
APPENDIX A ENVIRONMENTAL
IMPACT STATEMENT
GUIDELINES: HEYBRIDGE
SHORE CROSSING

Table A EIS guidelines – Heybridge Shore Crossing for Marinus Link

	EIS guidelines	EIS Section where addressed
N/A	Executive Summary	
N/A	An executive summary of the EIS should be included to provide a clear and concise overview of the proposal, its environmental implications, the approvals process, and the function of the EIS in the context of the approvals process. For larger EISs, it is recommended that the executive summary be written as a stand-alone document, able to be provided on request to interested parties who may not wish to read or acquire the full EIS.	Executive Summary
N/A	Table of contents	
N/A	A table of the contents of the report with reference to the relevant page numbers. It should also contain a list of figures and tables.	Table of contents
N/A	Abbreviations and Glossary	
N/A	Include a list of abbreviations, acronyms and technical terms used in the EIS.	Abbreviations and Glossary
1	Introduction	
1	Title of the proposal	Section 1.1
1	Proponent details	Section 1.2, Table 1-1
1	Contact person's details	Section 1.2, Table 1-1
1	Activity operator details	Section 1.2
1	General background information on the proponent, such as relevant development and operational experience.	Section 1.2
1	General background information on the proposal, including the current status of the proposal, an overview of the principal components of the proposal, the proposal location, anticipated establishment costs, likely markets for the product, and the possibilities for future expansion	Section 1.2, 6.12, 6.14
1	An examination of how the proposal relates to any other proposals that have been or are being developed, or that have been approved in the region affected by the proposal	Section 1.6.3
1	Environmental legislation, standards and guidelines that will be applicable (such as policies, regulations, and industry codes of practice).	Section 1.6
1	Other relevant Commonwealth, State and Local Government policies, strategies and management plans with which the proposal would be expected to comply.	Section 1.6
1	Details of any proceedings under a Commonwealth, State or Territory law for the protection of the environment or the conservation and sustainable use of natural resources, against the person proposing to take the action.	Section 1.6
1	If the person proposing to take the action is a corporation, details of the corporation's environmental policy and planning framework.	Section 1.2
2	Proposal description	
2	Where the proposal is to be subject to a permit application under the LUPA Act, the proposal description and specification of the site must be consistent with the intended or current permit application. Any works or activity that are for the purpose of the proposal (e.g., access works) must be included.	Section 1.6.1, 5.1.2
2	Provide a full description of the proposal, including construction, commissioning, operational and decommissioning phases, as well as any infrastructure and off-site ancillary facilities required for the proposal.	Section 2

	EIS guidelines	EIS Section where addressed
2	Provide a detailed description of key physical components of the proposal, including their function, composition, size, capacity, operational life, technical and performance requirements, interrelationships and method of construction, operation, and maintenance.	Section 2.1,2.2
2.1	General	
2.1	Details of the proposal, including an overview of the Marinus project, details of the particular component being assessed and any ancillary infrastructure.	Section 2, 2.1, 2.2
2.1	Description of the major items of equipment (including pollution control equipment) and on-site facilities as relevant. Detailed technical information on major items of equipment may be included in appendices.	Section 2, 2.3.3
2.2	Construction	
2.2	A step-by-step description and timetable for significant activities during the construction phase of the proposal. Indicative timeframes for the completion of major steps, and the likely sequencing of steps.	Section 2.3.2, Table 2-1
2.2	Details of any pre-construction works, including site preparation works, any temporary or permanent removal of vegetation including stockpiling of vegetation, and erosion control measures.	Section 2.3.1
2.2	Details of any pre-clearance surveys to be carried out prior to commencement of construction, including flora and fauna and geotechnical studies.	Section 2.3.1, 6.1.2
2.2	Estimates of the quantities of major raw materials required for construction (e.g., gravel, sand/aggregate and water) and how and where these will be sourced, i.e., on-site and/or off-site.	Section 2.3.4
2.2	Nature, capacity, and location(s) of temporary construction equipment required onsite.	Section 2.3.3
2.2	The volume, composition, origin, destination, and route for vehicle movements (including road, rail, shipping, and air) likely to be generated during each phase of the proposal, including a break-down for over-dimension and heavy road vehicles.	Section 2.3.6, 2.3.7
2.2	Information on the number of construction workers required in the various stages of construction, sources of labour, transport of workers to and from the site, accommodation, and support servicing requirements.	Section 2.3.5, 2.3.6
2.2	Proposed hours per day and days per week of construction activities.	Section 2.3.5
2.3	Commissioning	
2.3	A step-by-step description of major commissioning activities following installation of equipment.	Section 2.3.8
2.3	Indicative timeframes for the completion of major steps, and the likely sequencing of steps.	Section 2.3.8
2.3	Describe the point at which commissioning will be considered completed.	Section 2.3.8
2.4	Definition of the Land	Section 5
2.4	A definition of 'the land' (or area) on which the activity will take place must be provided.	Section 5, 5.1.1
2.4	A plan is required clearly showing the boundary of the land in relation to cadastral boundaries and topographic features (as relevant).	Figure 2-1, Figure 5-1
2.4	The boundary of the land should also be provided to the Board in a geospatial vector format (shapefile or DXF).	To be provided
2.5	General location map	
2.5	A general location map (e.g., 1:25,000 scale or better as appropriate) which identifies the following is required: <ul style="list-style-type: none"> • The location of the proposal site • Topographical features, aspect, and direction of drainage • Road access to and from the site 	Figure 1-4, Figure 2-1, Figure 2-2, Figure 2-3, Figure 5-1,

	EIS guidelines	EIS Section where addressed
	<ul style="list-style-type: none"> • Location of waterways and drains (including ephemeral) • The distance(s) to any nearby sensitive uses (such as residences) • Electricity transmission lines • Boundaries of the property on which the proposal is located • Surrounding land tenure • Surrounding land use (identify areas of conservation or recreational significance) • Jurisdictional (State and Commonwealth) boundaries • Surrounding land zoning in the local government planning scheme • Any seabed or other features which may be relevant in the aquatic portion of the proposal. (specific to shore crossing component) 	Figure 5-2, Figure 5-3, Figure 5-4, Figure 5-6, Figure 5-7
2.6	Site Plan	
2.6	<p>A site plan(s) is required which includes existing and proposed conditions and features of the site/cabling route and surrounding area out to the limit of State waters.</p> <p>Where relevant, this may include:</p> <ul style="list-style-type: none"> • Elevation contours and levels. • The positions of topographic features including roads, tracks, waterways, and drains. • Key shoreline and benthic geomorphological features. (specific to shore crossing component) • Key natural values or constraints such as potentially contaminated areas. • The positions of facilities, buildings, structures, major items of equipment, storage areas and loading or unloading areas (existing and proposed). • The route of any pipelines, tracks, roads, conveyors, or similar means of transporting onsite materials. • The location of raw materials storage areas. • The locations of temporary and permanent storage areas for fuels, oils, reagents and other hazardous goods or chemicals. • The locations of stormwater collection systems and details of drainage control measures such as cut-off drains and sediment settling ponds, including location of all discharge points (stormwater or other). • Details of any screening vegetation or bund walls. • The location(s) of any monitoring sites. 	Figure 1-4, Figure 2-1, Figure 2-2, Figure 2-3, Figure 5-6, Figure 5-7
2.6	Geospatial data included on the plan(s) should also be provided to the Board in a geospatial vector format (shapefile or DXF).	
2.7	Off-site infrastructure	
2.7	Any new infrastructure or off-site ancillary facilities required to allow the proposal to proceed should be described (for example water supply, electricity supply, roads, or other transport infrastructure).	Section 2.3.7, 6.13
3	Rationale and Project Alternatives	
3	Discuss the rationale for Marinus Link as a whole and this component of the project in particular including how it relates to other proposals.	Section 3.1, 3.2

	EIS guidelines	EIS Section where addressed
3	Describe the site/route selection process, including selection criteria, alternative sites/routes considered and an assessment of those alternatives. The assessment should compare alternatives according to clearly defined environmental, social, economic, and technical considerations, and provide a justification for the preferred site/route.	Section 3.3
3	Detail the effect that any community consultation undertaken had on the selection process.	Section 3.3 and Section 4
3	Provide a critique of other available technologies and the reason for selection of the preferred technology, including from an environmental perspective.	Section 3.3.4, 3.3.5
4	Public Consultation	
4	Detail the nature and results of public consultation undertaken by the proponent during project planning and preparation of the EIS, as well as any proposals for further public consultation during and beyond project implementation. Early community engagement often leads to better outcomes for all and is strongly encouraged. The Board has produced a guide to community engagement which is available on the EPA Website.	Section 4
5	Existing environment	
5	Describe the proposed site/route location and provide an overview of the existing environment which may be affected by construction and operation of the proposal, including areas associated with any ancillary activities.	Section 5
5	Include details of salient features of the existing environment and, where appropriate, include maps, plans, photographs, diagrams, or other descriptive detail.	Section 5, Figure 5-1, Figure 5-2, Figure 5-3, Figure 5-4, Figure 5-6, Figure 5-7
5.1	Planning aspects	
5.1	If a permit is required for the proposal under the LUPA Act provide: <ul style="list-style-type: none"> • Use Class of the proposed activity under the applicable Planning Scheme. • Permissibility of the activity under the applicable Planning Scheme. 	Section 5.1.2, Table 5-2
5.1	Information on land tenure and property boundaries of the proposed site/route, with certificate of title details.	Section 5.1.1, Table 5-1
5.1	Land zonings for the proposed site and surrounding areas.	Section 5.1.2, Table 5-2
5.1	Any rights of way, easements and covenants affecting the site	Section 5.1.1
5.1	Land and water use and planning history of the site, including the potential for site contamination, present use and any existing buildings and significant structures.	Section 5, Section 5.1.3
5.1	A description of land use and ownership in the vicinity of the site and those areas which may be affected by the proposal, including: <ul style="list-style-type: none"> • The location and nature of industrial facilities. • Any sensitive uses or residential zones within applicable attenuation distances including the location of individual residences, schools, hospitals, caravan parks and similar sensitive uses, and the location of any tourist or recreation facilities or routes (such as camping areas, picnic areas, walking tracks, historic routes). 	Section 5.1, 5.1.1 5.1.3, 5.1.4

	EIS guidelines	EIS Section where addressed
	<ul style="list-style-type: none"> Any proposed or potentially sensitive uses within this distance of the proposal site, which have been or are likely to be granted approval under the local planning scheme, should also be considered. 	
5.2	Environmental aspects	
5.2	A description of the general physical characteristics of the site/route and surrounding area, including topography, local climate, geology, geomorphology, soils (including erodibility and acid sulphate soils), vegetation, fauna, groundwater and surface drainage (including waterways, lakes, wetlands, coastal areas etc).	Section 5.2.1, 5.2.2, 5.2.3, 5.2.4, 5.2.5, 5.2.6, 5.2.7, 5.2.8
5.2	A description of natural processes of particular importance for the maintenance of the existing environment (e.g., fire, flooding, wave action etc).	Section 5.2
5.2	Any existing conservation reserves located on or within 500 metres of the site/route.	Section 5.2.5
5.2	Information on species, sites or areas of landscape, aesthetic, wilderness, scientific or otherwise special conservation significance which may be affected by the proposal. Relevant information resources include the LIST and the Natural Values Atlas.	Section 5.2.4, 6.1.3
5.2	An assessment of the vulnerability of the site to natural hazards (e.g., flooding, seismic activity, fire, landslips, or strong winds).	Section 5.2
5.2	Any available air, noise, or water ambient monitoring results for the vicinity of the proposed development (in tabular or graphical form). The results may be summarised (e.g., as annual averages) if the summary will provide adequate information.	Table 5-5, Table 6.7-3
5.3	Socio-economic aspects	
5.3	A summary of the social or demographic characteristics of the population living in the vicinity of the proposal site, identifying any special characteristics which may make people more sensitive to impacts from the proposal than might otherwise be expected.	Section 5.3.1
5.3	A summary of the characteristics of the local and regional economy.	Section 5.3.1, 5.3.2
5.3	Human uses of the area which may be impacted by or interact with the proposal.	Section 6.12
6	Potential impacts and their management	
6.1	Terrestrial Natural Values	
6.1	Existing environment	
6.1	Specify and map known records of species and their habitat, with particular reference to rare and threatened species, communities, and habitats, including those listed under the relevant Schedules of the Commonwealth EPBC Act and the <i>Tasmanian Threatened Species Protection Act 1995</i> (TSP Act) and <i>Tasmanian Nature Conservation Act 2002</i> (NC Act).	Section 6.1.3
6.1	Undertake and provide the results of a current natural values survey for the site.	Section 6.1.2, 6.1.3
6.1	Identify any known occurrences of species of conservation significance, threatened fauna species or flora species or potential habitat in the vicinity of the proposal footprint, or potentially impacted offsite, including aquatic species and shorebirds.	Section 6.1.3
6.1	White-bellied sea-eagle (<i>Haliaeetus leucogaster</i>) and Tasmanian Wedge-tailed Eagle (<i>Aquila audax</i> subsp. <i>fleayi</i>) have been recorded in the area and an eagle nest has been recorded 1.8 km from the impact site. As eagle pairs often have several nests in their territory, an eagle nest search must be undertaken within 500 m direct distance and 1 km line-of-sight of the development to determine if any unknown nests are present. As eagles can be sensitive to disturbance during the eagle nesting/breeding season (July to January).	Section 6.1.3.4, 6.1.6
6.1	Identify areas or habitats of conservation significance, including designated conservation areas, areas relating to the requirements of international treaties (e.g., Japan-Australia and China-Australia Migratory Bird Agreements (JAMBA/CAMBA) and Ramsar (wetlands) Convention).	Section 6.1.3.6

	EIS guidelines	EIS Section where addressed
6.1	Specify and map known sites of geoconservation significance or natural processes (such as fluvial or coastal features), including sites of geoconservation significance listed on the Tasmanian Geoconservation Database.	Section 6.1.3.6
6.1	Demonstrate that any surveys comply with requirements in Guidelines for Terrestrial Natural Values Surveys	Section 6.1.2
6.1	Identify any environmental weed species present on or near the site	Section 6.1.3.5
6.1	Describe natural processes of particular importance for the maintenance of the existing environment (e.g., fire, flooding, etc).	Section 6.1.3
6.1	Provide all results in a natural values assessment, undertaken by a suitably qualified person.	Section 6.1.3
6.1	Potential impacts	
6.1	Describe potential impacts of construction and operation of the proposal on flora, vegetation communities and habitat, with particular reference to rare and threatened species, communities, and habitats, including those listed under the relevant Schedules of the TSP Act and NC Act.	Section 6.1.5
6.1	Describe potential impacts of construction and operation of the proposal on fauna, including impacts on species, communities, and habitats. Provide details of impacts to rare and threatened species, migratory species, communities, and habitats, including those listed under the relevant Schedules of the TSP Act and NC Act.	Section 6.1.5
6.1	In discussion of impacts on flora and fauna, including consideration of: <ul style="list-style-type: none"> Habitat clearance and disturbance Activity causing potential disturbance (e.g., movement) Noise and vibration emissions Lighting Vehicle movements (including roadkill) Mobilised contaminated material or sediment The potential for the proposed works to result in subsidence and resultant impact onshore bird habitat above and adjacent to the drill holes. 	Section 6.1.5
6.1	Discuss impacts on existing conservation reserves which may be affected by the proposal, with reference to the management objectives of the reserve(s) and the reserve management plan(s) (if any).	N/A (refer to Section 6.1.3)
6.1	Discuss impacts on other species, sites or areas of special conservation significance, including areas of wilderness or scientific value.	N/A (refer to Section 6.1.3)
6.1	Discuss the potential introduction or spread of pests, weeds and plant and animal diseases as a result of construction and operation of the proposal. Information about controlling the introduction and spread of weeds and the development of weed and disease management plans can be found in Section 4 of the NRE (2015) <i>Weed and Disease Planning and Hygiene Guidelines – Preventing the spread of weeds and diseases in Tasmania</i> .	Section 6.1.5, 6.1.6
6.1	Discuss impacts on sites of geoconservation significance or natural processes (such as fluvial or coastal features), including sites of geoconservation significance listed on the Tasmanian Geoconservation Database.	N/A (refer to Section 6.1.3)
6.1	In consideration of all issues, discuss any potential for cumulative impact with the proposed Heybridge Converter Station for Marinus Link.	Section 6.1.5.4
6.1	Avoidance and mitigation measures	

	EIS guidelines	EIS Section where addressed
6.1	Describe management measures to mitigate adverse impacts to threatened fauna, flora and vegetation communities and other natural values where they cannot be avoided.	Section 6.1.6
6.1	It is noted that the shore crossings will be drilled continuously over 24 hours, seven days a week to ensure borehole stability. It is important that illumination of the site at night is minimised as this can disorient seabirds and shorebirds. If there is to be any form of additional night time lighting associated with the construction area for safety (or other) reasons, the illumination should be kept to a minimum and red light should be used. It is recommended that the guidance principles outlined in the Commonwealth <i>National Light Pollution Guidelines for Wildlife</i> be considered for incorporation into the lighting design, in particular those specified in Appendix A (Best Practice Lighting Design)	Section 6.1.6
6.1	Where impacts cannot be avoided, present proposed measures to mitigate and/or compensate adverse impacts on biodiversity and nature conservation values.	Section 6.1.6
6.1	Develop a plan to control the spread of weeds, pests and diseases and ensure that weeds present at the impact site are properly managed	Section 6.1.6
6.1	Discuss rehabilitation of disturbed areas following the completion of construction activities and cessation of the activity, including any proposed seed collection and progressive rehabilitation programme.	Section 6.1.6
6.1	Provide a conclusion regarding the significance of likely impacts on natural values.	Section 6.1.7
6.1	Requirements for surveys	
6.1	Any flora and fauna surveys must, as a minimum, comply with the requirements of the document Guidelines for Terrestrial Natural Values Surveys published by the Department of Natural Resources and Environment (NRE). The methodology for surveys should be developed in consultation with the Department.	Section 6.1.2, 6.1.6
6.1	Legislative and policy requirements	
6.1	<i>Tasmanian Threatened Species Protection Act 1995</i> and associated regulations, <i>Nature Conservation Act 2002</i> and associated regulations, including the <i>Nature Conservation (Wildlife) Regulations 2021</i> , <i>Forest Practices Act 1985</i> and associated regulations and codes (as relevant). <i>Commonwealth National Light Pollution Guidelines for Wildlife</i> .	Section 6.1.4
6.2	Potentially contaminated material and acid sulfate soils	
6.2	From sampling, provide an analysis as to whether Potential Acid Sulfate Soils (PASS) may be present and potentially disturbed as a result of construction of the proposal.	Section 6.2.3.5, 6.2.5.1.3
6.2	For the terrestrial component of the proposal, an assessment of site contamination, which must be conducted in accordance with the <i>National Environment Protection (Assessment of Site Contamination) Measure 1999</i> by a consultant who holds Site Contamination Specialist certification under the Certified Environmental Practitioner Scheme (CEnvP(SC)).	Section 6.2.2, 6.2.3
6.2	For the marine component of the proposal, an assessment of site contamination undertaken by a suitably qualified person, based on sampling and site history, applying the principles of the <i>National Environment Protection (Assessment of Site Contamination) Measure 1999</i> as relevant.	Section 6.2.2, 6.2.3, 6.2.4.1
6.2	Detail of proposed construction methodology, footprint, extent of disturbance and how this may interact with contaminated material and PASS.	Section 6.2.5.1, 6.2.3.6
6.2	Analysis of receptors and risk to receptors due to disturbing potentially contaminated material, during and after construction (e.g., from scouring of sediment due to altered flow patterns).	Section 6.2.3.7, 6.2.5.1, 6.2.5.2, 6.2.5.3
6.2	Potential consequences of disturbance (i.e., potential impact/risks), and evaluation of their significance.	Section 6.2.5, 6.2.5.3

	EIS guidelines	EIS Section where addressed
6.2	Potential cumulative impact with works being undertaken for the Heybridge convertor station.	Section 6.2.5.4
6.2	Describe proposed management and mitigation measures for minimising impacts of contaminated material during construction and long-term use/operation, including storage, monitoring and disposal as relevant.	Section 6.2.6
6.2	In regard to potential acid sulfate soils, the risk should be managed and monitored in accordance with Australian Government ASS Guidelines and <i>Tasmanian ASS Management Guidelines</i> . The national guidelines indicate that a management plan is required for an activity if >100m ³ ASS materials is likely to be disturbed during the construction phase. This management plan should clearly describe and detail construction techniques, include a risk assessment and describe management and monitoring activities.	Section 6.2.6
6.2	Legislative and policy requirements	
6.2	<i>National Environment Protection (Assessment of Site Contamination) Measure 1999</i> (the ASC NEPM), <i>Environmental Management and Pollution Control (Waste Management) Regulations 2020</i> , Australian Government ASS guideline documents, <i>Tasmanian Acid Sulfate Soils Management Guidelines 2009</i> .	Section 6.2.46.2.4
6.3	Marine natural values	
6.3	Existing environment	
6.3	Specify and map known records of species and their habitat in the vicinity of the proposed works, including shorebirds and aquatic species, with particular reference to rare and threatened species, communities, and habitats, including those listed under the relevant Schedules of the Commonwealth EPBC Act and the <i>Tasmanian Threatened Species Protection Act 1995</i> (TSP Act) and <i>Tasmanian Nature Conservation Act 2002</i> (NC Act).	Section 6.3.4
6.3	Undertake and provide the results of a marine natural values survey of the proposed cable routes, including benthic ecology, habitat and observed species.	Section 6.3.2 and 6.3.4
6.3	Demonstrate that any surveys comply with requirements in <i>Guidelines for Marine and Estuarine Natural Values Surveys</i> related to Development Proposals	Section 6.3.2
6.3	Identify areas or habitats of conservation significance, including designated conservation areas or areas relating to the requirements of international treaties.	Section 6.3.4
6.3	Describe natural processes of particular importance for the maintenance of the existing environment.	Section 6.3.4
6.3	Provide all results in a natural values assessment, undertaken by a suitably qualified person.	Section 6.3.2 and 6.3.4
6.3	Potential impacts	
6.3	Describe potential short-term and long-term impacts of construction and operation of the proposal on flora and fauna, with particular reference to rare and threatened species, migratory species, communities, and habitats, including those listed under the relevant Schedules of the TSP Act and NC Act.	Section 6.3.5
6.3	In discussion of impacts on flora and fauna, including consideration of: <ul style="list-style-type: none"> • Habitat clearance and disturbance. • Activity causing potential disturbance (e.g., movement). • Noise and vibration emissions. • Lighting. • Vehicle/vessel movements. 	Section 6.3.5

	EIS guidelines	EIS Section where addressed
	<ul style="list-style-type: none"> • Potential for marine mammal entanglement or collision with vessels or infrastructure. • Mobilised contaminated material or sediment. • Heat and electromagnetic radiation, including whether it will have any potential impacts on benthic ecosystems, fish or mammals, and their migratory behaviours, e.g., through impact on movement of seawater, magnetic characteristics of marine sediments or other potential impacts. 	
6.3	Discuss the potential introduction or spread of pests or plant and animal diseases as a result of construction and operation of the proposal.	Section 6.3.5
6.3	In consideration of all issues, discuss any potential for cumulative impact with the proposed Heybridge converter station and the remainder of cabling works for Marinus Link.	Section 6.3.5.3
6.3	Avoidance and mitigation measures	
6.3	Describe potential short-term and long-term impacts of construction and operation of the proposal on flora and fauna, with particular reference to rare and threatened species, migratory species, communities, and habitats, including those listed under the relevant Schedules of the TSP Act and NC Act.	Section 6.3.5
6.3	It is noted that the shore crossings will be drilled continuously over 24 hours, seven days a week to ensure borehole stability. It is important that illumination of the site at night is minimised as this can disorient seabirds and shorebirds. If there is to be any form of additional night-time lighting associated with the construction area for safety (or other) reasons, the illumination should be kept to a minimum and red light should be used. It is recommended that the guidance principles outlined in the <i>Commonwealth National Light Pollution Guidelines for Wildlife</i> be considered for incorporation into the lighting design, in particular those specified in Appendix A (Best Practice Lighting Design).	Section 6.1.6, 6.3.6, and 6.3.3.3
6.3	Where impacts cannot be avoided, present proposed measures to mitigate and/or compensate adverse impacts on biodiversity and nature conservation values.	Section 6.3.6
6.3	Develop a plan to control the spread of weeds, pests and diseases and ensure that weeds present at the impact site are properly managed.	Section 6.1.6
6.3	Discuss rehabilitation of disturbed areas following the completion of construction activities and cessation of the activity, including any proposed seed collection and progressive rehabilitation program.	Section 6.3.6
6.3	Provide a conclusion regarding the significance of likely impacts on natural values.	Section 6.1.6, 6.3.6
6.3	Requirements for surveys	
6.3	Any flora and fauna surveys must, as a minimum, comply with the requirements of the document <i>Guidelines for Natural Values Assessments</i> or with the <i>Guidelines for Natural Values Surveys – Estuarine and Marine Development Proposals</i> (as relevant) published by the Department of Natural Resources and Environment (NRE). The methodology for surveys should be developed in consultation with the Department.	Section 6.3.2
6.3	Legislative and policy requirements	
6.3	<i>Tasmanian Threatened Species Protection Act 1995</i> and associated regulations, <i>Nature Conservation Act 2002</i> and associated regulations, <i>Forest Practices Act 1985</i> and associated regulations and codes (as relevant). <i>Commonwealth National Light Pollution Guidelines for Wildlife</i> .	Section 6.3.3
6.4	Marine water quality	
6.4	Discuss potential impacts of construction and operation of the proposal on marine water quality including:	

	EIS guidelines	EIS Section where addressed
6.4	Details and results of any baseline water quality, biological or sediment monitoring undertaken. Please note it is preferable that any such monitoring be undertaken over a minimum 18-month period on a monthly basis but may include reference to historical water quality monitoring. As available, other relevant information for assessing potential impacts such as ecotoxicological, hydrological or electromagnetic data should be included.	Section 6.4.2
6.4	Consideration of applicable Default Guideline Values (DGVs) and Protected Environmental Values (PEVs) under the <i>State Policy on Water Quality Management 1997</i> .	Section 6.4.2, 6.4.4, 6.5
6.4	Consideration of construction impacts on water quality, including: the potential for pollutants such sediment, fuel, drilling fluid or other hazardous chemicals to enter the marine environment. specific consideration of the potential for contaminated material or acid sulfate soils to be disturbed. any potential diffuse or point source liquid emissions (e.g., stormwater or runoff from waste materials). cumulative impact with proposed Heybridge converter station works and the remainder of cabling works for Marinus Link.	Section 6.4.5.1, 6.4.5.3
6.4	Consideration of operational impacts on water quality, including: electromagnetic fields (noting that electromagnetic radiation is within the definition of ‘pollutant’ under the EMPC Act); and potential maintenance works.	Section 6.4.5.3, 6.3.5.2
6.4	Discuss proposed avoidance and mitigation measures to minimise potential impacts on marine water quality. In regard to potential acid sulfate soils, the risk should be managed and monitored in accordance with the applicable Australian Government ASS guidelines and Tasmanian ASS Management Guidelines, as per requirements under Key Issue 2: Potentially Contaminated Material and Acid Sulfate Soils.	Section 6.4.6, 6.2.6
6.4	Provide justification for any proposed emission of pollutants to marine waters in accordance with the principles under the <i>State Policy on Water Quality Management 1997</i> and with application of a ‘weight of evidence approach’ consistent with the Australian and New Zealand Guidelines for Fresh and Marine Water Quality. Reference should be made to published or determined (site specific) water quality guideline values for receiving environments.	Section 6.4.4.2
6.4	Legislative and policy requirements	
6.4	It must be demonstrated that the proposal is consistent with the objectives and requirements of relevant water management policies and legislation including the <i>Water Management Act 1999</i> , the <i>State Policy on Water Quality Management 1997</i> , and the <i>Tasmanian State Coastal Policy 1996</i> .	Section 6.4.4
6.5	Water quality (surface and groundwater)	
6.5	Results of any baseline water quality, biological and sediment monitoring undertaken of potentially impacted waterways;	Section 6.5.3
6.5	Consideration of Protected Environmental Values (PEVs) under the <i>State Policy on Water Quality Management 1997</i> ;	Section 6.5.4.2
6.5	Identify any freshwater ecosystems of high conservation management priority using the Conservation of Freshwater Ecosystem Values (CFEV) database, including values in the vicinity of the proposal. The specific CFEV information should include Conservation Management Priority Potential	Section 6.5.3.1.1
6.5	Details of potential stormwater management (including during reasonably foreseeable flood events). A map of the on-land above ground works area, with indicative locations of stormwater collection systems and details of drainage control measures such as cut-off drains and sediment settling ponds.	Section 6.5.6
6.5	Consideration of construction and operational impacts on water quality, including: <ul style="list-style-type: none"> works undertaken in and near waterways. 	Section 6.5.5.1, 6.5.5.2

	EIS guidelines	EIS Section where addressed
	<ul style="list-style-type: none"> the potential for pollutants to become entrained in stormwater. specific consideration of the potential for contaminated material or acid sulfate soils to be disturbed. cumulative impact with proposed converter station works. 	
6.5	Discuss proposed avoidance and mitigation measures to minimise potential impacts on surface water quality	Section 6.5.6
6.5	Provide justification for any proposed emission of pollutants to surface water in accordance with the principles under the <i>State Policy on Water Quality Management 1997</i> and with application of a ‘weight of evidence approach’ consistent with the Australian and New Zealand Guidelines for Fresh and Marine Water Quality. Reference should be made to published or determined (site specific) water quality guideline values for receiving environments	Section 6.5.4.2
6.5	Where any subsurface works are proposed: <ul style="list-style-type: none"> Provide a map showing the location of any groundwater bores (refer to the Groundwater Information Portal), a conceptual groundwater model for regional and local aquifer flows and details of any baseline groundwater quality monitoring undertaken. Identify any surface water and groundwater dependent ecosystems that may receive groundwater from areas impacted by the proposal. Discuss potential impacts of the proposal on groundwater (quality and quantity), including interruption of flow and release of sediment, and cumulative impact with proposed converter station works. 	Section 6.5.3.2, 6.5.5.2
6.5	Discuss proposed avoidance and mitigation measures to minimise potential impacts on surface and groundwater quality.	Section 6.5.6
6.5	Provide justification for any potential impact to groundwater in accordance with the principles under the <i>State Policy on Water Quality Management 1997</i> and with reference to likely groundwater community values, associated guideline values and guideline values for receiving surface waters. For information regarding the water quality management framework and evaluation criteria in Tasmania refer to <i>Technical Guidance for Water Quality Objectives (WQOs) Setting for Tasmania</i> , August 2020	Section 6.5.4.2
6.5	Legislative and policy requirements	
6.5	It must be demonstrated that the proposal is consistent with the objectives and requirements of relevant water management policies and legislation including the <i>Water Management Act 1999</i> , the <i>State Policy on Water Quality Management 1997</i> , and the <i>Tasmanian State Coastal Policy 1996</i> . In particular, it must be demonstrated that the proposal will not prejudice the achievement of any water quality objectives set for water bodies under the <i>State Policy on Water Quality Management 1997</i> . Where water quality objectives have not yet been set, EPA should be consulted to identify the baseline water quality data required to enable the water quality objectives to be determined. For information regarding the water quality management framework and evaluation criteria in Tasmania refer to <i>Technical Guidance for Water Quality Objectives (WQOs) Setting for Tasmania</i> , August 2020.	Section 6.5.4
6.6	Noise and vibration emissions	
6.6	Discuss impacts on human sensitive receptors of the proposal on ambient (surrounding) noise levels during both the construction and operational phases (e.g., maintenance works), including:	
6.6	Identifying and describing all sources of noise with the potential to cause nuisance, including vehicle movements;	Section 6.6.5.1
6.6	A map of the location of all such sources of noise;	Figure 2-2, Figure 2-3
6.6	Considering the potential for noise emissions during both the construction and operational phases to cause nuisance for nearby land users, particularly at noise sensitive premises, including:	

	EIS guidelines	EIS Section where addressed
6.6	Establishing the baseline (pre-existing) noise in the area with particular focus on sensitive receptors likely to be influenced by the proposal	Section 6.6.3
6.6	Establishing noise level criteria for the operational phases of the proposal	Section 6.6.2.4
6.6	Predicting noise levels at noise sensitive premises;	Section 6.6.5
6.6	Consideration of timing and duration of noise;	Section 2.3.5, 6.6.5.1
6.6	Consideration of existing noise levels to determine whether predicted noise levels are likely to result in nuisance for sensitive premises	Section 6.6.5
6.6	Consideration of the potential for cumulative noise impact from the Heybridge shore crossing works	Section 6.6.5.3
6.6	Development of a construction noise and vibration management plan, including management of noise complaints and options for noise and vibration monitoring, if required;	Section 6.6.6
6.6	Legislative and policy requirements	
6.6	Consideration should be given to the requirements of the <i>Tasmanian Environment Protection Policy (Noise) 2009</i>	Section 6.6.4.2
6.7	Air quality	
6.7	Identify, describe, and show on a site map all sensitive receptors that could potentially be affected by dust and particulate matter emissions.	Section 6.7.3, Figure 6.7-1
6.7	Identify and map all possible sources of air emissions including dust and particulate matter from the site, particularly that associated with the proposed construction. This includes emissions generated from: <ul style="list-style-type: none"> • Upgrading/building of roads; • On-site and off-site vehicle and vessel movements; • Use of generators; • Site ground preparation/vegetation clearance/trenching/general disturbance; • Infrastructure construction (e.g., HDD launch pad construction). • HDD of shore crossing cables from the Heybridge launch pad. 	Section 6.7.5
6.7	Provide the details of equipment used on the site.	Section 2.3.3
6.7	Discuss potential impact of fugitive dust and particulate matter emissions from the proposed activity on the environment and the likelihood for the activity to cause environmental nuisance or harm. The discussion should consider: <ul style="list-style-type: none"> land uses in the vicinity of the activity; terrain and local climatic conditions, especially the direction and strength of prevailing winds and rainfall; special consideration of the environmental impact of the activity during adverse meteorological conditions; the potential for cumulative impact with the proposed converter station. 	Section 5.2.2, 6.7.5
6.7	Provide information about proposed management measures to be implemented to avoid or mitigate potential impact of emissions to air during various phases of the project including construction, commissioning and operation, especially during adverse meteorological conditions. This may include but not be limited to watering or sealing of roads, covering of truck loads, reduced vehicle speed, road surfacing/maintenance details, enclosures, water sprays, windbreaks, and revegetation/stabilisation. Evidence of application of accepted modern technology for reduction of unavoidable emissions to the greatest extent practicable should be provided.	Section 6.7.6
6.7	Legislative and policy requirements	

	EIS guidelines	EIS Section where addressed
6.7	Consideration should be given to the requirements of the <i>Tasmanian Environment Protection Policy (Air Quality)</i>	Section 6.7.4.1
6.8	Waste management	
6.8	Identify the source, nature, and quantities of all wastes, (liquid, atmospheric or solid) including marine wastes or sea debris, general refuse and by-products from the various stages of the process likely to be generated.	Section 6.8.4
6.8	Identify any Controlled Waste which may be generated by the proposal. Note: Controlled Waste is defined in the EMPC Act and associated regulations. This may include extracted sediment.	Section 6.8.4
6.8	Identify best practice methods and facilities available to collect, store, reuse, treat or dispose of each waste stream, including maintenance requirements.	Section 6.8.4
6.8	Describe the source, nature, quantity of each controlled waste, and potential best practice methods of treatment, storage and disposal for each controlled waste.	Table 6.8.3 and Section 6.8.4
6.8	Legislative and policy requirements	
6.8	Waste management measures must be in accordance with the following hierarchy of waste management, arranged in decreasing order of desirability: <ul style="list-style-type: none"> • Avoidance. • Recycling/reclamation. • Re-use. • Treatment to reduce potentially adverse impacts. • Disposal. 	Section 6.8.3, 6.8.5
6.9	Dangerous goods and environmentally hazardous materials	
6.9	Discuss impacts of the proposal in relation to dangerous goods and environmentally hazardous materials, including:	
6.9	The nature, quantity and storage location of all environmentally hazardous materials including Dangerous Goods (as defined in the <i>Australian Code for the Transport of Dangerous Goods by Road and Rail</i>) that will be used during the construction and operation of the proposal.	Section 6.9.4
6.9	A map showing the location of temporary and permanent storage areas for fuels, oils, and other dangerous goods or chemicals.	Figure 2-2
6.9	The measures (such as bunded areas or spill trays) to be adopted to prevent or control any accidental releases of dangerous goods and environmentally hazardous materials.	Section 6.9.5
6.9	Contingency plans for when control measures, equipment breakdowns or accidental releases to the environment occur, including proposed emergency and clean-up measures and notification procedures.	Section 6.9.5
6.9	Identify any safety management requirements for the protection of human health and safety affecting the community.	Section 6.9.5
6.9	Legislative and policy requirements	
6.9	Reference the Australian Code for the Transport of Dangerous Goods by Road and Rail	Section 6.9.3.3
6.10	Marine and coastal	
6.10	Identify any potential impacts of the proposal on marine and coastal areas not addressed in other sections. It should identify measures to avoid and mitigate any possible adverse impacts and assess the overall impacts on marine and coastal areas following implementation of the proposed avoidance and mitigation measures. Cross referencing should be made to other relevant sections dealing with conservation values (marine flora and fauna, geoconservation) and coastal impacts.	Section 6.10.4, 6.10.5, 6.10.6
6.10	Legislative and policy requirements	

	EIS guidelines	EIS Section where addressed
6.10	It must be demonstrated that the proposal is consistent with the objectives and requirements of all relevant marine and coastal policies and legislation, including the <i>Living Marine Resources Management Act 1995</i> , <i>State Policy on Water Quality Management 1997</i> , and the <i>Tasmanian State Coastal Policy 1996</i> .	Section 6.10.3
6.11	Greenhouse gases and ozone depleting substances	
6.11	Discuss the direct and indirect effects of the proposal, including construction, in relation to production, use and reduction of greenhouse gases and ozone depleting substances including:	
6.11	Consideration of the evolving national response to climate change and greenhouse gas emissions, and the targets set in the Tasmanian Climate Change Action Plan 2017-2021 or any updated versions thereof available at the time of preparing the EIS.	Section 6.11.3
6.11	Provide an estimate of greenhouse gas emissions, energy production and energy consumption for both construction and operational phases of the proposal, including emissions associated with vegetation removal (as relevant). Calculators are available on the Australian Government Clean Energy Regulator website;	Section 6.11.4
6.11	Demonstration that the development will implement cost-effective greenhouse best practice measures to achieve on going minimisation of greenhouse gas emissions. Where less emissions-intensive options are not adopted, justification should be provided and/or mechanisms to offset greenhouse gas emissions identified.	Section 6.11.5
6.11	Legislative and policy requirements	
6.11	The <i>Tasmanian Climate Change Action Plan 2017 – 2021</i> or any subsequent versions. Proponents will need to determine whether they are required to report to the Commonwealth under the <i>National Greenhouse and Energy Reporting Act 2007</i>	Section 6.11.3
6.12	Socio-economic issues	
6.12	An estimate of total capital investment for the proposal and where that capital will be expended (particularly in relation to the source of large capital items of processing equipment).	Section 6.12.4.2
6.12	Operational expenditures and revenues.	Section 6.12.4.2
6.12	The impacts on local and State labour markets for both the construction and operational phases of the proposal. The number and nature of direct and indirect jobs arising from the proposal must be detailed. Skills and training opportunities should also be discussed.	Section 6.12.4
6.12	The impacts on upstream/downstream industries, both locally and for the State.	Section 6.12.4
6.12	The extent to which raw materials, equipment, goods, and services will be sourced locally.	Section 2.3.4, 6.12.4.2.2
6.12	A qualitative assessment of impacts on local social amenity and community infrastructure, including recreational, cultural, health and sporting facilities and services. Any proposals to enhance or provide additional community services or facilities should be described.	Section 6.12.4
6.12	Potential interaction of the proposal with existing uses of Bass Strait, and whether the construction or operation of the proposal will impact those uses.	Section 6.12.4.4
6.12	Community demographic impacts (changes to cultural background, occupation, incomes).	Section 6.12.4.2, 6.12.4.3
6.12	Impacts on land values, and demand for land and housing.	Section 6.12.4.4.1
6.12	Impacts on the local, regional, state, and national economies.	Section 6.11.4.2, 6.12.4.4.2

	EIS guidelines	EIS Section where addressed
6.12	Any publicly funded subsidies or services to be relied upon for the construction or operation of the proposal.	Section 6.12.4
6.12	Any impacts on Local, State and Federal Government rate, taxation and royalty revenues.	Section 6.12.4.2, 6.12.4.4.2
6.13	Hazard analysis and risk assessment	
6.13	Provide a quantitative analysis of any identified risk of impact to groundwaters or surface water quality and aquatic ecosystems as a result of a major hazard event and detail relevant mitigation measures. The analysis should systematically identify all potential major environmental hazards (internal and external) to people and the environment associated with the construction, operation, maintenance and decommissioning of the proposal.	Section 6.5.2, 6.5.5.1, 6.5.5.2
6.13	It is expected that risks to receiving aquatic waterbodies and ecosystems will be considered through Hazard and Operability Study and emergency management planning and that environmental impact mitigation measures will be incorporated into emergency response plans as appropriate.	Section 8.2 (MM Gen05)
6.14	Infrastructure and off-site ancillary facilities	
6.14	Discuss potential environmental impacts of the proposal on any significant offsite or infrastructure facilities (including increased use of existing infrastructure, such as roads, ports and quarries).	Section 6.13.5
6.14	Identify measures to avoid and mitigate any possible adverse impacts and assess the overall impacts following implementation of the proposed avoidance and mitigation measures	Section 6.13.6
6.14	Identify roads and other infrastructure to be used by vehicles for the proposal (during both construction and operation).	Section 6.13.3, 6.13.5
6.14	Potential environmental impacts associated with construction and use of such infrastructure should be assessed.	Section 6.13.5
6.15	Environmental Management Systems	
6.15	Any environmental management systems or environmental policies implemented or proposed by the proponent, which are relevant to the environmental management of the proposal	Section 8
6.15	Organisational structure and environmental responsibility within that structure for the proposal.	Section 8
6.15	Procedures and instructions to employees (including contractors) on minimising adverse environmental impacts of activities, as well as employee induction and education programs to ensure an appropriate response to operational environmental concerns should be included in relevant sections.	Section 8
6.16	Cumulative and interactive impacts	
6.16	Provide an assessment of the potential cumulative impacts of the proposal in the context of existing and approved developments in the region, if such impacts have not been addressed in previous sections, including proposed transmission infrastructure. Other proposals which have been formally proposed, and for which there is sufficient information available to the proponent to allow a meaningful assessment of their impacts, should also be considered in that assessment. Uncertainties about potential impacts in such cases should be identified, and interactions between biophysical, socio-economic, and cultural impacts of the proposal discussed.	Sections 6.14.3, 6.14.4, 6.14.5
7	Monitoring and review	
7	Provide an outline of any monitoring, review and reporting programmes for the proposal. The programme should be designed to meet the following objectives: <ul style="list-style-type: none"> Monitoring of compliance with emission standards and other performance requirements identified in the EIS. 	Section 8.3, Table 8-1

	EIS guidelines	EIS Section where addressed
	<ul style="list-style-type: none"> Assessing the effectiveness of the performance requirements and environmental safeguards in achieving environmental quality objectives. Assessing the extent to which the predictions of environmental impacts in the EIS have eventuated. Assessing compliance with management measures defined in the EIS. 	
7	Include a map showing the location of all monitoring sites and a table of proposed monitoring including location, parameters and frequency.	Section 8.3, Table 8-1
8	Decommissioning and Rehabilitation	
8	Describe an on-going, staged approach to decommissioning and rehabilitation throughout the proposal life, including consideration of both post-construction and potential future decommissioning of the project.	Section 7.2, 7.3
8	A preliminary Decommissioning and Rehabilitation Plan or Closure Plan should be outlined.	Section 7.3, and Section 7.4 of the Heybridge Converter Station EIS
9	Management Measures	
9	Provide a consolidated management measures table listing all the management measures made throughout the EIS. Measures must be sequentially numbered, unambiguous statements of intent. For each measure, the table must specify when it is to be implemented and refer to the section of the EIS where the measure is detailed.	Table 8-1
10	Conclusion	
10	Provide an overall conclusion as to the environmental acceptability of the proposal, including discussion of compliance with the principles of Ecologically Sustainable Development and the objectives and requirements of the EMPC Act.	Section 9.1, 9.2, 9.3, 9.4
11	References	
11	This section should provide details of authorities consulted, reference documents etc.	Section 10
12	Appendices	Appendix B to O
12	Detailed technical information which supports the EIS should be included in appendices.	Appendix B to O