitation on site.
 - 2.4. Measures to control the introduction, spread and movement of disease and weeds by equipment or by on ground operations must be undertaken in accordance with the Department's (2015) Weed and Disease Planning and Hygiene Guidelines - Preventing the spread of weeds and diseases in Tasmania as relevant.
 - 2.5. A report must be provided to the Department of Natural Resources and Environment Tasmania (NRE Tas) within 30 days of the completion of the activity authorised under this permit or expiration of the permit, whichever is the sooner. The report must detail the numbers of individual plants taken, or the area of the population taken of the specified threatened species, along with the date and location of the works undertaken.

TSP2 Aquatic Flora

1. The proponent (and any employees or subcontractors of a person named in this permit acting on that person's behalf on their written authority) is authorised to take the following specified aquatic threatened flora:
 - 1.1. *Ruppia megacarpa* (largefruit seatassel) –up to 3.53ha of habitat from the Bridgewater Bridge direct project footprint, contained within the project land identified in Figure 3.2 of the New Bridgewater Bridge Major Project Impact Statement (November 2021).
2. Subject to the following conditions:
 - 2.1. Prior to commencement of relevant construction, in the River Derwent, an Aquatic Threatened Flora Management Plan that includes mitigation measures to prevent sediment disturbance to threatened flora outside of the direct project footprint must be submitted to the Department of Natural Resources and Environment Tasmania for approval.

The Management Plan must include, at a minimum, mitigation measures to control impacts to threatened flora including: use of barriers to limit sediment disturbance during high impact activities (such as cofferdams, silt screens, and/or silt curtains) and control of vessel movements (such as limiting total movements, timing movements to correlate with high tides, use of shallow draft boats with short shaft motors). The locations of all threatened aquatic flora on the project land, outside of the direct project footprint, must be clearly marked on the construction environmental management plan.

- 2.2. A report detailing the numbers of individual plants taken, or the area of the population taken, along with the date and location of the works undertaken that directly impacted the specified threatened species must be provided to the Department of Natural Resources and Environment Tasmania (NRE Tas) within 30 days of the completion of the activity authorised under this permit or 30 days prior expiration of the permit, whichever is the sooner.

NATURE CONSERVATION ACT 2002

Section 60ZZZD of the *Land Use Planning and Approvals Act 1993*, sets out the responsibility for enforcement of condition and restriction NCA1.

NCA1 Terrestrial Fauna

1. The proponent (and any employees or subcontractors of a person named in this permit acting on that person's behalf on their written authority) is authorised to take nests, eggs and nestlings of Protected and Partly Protected bird species listed under Schedules 1 and 8 of the *Nature Conservation (Wildlife) Regulations 2021* (the Regulations).
2. These may be taken from the project land in Figure 3.2 of the New Bridgewater Bridge Major Project Impact Statement (November 2021).
3. This action is subject to the following conditions:
 - 3.1. This permit does not permit the taking of, or impacts to; nests, eggs and nestlings of birds listed as Specially Protected under Schedule 5 of the Regulations. If any nests identified as belonging to birds listed under Schedule 5 of the Regulations are identified as occurring within the construction footprint of the bridge and will be impacted directly by the construction, works must cease immediately and further advice sought from the regulator.
 - 3.2. Nest surveys of Protected and Partly Protected bird species located within the project land are permitted to take place from May onwards and clearance of nests, eggs and nestlings must take place as close to the commencement of construction as possible.
 - 3.3. Nests and associated nesting habitat from the bird species authorised to be taken under this permit, located within the direct project footprint and that will be impacted by construction activities, must be removed and/or destroyed. Any eggs found within nests must be removed from the nests and destroyed. Any nestlings must be removed from the nests and humanely destroyed.
 - 3.4. All known locations of bird nests outside of, but adjacent to, the works area must be taped or fenced off by a suitably qualified person to the extent necessary to prevent incursion by machinery or personnel.
 - 3.5. A report must be provided to the Department of Natural Resources and Environment Tasmania within 30 days of the completion of the activity authorised under this permit or expiration of the permit, whichever is the sooner. The report must detail the number of individual bird nests, eggs and/or nestlings taken, along with the date and location of the works undertaken.
 - 3.6. A suitably qualified and experienced person must be engaged to identify the nests as not belonging to bird species listed under Schedule 5 of the Regulations.

- 3.7. Any nestlings found within the construction footprint directly prior to construction works must be euthanised in accordance with the Methods of Euthanasia set out in the Best Practice Guidelines for Wildlife Rehabilitation July 2021 published on the Department of Natural Resources and Environment Tasmania website.

ABORIGINAL HERITAGE ACT 1975

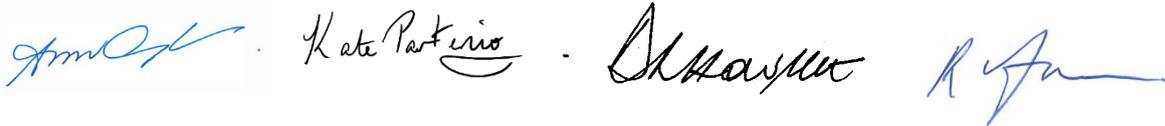
Section 60ZZZD of the *Land Use Planning and Approvals Act 1993*, sets out the responsibility for enforcement of conditions and restrictions AH1.

AH1 Aboriginal heritage

1. The Proponent (and any employees or subcontractors of a person named in this permit acting on that person's behalf on their written authority) is authorised to interfere with the identified Aboriginal relics AH 11190 and AH 13833 while carrying out the approved works as outlined in the MPIS. These sites are contained within the project land identified in Figure 3.2 of the New Bridgewater Bridge Major Project Impact Statement (November 2021).

Date granted: 18 May 2022

Signed by the Development Assessment Panel



Ann Cunningham

Chairperson

Kate Partenio

Member

Roger Howlett

Member

Richard Jamieson

Member

THIS PERMIT HAS BEEN AMENDED AS FOLLOWS:

<i>Amendment No.</i>	<i>Date of amendment</i>	<i>Brief description of amendment</i>

SCHEDULE 1 – DEFINITIONS

Terms in this permit have their ordinary meaning unless defined in this schedule, the *Land Use Planning and Approvals Act 1993*, or unless the contrary intention appears.

AASS means actual acid sulfate soils.

Ambient Air Quality NEPM means the *National Environment Protection (Ambient Air Quality) Measure* made by the National Environment Protection Council, dated 18 May 2021.

AS/NZS 3580.14:2014 means *the Australian/New Zealand Standard for Methods for sampling and analysis of ambient air, Part 14: Meteorological monitoring for ambient air quality monitoring applications*, 2014.

AS/NZS 3580.1.1:2016 means the Australian/New Zealand Standard for *Methods for sampling and analysis of ambient air, Guide to siting air monitoring equipment*, 2016.

AS1742.3:2019 means the Australian Standard for *Manual of uniform traffic control devices Traffic control for works on roads*, 2019.

ASS Guidelines means the *Tasmanian Acid Sulfate Soil Management Guidelines*, Department of Primary Industries, Parks, Water and the Environment, 2009.

ASS means acid sulfate soils.

Australian Air Quality Standards means the air quality standards set in the Ambient Air Quality NEPM.

Background level means the maximum level measured at intermediate monitoring sites, set in accordance with these conditions, which at the time of monitoring are outside of the zone of potential significant effect of disturbed sediment.

Commencement of Construction means the point at which the Person Responsible commences any activity on the project land under this permit in a continuous program of construction excluding Low Impact Works.

Commission has the meaning in section 3 of the Tasmanian Planning Commission Act 1997.

Community Values has the meaning ascribed in the *ANZG 2018 Australian and New Zealand Guidelines for Fresh and Marine Water Quality*. Australian and New Zealand Governments and Australian state and territory governments, Canberra ACT, Australia

Construction means activities associated with the construction phase of the Project encompassed by these conditions, including but not limited to, activities associated with the clearance of vegetation, soil disturbance, rock breaking and installation of infrastructure whether on land or in water. It does not include demolition of the existing Bridgewater Bridge.

Decommissioning means completion of site works at any location, including removal of equipment and rehabilitation of exposed surfaces.

Demolition means demolition of the existing Bridgewater Bridge as described in the MPIS.

Department of State Growth Specification – Section 176, Part B – Water Quality means Part B of the *Standard Specification for Road Projects, Section 176, Part B*, Department of State Growth, 2017, and includes any subsequent versions of that document.

Design Plans means general arrangement plans prepared to show the extent, location, size and elevation of use and development, at a scale sufficient to confirm permit compliance.

Director means the Director, Environment Protection Authority holding office under Section 18 of EMPCA and includes a delegate or person authorised in writing by the Director to exercise a power or function on the Director's behalf.

DRP means Decommissioning and Rehabilitation Plan.

EMPCA means the *Environmental Management and Pollution Control Act 1994*

Environmental Harm and **Material Environmental Harm** and **Serious Environmental Harm** each have the meanings ascribed to them in Section 5 of EMPCA.

Environmental Nuisance and **Pollutant** each have the meanings ascribed to them in Section 3 of EMPCA.

Environmentally Hazardous Material means any substance or mixture of substances of a nature or held in quantities which present a reasonably foreseeable risk of causing serious or material environmental harm if released to the environment and includes fuels, oils, waste and chemicals but excludes sewage.

German Standard DIN 4150-3:1999 means *German Standard: DIN 4150: Part 3:1999. Structural Vibration – Part 3: Effects of Vibration on Structures*, Deutsches Institut für Normung e.V., Berlin, Germany

Habitable room has the meaning ascribed to it in Section 3 of EMPCA.

IB 105 means *Information Bulletin No. 105 – Classification and Management of Contaminated Soil for Disposal*, EPA Tasmania 2018, and includes any subsequent versions of that document.

L_{Aeq, 9-hour} means the A-weighted traffic equivalent noise level for the period between 2200 hours and 0700 hours.

L_{Amax} means the maximum r.m.s A-weighted sound pressure level during a specified time interval, as measured using the F time-weighting characteristics as specified in Australian Standard AS1259.1 *Acoustics – Sound level meters – Non-integrating*.

Low Impact Works means topographical or feature survey work including installation of controls and markers, dilapidation surveys, underground service location including potholing, geotechnical investigations including drilling, coring, test pitting and hand testing, collection of samples for analysis including of contaminated materials, installation of monitoring stations, installation of mitigation measures for sediment and erosion control, installation of temporary fencing, establishment of temporary facilities to support construction (e.g. site offices and laydown areas), establishment of exclusion zones for protected areas, archaeological investigations, geoheritage investigations, maintenance of existing facilities under the control of the Proponent, and in accordance with any other condition required by this permit.

Management Plans means air quality management plan, noise and vibration management plan, estuarine water quality monitoring plan, contingency management plan, stormwater management plan, environmentally hazardous materials management plan, waste materials management plan.

MPIS means the *Major Project Impact Statement – New Bridgewater Bridge*, dated 12 November 2021, prepared for the New Bridgewater Bridge Major Project.

Near Field means within the volume of water within the estuarine environment adjacent to works that may cause mobilisation of sediment where any disturbed sediment plume has not yet been entirely entrained in the direction of water current flow.

No increase in flood risk means:

- (a) the modelled flood levels (height) for the endorsed design is not more than 25mm above flood levels for equivalent flood events modelled without the construction of the New Bridgewater Bridge; or
- (b) the flood hazard category of the endorsed design, assessed in accordance with Section 7.2.7 of the Australian Rainfall and Runoff (2019), is not classified into a higher hazard vulnerability classification when modelled without the construction of the New Bridgewater Bridge.

Noise Sensitive Receptor means a sensitive receptor with the potential to be affected by noise emissions, and includes residences, classrooms, hospitals, places of worship, passive recreation areas such as outdoor grounds used for teaching, active recreation areas such as parks and sports ground, commercial premises and industrial premises.

Operation phase of the Project means use of the new Bridgewater Bridge for traffic.

Other Plans means landscape plan, lighting design plan, staging report, decommissioning and rehabilitation plan, pre-construction operational traffic noise impact assessment report, post-construction traffic noise monitoring report.

PASS means potential acid sulfate soils.

PAH means polycyclic aromatic hydrocarbons.

Person Responsible is any person who is or was responsible for the Project and its associated works to which this document relates and includes the officers, employees, contractors, joint venture partners and agents of that person, and includes a body corporate.

Rating Background Level (RBL) means the Rating Background Level as defined in the *NSW EPA Noise Policy for Industry, 2017*.

Registered place means a place entered on the Tasmanian Heritage Register.

Relevant construction means construction activities, other than Low Impact Works, that are directly associated with, and may cause an impact against or relate to, a particular issue.

State Stormwater Strategy means the *State Stormwater Strategy*, Department of Primary Industries, Parks, Water and Environment, 2010.

Tasmanian Noise Measurement Procedures Manual means the document titled Noise Measurement Procedures Manual, by the Department of Environment, Parks, Heritage and the Arts, dated July 2008, and any amendment to or substitution of this document.

Tasmanian Traffic Noise Management Guidelines means the *Tasmanian State Road Traffic Noise Management Guidelines*, Department of State Growth, October 2015.

Tree protection zone means the space surrounding individual trees based on trunk (stem) diameter (DBH), measured at 1.4m up from ground level. The radius of the tree protection zone is calculated by multiplying the tree's DBH by 12. For example, a tree with 0.4m DBH requires a tree protection zone of 4.8m. The method provides a tree protection zone that addresses both tree stability and growth requirements. Tree protection zone distances are measured as a radius from the centre of the trunk at ground level.

Underwater Piling Noise Guidelines means the document titled *Underwater Piling Noise Guidelines* by the Government of South Australia, dated November 2012, and any amendment to or substitution of this document.

Vibration Sensitive Receptor means sensitive receptors with the potential to be affected by vibration and include all Noise Sensitive Receptors and critical infrastructure and utilities including electrical and telecommunications facilities, oil and gas pipelines and other petrochemical installations, utilities such as water mains and sewers and other facilities, infrastructure or utilities which may be deemed to be of critical importance.

Waste has the meaning ascribed to it in Section 3 of EMPCA.

Water quality guideline values has the meaning ascribed by clause 8.1 of the *State Policy on Water Quality Management 1997*

Water quality indicator has the meaning ascribed by the *State Policy on Water Quality Management 1997*.

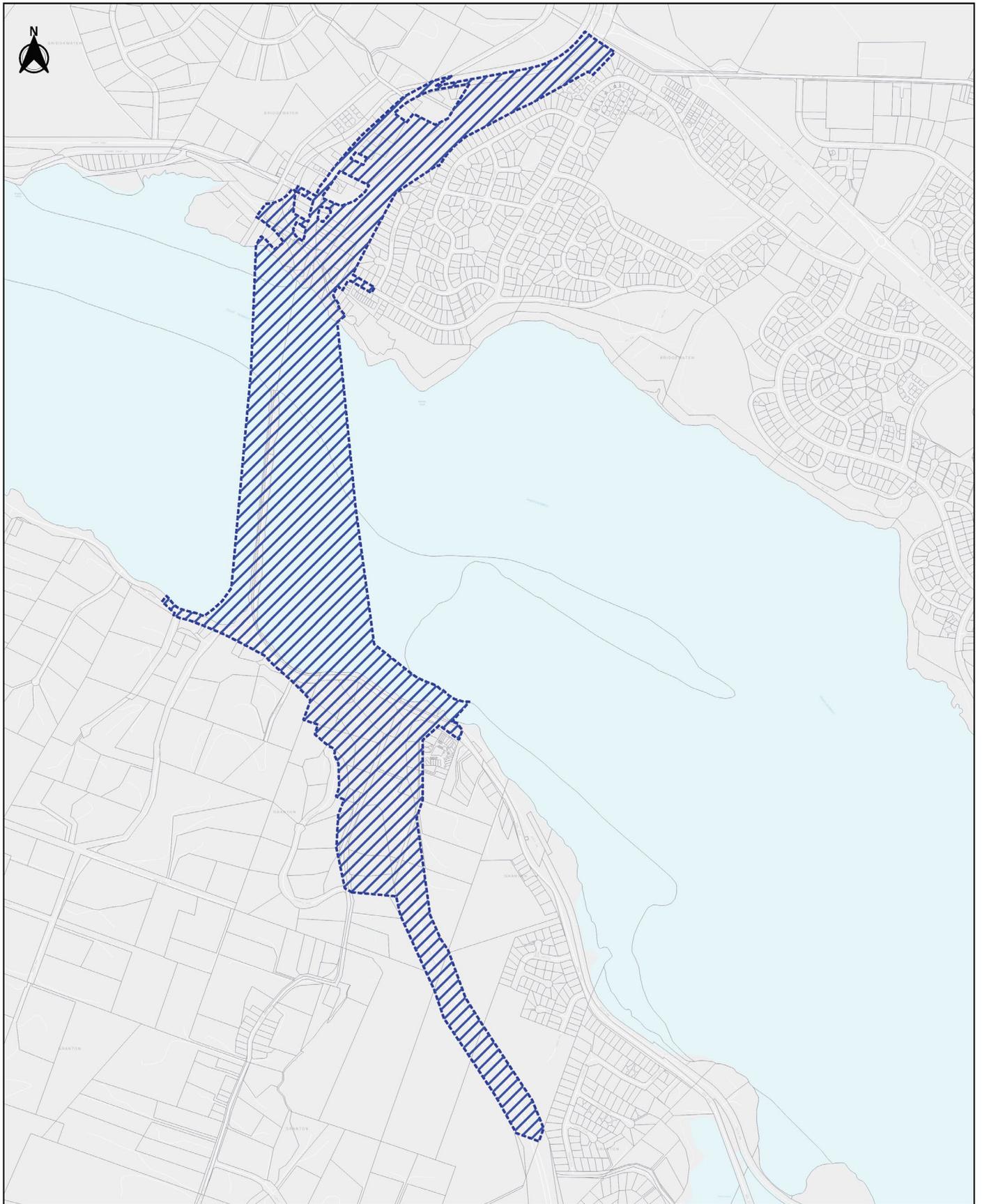
Works has the meaning in:

- (a) section 3 of the *Cultural Heritage Act 1995*, for conditions THC1, THC2 and THC3; and
- (b) section 3 of the *Land Use Planning and Approvals Act 1995*, for all other conditions.

SCHEDULE 2 – PROJECT LAND

Schedule 2 includes the following map, New Bridgewater Bridge Major Project – Project Land.

NEW BRIDGEWATER BRIDGE MAJOR PROJECT - PROJECT LAND



0 250 500 750 1,000 m

 Project Land
 Land Parcels (LIST)

1:10000 Scale at A3
GDA94
Cadastre & Topographic Basemap from theLIST © State of Tasmania