

## ONSHORE ENVIRONMENTAL RISK ASSESSMENT

An environmental planning risk assessment has been undertaken for both onshore (**Attachment 07**) and offshore activities (**Attachment 08**). As part of the risk assessment, environmental assets/values were identified, sources of risk identified, potential project impacts were articulated, including ancillary and facilitated works and control measures identified to mitigate risks.

As noted in the referral document, there is a high level of inherent uncertainty around the final pipeline corridor and gas plant location due to the conceptual nature of the project design. However, the absence of a detailed design and finalised footprint for the project does not prevent the development of preventative and proactive measures that will condition the design to be considerate of environmental and cultural assets. The uncertainty associated with the project is temporary in nature.

The risk assessment matrix applied for the onshore environmental risk assessment and the offshore environmental risk assessment are based on preliminary concept of the project and will be evaluated at an ENVID workshop prior to the project commencing.

| Flora and Native Vegetation  |  |   |  |  |                      |                       |                      |   |                    |                     |                      |
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| Environmental Aspect   | EES Referral Reference   | Additional Legislative Context  | Source of Risk   | Potential Impact   | Untreated Likelihood | Untreated Consequence | Untreated Risk Score | Management Commitments  | Treated Likelihood | Treated Consequence | Residual Risk Rating |
| Project activities impacting on Flora and Native Vegetation during construction activities | <ul style="list-style-type: none"> <li>Is any native vegetation likely to be cleared or otherwise affected by the project?</li> <li>What investigation of native vegetation in the project area has been done?</li> <li>What is the maximum area of native vegetation that may need to be cleared?</li> <li>Which Ecological Vegetation Classes may be affected?</li> <li>Have potential vegetation offsets been identified as yet?</li> </ul> | <ul style="list-style-type: none"> <li>Avoid or minimise the loss of FFG and EPBC listed threatened flora species and ecological communities</li> <li>Identify threatening processes under the FFG act and implement management conditions to minimise the Project's contribution to a level that is as low as is reasonably practicable</li> <li>Comply with the Planning and Environment Act, 1987</li> <li>Comply with the intent and provisions of the Wellington Planning Scheme</li> <li>Comply with Victoria's Permitted clearing of native vegetation-Biodiversity assessment guidelines</li> </ul> | Disturbance caused by the construction process, specifically: <ul style="list-style-type: none"> <li>- Clearing of vegetation</li> <li>- Land disturbance</li> <li>- Soil movement and replacement</li> <li>- Vehicle and machinery movement</li> <li>- Formation of temporary site access</li> <li>- Laydown and vehicular turnaround preparation</li> <li>- Clearing and excavation associated with Horizontal Directional Drilling</li> </ul> | <ul style="list-style-type: none"> <li>Impact to endangered or very high conservation significance EVCs</li> <li>Impacts to plants or communities, listed under FFG or EPBC</li> <li>Non-permitted clearing by construction crews</li> </ul> | Almost Certain       | Major                 | E                    | <ul style="list-style-type: none"> <li>A site-specific ecology survey will be undertaken during the detailed design phase to determine precise presence and absence of native vegetation and vegetative communities to confirm desktop data. Targeted surveys may be undertaken should desktop assessment indicate the presence of endangered species.</li> <li>GB Energy will apply the principles of 'Avoid' and 'Minimise' in pipeline alignment selection. Avoid via:               <ul style="list-style-type: none"> <li>Re-alignment around environmental assets (primary avoidance mechanism) or Horizontal Directional Drill (HDD) underneath environmental assets (secondary avoidance mechanism).</li> <li>Compression facility and associated access will be located on pre-disturbed areas of land where possible, avoiding areas remnant vegetation and mature regrowth.</li> <li>'No-go' areas (areas of remnant vegetation and mature regrowth) in close proximity to the disturbance footprint will be GPS located and clearly marked e.g. with signage, bunting, flagging tape</li> </ul> </li> <li>Offsets shall be considered in the context of Biodiversity information explanatory document. Measuring value when removing or offsetting native vegetation (DELWP 2017).</li> <li>Impact to native vegetation will be minimised with any residual removal being evaluated by ecologists. Biodiversity Impact and Offset Requirements report will be prepared on a 'worst case' scenario with offsets being secured during the project planning phase.</li> <li>GB Energy will prepare an Environmental Management Framework (EMF) that will contain all environmental commitments for the project, including specific measures to address predicted impacts and risks.</li> </ul> | Unlikely           | Minor               | L                    |

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|  |  |   |   |   |          |       |   | <ul style="list-style-type: none"> <li>• GB Energy will work collaboratively with technical consultants to adopt alternative, no impact or low impact construction methodologies where native vegetation values are identified. The most appropriate methodology will be selected on a case by case basis and documented in EMF.</li> <li>• A construction environmental risk analysis will be undertaken following completion of the survey program and selection of the construction contractor(s). This will enable site specific planning and control measures to be collectively workshopped to ensure impact minimisation from construction.</li> <li>• Construction contractor(s) will be required to prepare a Construction Environmental Management Plan (CEMP) that will outline how they propose to comply with the commitments detailed within GB Energy's Environmental Management Framework. The CEMP will be focused on preferred construction methodologies and site-specific controls that will be implemented in order to ensure compliance with the EMF.</li> </ul>  |          |       |   |
| Project activities impacting on Flora and Native Vegetation during the operational phase | <ul style="list-style-type: none"> <li>• Is any native vegetation likely to be cleared or otherwise affected by the project?</li> <li>• What investigation of native vegetation in the project area has been done?</li> <li>• What is the maximum area of native vegetation that may need to be cleared?</li> <li>• Which Ecological Vegetation Classes may be affected?</li> <li>• Have potential vegetation offsets been identified as yet?</li> </ul> | <ul style="list-style-type: none"> <li>• Avoid or minimise the loss of FFG and EPBC listed threatened flora species and ecological communities</li> <li>• Identify threatening processes under the FFG act and implement management conditions to minimise the Project's contribution to a level that is as low as is reasonably practicable</li> <li>• Comply with the Planning and Environment Act, 1987</li> <li>• Comply with the intent and provisions of the Wellington Planning Scheme</li> <li>• Comply with Victoria's Permitted clearing of native vegetation-Biodiversity</li> </ul> | Disturbances caused by operational activities: <ul style="list-style-type: none"> <li>- Vegetation maintenance activity;</li> <li>- Operational vehicle movement;</li> <li>- Soil disturbance during operation and maintenance activity (pipeline dig ups, etc.)</li> </ul> | <ul style="list-style-type: none"> <li>• Impact to endangered or very high conservation significance</li> <li>• EVCs</li> <li>• Impacts to plants or communities, listed under FFG</li> <li>• or EPBC.</li> <li>• Non-permitted clearing by operation and maintenance crew s occurs.</li> </ul> | Possible | Major | M | <ul style="list-style-type: none"> <li>• All Project components shall be designed, constructed and maintained to Australian Standards and in accordance with Australian legislation. There will be a heavy emphasis on continued safe operation of all component parts of the project with several layers of engineering controls and continued monitoring and maintenance of the infrastructure and apparatus to ensure that the infrastructure is operated safely within its design limitations.</li> <li>• GB Energy will prepare an Operational Environmental Management Plan (OEMP) for all components of the project. The OEMP will focus on analyzing operational environmental risk. It will nominate commitments and control measures that will be used to ensure compliance with regulatory conditions and include procedures and work instructions focused on the protection of the environment from the continued operation of the infrastructure.</li> <li>• GB Energy will develop and maintain an environmental line list (ELL) that will record all environmental threats and values to native vegetation within the pipeline corridor. The ELL will be used to monitor and control localised soil stability, noxious weeds, pest animal species or other environmental threat. Any environmental values will be nominated and protected during operation of the GB Energy project. The ELL will be updated on a regular basis as new threats or values are identified and formally reviewed every five years.</li> <li>• Any maintenance activity involving ground disturbance activity within an area containing a previously identified threat or value will be thoroughly evaluated prior to site mobilisation. Control measures will be</li> </ul> | Unlikely | Minor | L |

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|  |  | assessment guidelines |  |  |  |  |  |  | put into place to ensure the protection of the environmental asset(s). This could include mitigation measures such as scheduling the timing of works so as to fall outside of breeding season so as to minimise impact to fauna species. |  |  |  |
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**Fauna - Aquatic and Terrestrial**

| Environmental Aspect  | EES Referral Reference   | Additional Legislative Context   | Source of Risk   | Potential Impact  | Untreated Likelihood  | Untreated Consequence | Untreated Risk Score | Management Commitments  | Treated Likelihood | Treated Consequence | Residual Risk Rating |
|---|--|--|--|---|-----------------------|-----------------------|----------------------|---|--------------------|---------------------|----------------------|
| Project construction activities impacting on native fauna species and habitats including aquatic species and habitats | <ul style="list-style-type: none"> <li>What investigations of native fauna in the project area have been done?</li> <li>Have any threatened or migratory species or listed communities been recorded from the local area?</li> <li>What threatening processes affecting these species or communities may be exacerbated by the project?</li> <li>Are any threatened or migratory species, other species of conservation significance or listed communities potentially affected by the project?</li> <li>Is mitigation of potential effects on indigenous fauna proposed?</li> </ul> | <ul style="list-style-type: none"> <li>Avoid and/or minimise impacts on FFG and EPBC listed threatened fauna species or habitats</li> <li>Avoid and/or minimise impacts on native fish species</li> <li>Avoid and/or minimise impacts on habitat for native fauna species</li> </ul> | Disturbance caused by the construction process, specifically: <ul style="list-style-type: none"> <li>- Clearing of vegetation</li> <li>- Land disturbance</li> <li>- Soil movement and replacement</li> <li>- Vehicle and machinery movement</li> <li>- Formation of temporary site access</li> <li>- Laydown and vehicular turnaround preparation</li> <li>- Clearing and excavation associated with Horizontal Directional Drilling</li> </ul> | <ul style="list-style-type: none"> <li>Non-permitted damage or destruction of native terrestrial and aquatic fauna habitat from construction activities</li> <li>Mortality to terrestrial and aquatic species including listed threatened species from construction activities</li> </ul> | <b>Almost Certain</b> | <b>Major</b>          | <b>E</b>             | <ul style="list-style-type: none"> <li>A site-specific ecology survey will be undertaken during the detailed design phase to determine precise presence and absence of native fauna and native fauna habitat to confirm desktop data. Targeted surveys may be undertaken should desktop assessment indicate the presence of endangered species.</li> <li>GB Energy will prepare an EMF that will contain all environmental commitments for the project, including specific measures to address predicted impacts and risks.</li> <li>A construction environmental risk analysis will be undertaken following completion of the survey program and selection of the construction contractor(s). This will enable site specific planning and control measures to be collectively workshopped to ensure impact minimisation from construction.</li> <li>Construction contractor(s) will be required to prepare a CEMP that will outline how they propose to comply with the commitments detailed within GB Energy's Environmental Management Framework. The CEMP will be focused on preferred construction methodologies and site-specific controls that will be implemented in order to ensure compliance with the EMF.</li> <li>The gas compression facility site should be located to avoid high quality fauna habitat.</li> <li>A permit holding fauna handler will conduct a search immediately prior to clearing of vegetation for the presence of fauna species.</li> <li>Where fauna is detected, the handler will assess and implement the most appropriate method to avoid or minimise impacts on that fauna as a result of clearing in line with permit conditions.</li> <li>Trenches inspected daily before works.</li> <li>Use of fencing or bunting will be installed adjacent to sizeable excavations that are proposed to be left open following the completion of each working day.</li> <li>All open excavations to have fauna egress's and excavations to be restricted in the timeframe they are open.</li> <li>Welded pipe strings will have end caps inserted when work is not active around the site to prevent fauna access.</li> <li>Driving at dawn and dusk will form part of the Project induction for work crews. Pool vehicles will be used to get construction workers out to site each day.</li> </ul> | <b>Unlikely</b>    | <b>Minor</b>        | <b>L</b>             |

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| Operational activities impacting on native fauna species and habitats including aquatic species and habitats | <ul style="list-style-type: none"> <li>What investigations of native fauna in the project area have been done?</li> <li>Have any threatened or migratory species or listed communities been recorded from the local area?</li> <li>What threatening processes affecting these species or communities may be exacerbated by the project?</li> <li>Are any threatened or migratory species, other species of conservation significance or listed communities potentially affected by the project?</li> <li>Is mitigation of potential effects on indigenous fauna proposed?</li> </ul> | <ul style="list-style-type: none"> <li>Avoid and/or minimise impacts on FFG and EPBC listed threatened fauna species or habitats</li> <li>Avoid and/or minimise impacts on native fish species</li> <li>Avoid and/or minimise impacts on habitat for native fauna species</li> </ul> | Disturbances caused by operational activities: <ul style="list-style-type: none"> <li>- Vegetation maintenance activity;</li> <li>- Operational vehicle movement;</li> <li>- Soil disturbance during operation and maintenance activity (pipeline dig ups, etc.)</li> </ul> | <ul style="list-style-type: none"> <li>Non-permitted damage or destruction of native terrestrial and aquatic fauna habitat from operational activities</li> <li>Mortality to terrestrial and aquatic species including listed threatened species from operational activities</li> </ul> | Possible | Major | M | <ul style="list-style-type: none"> <li>Accommodation will also be local where possible to limit the time driving at these times.</li> <li>All Project components shall be designed, constructed and maintained to Australian Standards and in accordance with Australian legislation. There will be a heavy emphasis on continued safe operation of all component parts of the project with several layers of engineering controls and continued monitoring and maintenance of the infrastructure and apparatus to ensure that the infrastructure is operated safely within its design limitations.</li> <li>GB Energy will prepare an OEMP for all components of the project. The OEMP will focus on analyzing operational environmental risk. It will nominate commitments and control measures that will be used to ensure compliance with regulatory conditions and include procedures and work instructions focused on the protection of the environment from the continued operation of the infrastructure.</li> <li>GB Energy will develop and maintain an ELL that will record all environmental threats and values to native vegetation within the pipeline corridor. The ELL will be used to monitor and control localised soil stability, noxious weeds, pest animal species or other environmental threat. Any environmental values will be nominated and protected during operation of the GB Energy project. The ELL will be updated on a regular basis as new threats or values are identified and formally reviewed every five years.</li> <li>Any maintenance activity involving ground disturbance activity within an area containing a previously identified threat or value will be thoroughly evaluated prior to site mobilisation. Control measures will be put into place to ensure the protection of the environmental asset(s). This could include mitigation measures such as scheduling the timing of works so as to fall outside of breeding season so as to minimise impact to fauna species.</li> <li>Vehicle access will be through existing roads, gates, paddock tracks and along pipeline RoW.</li> </ul> | Unlikely | Minor | L |

**Water Environments**

| Environmental Aspect                        | EES Referral Reference   | Additional Legislative Context   | Source of Risk  | Potential Impact   | Untreated Likelihood | Untreated Consequence | Untreated Risk Score | Management Commitments   | Treated Likelihood | Treated Consequence | Residual Risk Rating |
|---|--|--|---|--|----------------------|-----------------------|----------------------|--|--------------------|---------------------|----------------------|
| Impact on surface water regimes and quality | <ul style="list-style-type: none"> <li>Will the project require significant volumes of fresh water (e.g. &gt;1Gl/yr)?</li> <li>Will the project discharge waste water or runoff to water environments?</li> <li>Are any waterways, wetlands, estuaries or</li> </ul> | <ul style="list-style-type: none"> <li>Environmental Protection Act, 1970 and 2017</li> <li>Water Act, 1989 (CMA Works on Waterways Permits)</li> <li>Fisheries Act 1995</li> <li>Wildlife Act 1975</li> </ul> | Disturbance caused by the construction process, specifically: <ul style="list-style-type: none"> <li>- Soil movement and replacement</li> <li>- Vehicle and machinery movement</li> </ul> | <ul style="list-style-type: none"> <li>Uncontrolled ground disturbance activities impact listed aquatic species and habitat</li> <li>Ineffective scheduling</li> </ul> | Almost Certain       | Moderate              | H                    | <ul style="list-style-type: none"> <li>GB Energy will prepare an EMF that will contain all environmental commitments for the project, including specific measures to address predicted impacts and risks.</li> <li>A construction environmental risk analysis will be undertaken following completion of the survey program and selection of the construction contractor(s). This will enable site specific planning and control measures</li> </ul> | Unlikely           | Minor               | L                    |

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|  | <p>marine environments likely to be affected?</p> <ul style="list-style-type: none"> <li>• Are any potentially affected wetlands listed under the Ramsar convention or in 'A Directory of Important Wetlands in Australia'?</li> <li>• Could the project affect streamflows?</li> <li>• Could environmental values (beneficial uses) of water environments be affected?</li> <li>• Could aquatic, estuarine or marine ecosystems be affected by the project?</li> <li>• Is there a potential for extensive or major effects on the health or biodiversity of aquatic, estuarine or marine ecosystems over the long-term?</li> <li>• Is mitigation of potential effects on water environments proposed?</li> </ul> | <ul style="list-style-type: none"> <li>• Comply with the intent and provisions of the Wellington Planning Scheme</li> <li>• Compliance with EPA Environmental Guidelines for Major Construction Sites.</li> <li>• Compliance with EPA Victoria Bunding Guidelines Publication 347 (December 1992).</li> <li>• EPA Publication 275: Construction Techniques for Sediment Control</li> </ul> | <p>- Formation of temporary site access</p> <ul style="list-style-type: none"> <li>- Laydown and vehicular turnaround preparation</li> <li>- Installation of valves and meters</li> <li>- Power line upgrade connections</li> </ul> | <p>leads to water inundation in Lake Reeve prior to reinstatement of work</p> <ul style="list-style-type: none"> <li>• Ineffective reinstatement leads to long term impact on waterway crossing location</li> </ul> |                              |                        |          | <p>to be collectively workshopped to ensure impact minimisation from construction.</p> <ul style="list-style-type: none"> <li>• Construction contractor(s) will be required to prepare a CEMP that will outline how they propose to comply with the commitments detailed within GB Energy's Environmental Management Framework. The CEMP will be focused on preferred construction methodologies and site-specific controls that will be implemented in order to ensure compliance with the EMF.</li> <li>• Any crossings will be undertaken in accordance with Works on Waterways permit conditions from the West Gippsland Catchment Management Authority (WGCMA).</li> <li>• Inspections will be undertaken with WGCMA personnel on an as required basis</li> <li>• Erosion and sediment controls shall be installed as per the Erosion and Sediment Control Plan (ESCP).</li> <li>• Where practicable, low risk waterway crossings will be scheduled during dry, low or no flow periods and where weather forecast is favourable (&lt;50% chance of rainfall in the next 48hrs).</li> <li>• Open trench will be closed as far as is practicable prior to forecast rainfall events.</li> <li>• Construction superintendent will remain vigilant regarding flood warnings, receiving daily weather reports and subscribing to flood warning services where available.</li> <li>• GB Energy will prepare an adverse weather contingency plan as part of the CEMP that will specify planned response to forecast rainfall events.</li> </ul> |                        |                     |          |
|  |   |  | <p>Disturbance caused by the construction process, specifically: - HDD failure</p>  | <ul style="list-style-type: none"> <li>• HDD Uncontrolled discharge</li> </ul>  | <p><b>Almost Certain</b></p> | <p><b>Moderate</b></p> | <p>H</p> | <ul style="list-style-type: none"> <li>• Horizontal Directional Drilling slurry consisting of Bentonite, a clay based product, would be managed in accordance with documented procedures (to be referenced in each CEMP and approved Works on Waterways permits. Bentonite is only used in high sand based conditions.</li> <li>• Horizontal Directional Drilling slurry would be managed in accordance with documented procedures (to be referenced in the CEMP) and approved Works on Waterways permits.<br/>Materials management: <ul style="list-style-type: none"> <li>• No refueling within 100m of a wetland or waterway.</li> <li>• Pumps or generators present on site must be bunded in accordance with the EPA Victoria Bunding Guidelines Publication 347 (December 1992).</li> </ul> </li> </ul>  | <p><b>Unlikely</b></p> | <p><b>Minor</b></p> | <p>L</p> |
| <p>Erosion and sedimentation leading to impacts on water quality</p> |   |  | <p>Disturbance caused by the construction process, specifically:<br/>- Vegetation clearing<br/>- Land disturbance</p>   | <p>Ineffective site based controls lead to sedimentation of waterway and transport of silt/soil off site or precipitate an uncontrolled release of</p>  | <p><b>Almost certain</b></p> | <p><b>Moderate</b></p> | <p>H</p> | <ul style="list-style-type: none"> <li>• All works will be carried out in accordance with the EPA Environmental Guidelines for Major Construction Sites and EPA Publication 275: Construction Techniques for Sediment Control</li> <li>• GB Energy shall prepare an Erosion and Sediment Control Plan (ESCP) as part of each CEMP describing standard erosion and sediment controls that will be applied across the project.</li> </ul>  | <p><b>Unlikely</b></p> | <p><b>Minor</b></p> | <p>L</p> |

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|  |  |  | <ul style="list-style-type: none"> <li>- Formation of temporary site access</li> <li>- Laydown and vehicular turnaround preparation</li> <li>-De-watering of the trench and excavations</li> </ul> | chemicals or hydrocarbons |  |  |  |  | <ul style="list-style-type: none"> <li>• Erosion and sediment controls shall be installed as per the ESCP.</li> <li>• De-watering of trenches and excavations must be in accordance with the ESCP and meet accepted water quality parameters prior to release.</li> <li>• No pollution or obvious sediment laden run-off is to be discharged directly or indirectly into wetlands or waterways.</li> <li>• Construction work will cease at waterway crossings prior to forecast heavy rain fall events at the discretion of the Construction Manager to avoid excessive disturbance to soil and the potential for sedimentation of the watercourse. This will be in accordance with the adverse weather contingency plan</li> <li>• Spoil and topsoil stockpiles will be located a minimum of 10m from the top of the active water channel at low risk trenched crossings to reduce the risk of site based run-off into the waterway.</li> <li>• No storage of chemicals or hazardous substances in or adjacent to surface waters, drainage lines or floodplains.</li> <li>• Any pumps or generators present on site must be banded in accordance with the EPA Victoria Bunding Guidelines Publication 347 (December 1992).</li> </ul> |  |  |  |
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**Heritage (Aboriginal and Historic)**

| Environmental Aspect   | EES Referral Reference  | Additional Legislative Context  | Source of Risk   | Potential Impact   | Untreated Likelihood  | Untreated Consequence | Untreated Risk Score | Management Commitments   | Treated Likelihood | Treated Consequence | Residual Risk Rating |
|--|---|---|--|--|-----------------------|-----------------------|----------------------|--|--------------------|---------------------|----------------------|
| Impact on cultural heritage sites and items, which may be located within and near the construction area. | <ul style="list-style-type: none"> <li>• Have relevant Indigenous organisations been consulted on the occurrence of Aboriginal cultural heritage within the project area?</li> <li>• What investigations of cultural heritage in the project area have been done?</li> <li>• Is any Aboriginal cultural heritage known from the project area?</li> <li>• Are there any cultural heritage places listed on the Heritage Register or the Archaeological Inventory under the Heritage Act 1995 within the project area?</li> <li>• Is mitigation of potential cultural heritage effects proposed?</li> </ul> | <ul style="list-style-type: none"> <li>• Aboriginal Heritage Act, 2006 (as amended, 2016)</li> <li>• Aboriginal Heritage Regulations, 2007</li> <li>• Heritage Act, 2017</li> <li>• Wellington Planning Scheme</li> </ul> | Disturbance caused by the construction process, specifically: <ul style="list-style-type: none"> <li>- Clear and grade</li> <li>- Temporary site access</li> <li>- Laydown and vehicular turnaround</li> </ul> | <ul style="list-style-type: none"> <li>• Disturbance to known and unknown sites of aboriginal significance.</li> <li>• Harm to cultural heritage artefacts and landmarks.</li> </ul> | <b>Almost Certain</b> | <b>Moderate</b>       | <b>H</b>             | <ul style="list-style-type: none"> <li>• Construction will occur in accordance with the commitments of the approved Cultural Heritage Management Plan (CHMP).</li> <li>• A copy of the CHMP will be kept on-site for the duration of the activity (hardcopy or soft copy).</li> <li>• All personnel will be required to undertake an induction which includes Cultural Heritage value identification.</li> <li>• Workforce to be trained in action plan scenarios and supervision of clearing by cultural heritage representatives.</li> <li>• All cultural sites will be reviewed by cultural heritage representatives with high significance sites supervised during construction (where topsoil is graded off).</li> <li>• Contingency measures listed within the CHMP will be adhered to.</li> <li><b>Historic Heritage:</b> <ul style="list-style-type: none"> <li>• All contractors will be made aware through inductions and training of areas of Historic Heritage value along the construction ROW. Out of the ordinary to be reported to supervision before works can continue.</li> </ul> </li> <li><b>No Go Zones:</b> <ul style="list-style-type: none"> <li>• 'No-go' will be clearly demarcated to prevent unauthorised impacts to Aboriginal Cultural Heritage Places and Historic Heritage Sites</li> <li>• During construction, the entire length of the construction corridor and associated</li> </ul> </li> </ul> | <b>Unlikely</b>    | <b>Minor</b>        | <b>L</b>             |

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|---|---|---|---|---|---------------|-----------------|----------|--|---|--------------|----------|--|
|   |   |   |   |   |               |                 |          |  | work areas will be regularly inspected to assess the effectiveness of protection measures, including established 'no go' zones. |              |          |  |
| Impact on cultural heritage sites and items, during the operational phase | <ul style="list-style-type: none"> <li>Have relevant Indigenous organisations been consulted on the occurrence of Aboriginal cultural heritage within the project area?</li> <li>What investigations of cultural heritage in the project area have been done?</li> <li>Is any Aboriginal cultural heritage known from the project area?</li> <li>Are there any cultural heritage places listed on the Heritage Register or the Archaeological Inventory under the Heritage Act 1995 within the project area?</li> <li>Is mitigation of potential cultural heritage effects proposed?</li> </ul> | <ul style="list-style-type: none"> <li>Aboriginal Heritage Act, 2006 (as amended, 2016)</li> <li>Aboriginal Heritage Regulations, 2007</li> <li>Heritage Act, 2017</li> <li>Wellington Planning Scheme</li> </ul> | Disturbances caused by operational activities: <ul style="list-style-type: none"> <li>- Vegetation maintenance activity;</li> <li>- Operational vehicle movement;</li> <li>- Soil disturbance during operation and maintenance activity (pipeline dig ups, etc.)</li> </ul> | <ul style="list-style-type: none"> <li>Disturbance to known and unknown sites of aboriginal significance.</li> <li>Harm to cultural heritage artefacts and landmarks</li> </ul> | <b>Likely</b> | <b>Moderate</b> | <b>H</b> | <ul style="list-style-type: none"> <li>All Project components shall be designed, constructed and maintained to Australian Standards and in accordance with Australian legislation. There will be a heavy emphasis on continued safe operation of all component parts of the project with several layers of engineering controls and continued monitoring and maintenance of the infrastructure and apparatus to ensure that the infrastructure is operated safely within its design limitations.</li> <li>GB Energy will prepare an Operational OEMP for all components of the project. The OEMP will focus on analyzing operational environmental risk. It will nominate commitments and control measures that will be used to ensure compliance with regulatory conditions and include procedures and work instructions focused on the protection of the environment from the continued operation of the infrastructure.</li> <li>GB Energy will develop and maintain an ELL that will record all environmental threats and values to native vegetation within the pipeline corridor. The ELL will be used to monitor and control localised soil stability, noxious weeds, pest animal species or other environmental threat. Any environmental values will be nominated and protected during operation of the GB Energy project. The ELL will be updated on a regular basis as new threats or values are identified and formally reviewed every five years.</li> <li>Any maintenance activity involving ground disturbance activity within an area containing a previously identified threat or value will be thoroughly evaluated prior to site mobilisation. Control measures will be put into place to ensure the protection of the environmental asset(s). This could include mitigation measures such as scheduling the timing of works so as to fall outside of breeding season so as to minimise impact to fauna species.</li> </ul> | <b>Unlikely</b>   | <b>Minor</b> | <b>L</b> |  |

### Soil Management

| Environmental Aspect                                 | EES Referral Reference   | Additional Legislative Context   | Source of Risk  | Potential Impact   | Untreated Likelihood  | Untreated Consequence | Untreated Risk Score | Management Commitments   | Treated Likelihood | Treated Consequence | Residual Risk Rating |
|--|--|--|---|--|-----------------------|-----------------------|----------------------|--|--------------------|---------------------|----------------------|
| Impacts on Soils including erosion and sedimentation | <ul style="list-style-type: none"> <li>Is there a potential for effects on land stability, acid sulphate soils or highly erodible soils?</li> <li>Are there geotechnical hazards that may either affect the project or be affected by it?</li> </ul> | <ul style="list-style-type: none"> <li>Environmental Protection Act, 1970</li> <li>Wellington Planning Scheme</li> <li>EPA Environmental Guidelines for Major</li> </ul> | <ul style="list-style-type: none"> <li>Disturbance to vegetation and soil during construction activities</li> <li>Removal of topsoil from construction RoW</li> </ul> | Erosion/ mixing of topsoil and subsoils; sedimentation of watercourses; sub-standard reinstatement/ rehabilitation in problem soil areas | <b>Almost Certain</b> | <b>Moderate</b>       | <b>H</b>             | <ul style="list-style-type: none"> <li>All works will be carried out in accordance with the EPA Environmental Guidelines for Major Construction Sites and EPA Publication 275: Construction Techniques for Sediment Control.</li> <li>Erosion and sediment controls shall be installed as per the ESCP. Measure will include: <ul style="list-style-type: none"> <li>Geofabric to be installed over temporary stockpiles that will be in place for long-periods to reduce</li> </ul> </li> </ul> | <b>Possible</b>    | <b>Minor</b>        | <b>M</b>             |

|  |  |  |  |  |  |  |  |   |  |  |  |
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|  |  | <p>Construction Sites.</p> <ul style="list-style-type: none"> <li>EPA Publication 275: Construction Techniques for Sediment Control</li> <li>EPA Victoria Bunding Guidelines Publication 347 (December 1992).</li> </ul> | <ul style="list-style-type: none"> <li>Temporary stockpiling of topsoil and sub-soil as a result of construction activities</li> <li>Imported material carrying weeds and seeds</li> </ul> |  |  |  |  | <p>erosion and sediment transfer during rainfall events, to prevent distribution of dust and banded to prevent sediment loss/transport and contamination of surface runoff.</p> <ul style="list-style-type: none"> <li>Sediment controls (e.g. fences, coir logs) will be installed down slope of exposed soil and stockpiles to prevent sediment entering any surface water (e.g. drainage lines, table drains and dams).</li> <li>Sediment controls will be immediately following creation of any stockpile and in the vicinity of any waterway, channel or drain.</li> <li>Sediment fences will be routinely inspected and reinstated if required as part of the daily inspection checklist, especially following heavy or prolonged rainfall events or following heavy traffic use to ensure their effectiveness.</li> <li>Topsoil and sub-soil are to be stockpiled separately and reinstated in appropriate order to prevent soil inversion.</li> <li>Any soil compaction identified is to be ripped following construction.</li> </ul> <ul style="list-style-type: none"> <li>Any imported fill material will be sourced from a reputable (preferably local) supplier, be weed and disease free.</li> <li>Induction training for all personnel on Soil Management to include the importance of separation of topsoil and subsoil</li> <li>GB Energy will prepare an EMF that will contain all environmental commitments for the project, including specific measures to address predicted impacts and risks.</li> <li>GB Energy will work collaboratively with technical consultants to adopt alternative, no impact or low impact construction methodologies where native vegetation values are identified. The most appropriate methodology will be selected on a case by case basis and documented in EMF.</li> <li>A construction environmental risk analysis will be undertaken following completion of the survey program and selection of the construction contractor(s). This will enable site specific planning and control measures to be collectively workshopped to ensure impact minimisation from construction.</li> <li>Construction contractor(s) will be required to prepare a CEMP that will outline how they propose to comply with the commitments detailed within GB Energy's Environmental Management Framework. The CEMP will be focused on preferred construction methodologies and site-specific controls that will be implemented in order to ensure compliance with the EMF.</li> </ul> |  |  |  |
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|                                     |   |   |  |   |                 |                 |          |   |                 |              |          |
|-------------------------------------|---|---|--|---|-----------------|-----------------|----------|---|-----------------|--------------|----------|
| Impacts on acid sulfate soils (ASS) | <ul style="list-style-type: none"> <li>Is there a potential for effects on land stability, acid sulphate soils or highly erodible soils?</li> </ul> | <ul style="list-style-type: none"> <li>Environmental Protection Act, 1970</li> <li>Wellington Planning Scheme</li> <li>EPA Environmental Guidelines for Major Construction Sites.</li> <li>EPA Victoria Bunding Guidelines Publication 347 (December 1992).</li> <li>655.1: Acid Sulfate Soil and Rock (July 2009)</li> </ul> | <ul style="list-style-type: none"> <li>Disturbance to known areas of ASS during clearing and excavation activities</li> <li>Disturbance to areas of ASS during clearing and excavation activities</li> </ul> | Oxidisation of PASS and/or ASS leading into acid leaching into adjacent soil and nearby waterways | <b>Possible</b> | <b>Moderate</b> | <b>M</b> | <ul style="list-style-type: none"> <li>Undertake an ASS investigation to ground truth areas of ASS and advise on management measures during construction.</li> <li>Identify and where practicable avoid disturbing areas of potential and actual acid sulfate soils.</li> <li>Manage potential and actual acid sulfate soils in accordance with best practice guidance - 655.1: Acid Sulfate Soil and Rock (July 2009)</li> </ul> | <b>Unlikely</b> | <b>Minor</b> | <b>L</b> |
|-------------------------------------|---|---|--|---|-----------------|-----------------|----------|---|-----------------|--------------|----------|

### Flooding & drainage

| Environmental Aspect   | EES Referral Reference                | Additional Legislative Context  | Source of Risk   | Potential Impact                           | Untreated Likelihood | Untreated Consequence | Untreated Risk Score | Management Commitments  | Treated Likelihood | Treated Consequence | Residual Risk Rating |
|--|---------------------------------------|---|--|--|----------------------|-----------------------|----------------------|---|--------------------|---------------------|----------------------|
| Impacts on Flood Management Zones, flooding and drainage regimes | Could the project affect streamflows? | <ul style="list-style-type: none"> <li>Environmental Protection Act, 1970</li> <li>Wellington Planning Scheme</li> <li>Regional Catchment Management Strategies.</li> </ul> | Flooding from existing drainage channels or floodplains across the work site | Impact to assets within the area of works. | <b>Possible</b>      | <b>Moderate</b>       | <b>M</b>             | <ul style="list-style-type: none"> <li>Identify and minimise disturbing existing flooding and drainage channels during construction. Where disturbance of existing flood-prone land is unavoidable, minimise the duration of impact and reinstate to a level that protects the asset from future flood events and returns the profile of the ground surface.</li> <li>Work on land subject to inundation should be undertaken in dry weather conditions.</li> <li>All work on land subject to inundation will be constructed according to the provisions of the adverse weather contingency plan</li> <li>Reinstatement of all drainage lines to their original soil profile</li> </ul> | <b>Unlikely</b>    | <b>Minor</b>        | <b>L</b>             |

### Biosecurity

| Environmental Aspect   | EES Referral Reference                              | Additional Legislative Context  | Source of Risk  | Potential Impact   | Untreated Likelihood  | Untreated Consequence | Untreated Risk Score | Management Commitments   | Treated Likelihood | Treated Consequence  | Residual Risk Rating |
|--|---|---|---|--|-----------------------|-----------------------|----------------------|--|--------------------|----------------------|----------------------|
| Impacts from the introduction and spread of pest plants and animals<br><br>Impacts animal borne, plant borne, or soil borne diseases attributable to the capital works activities. | Is mitigation of potential social effects proposed? | <ul style="list-style-type: none"> <li>Catchment and Land Protection Act, 1994 (CaLP Act)</li> <li>Regional Catchment Strategies.</li> <li>A Guide for Machinery Hygiene for Civil Construction' (CCF, 2011)</li> </ul> | Disturbance caused by the construction process, specifically: <ul style="list-style-type: none"> <li>- Clearing of vegetation</li> <li>- Land disturbance</li> <li>- Soil movement and replacement</li> <li>- Vehicle and machinery movement</li> <li>- Formation of temporary site access</li> <li>- Laydown and vehicular turnaround preparation</li> </ul> | <ul style="list-style-type: none"> <li>Weed transfer caused by construction vehicles, machinery and personnel movement between properties</li> <li>Introduction of new biosecurity issues to the region</li> </ul> | <b>Almost Certain</b> | <b>Moderate</b>       | <b>H</b>             | <ul style="list-style-type: none"> <li>GB Energy will prepare an EMF that will contain all environmental commitments for the project, including specific measures to address predicted impacts and risks.</li> <li>Construction contractor(s) will be required to prepare a CEMP that will outline how they propose to comply with the commitments detailed within GB Energy's Environmental Management Framework. The CEMP will include a Biosecurity Sub-Plan to ensure biosecurity management measures are in place during construction.</li> <li>A site-specific ecology survey will be undertaken during the detailed design phase to determine precise presence and absence of noxious weeds that require control.</li> <li>Imported material able to transport weed seed will be assessed to ensure they are</li> </ul> | <b>Possible</b>    | <b>Insignificant</b> | <b>L</b>             |

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|  |   |   | - Clearing and excavation associated with Horizontal Directional Drilling   |  |                       |                 |          | <ul style="list-style-type: none"> <li>free of contamination, disease and invasive weeds. Landowner approval may also be required for imported soils and gravel.</li> <li>All construction personnel will receive induction training in procedures for personal weed-control hygiene practices, such as removing seeds and mud from clothing and footwear.</li> <li>All vehicles and construction equipment will be cleaned by the contractor prior to arrival on the construction footprint in line with the EPA approved guideline: A Guide for Machinery Hygiene for Civil Construction' (CCF, 2011)</li> <li>Machinery hygiene areas may be situated at specific locations during construction for the use of all plant, vehicles and personnel equipment in line with the findings of the ecology survey.</li> <li>Signage will be installed at approved hygiene areas to advise personnel of this requirement. Personal clothing and footwear is also to be checked by construction personnel for seeds and mud at these designated points.</li> <li>All vehicle and machinery movement will be confined to the construction footprint and access of vehicles and personnel to any areas of known noxious weed infestation will be restricted.</li> </ul>   |                 |                      |          |
| Impacts from the introduction and spread of pest plants and animals during the operational phase | <ul style="list-style-type: none"> <li>Is mitigation of potential social effects proposed?</li> </ul> | <ul style="list-style-type: none"> <li>Catchment and Land Protection Act, 1994 (CaLP Act)</li> <li>Regional Catchment Strategies.</li> <li>A Guide for Machinery Hygiene for Civil Construction' (CCF, 2011)</li> </ul> | Disturbances caused by operational activities: <ul style="list-style-type: none"> <li>- Vegetation maintenance activity;</li> <li>- Operational vehicle movement;</li> <li>- Soil disturbance during operation and maintenance activity (pipeline dig ups, etc.)</li> </ul> | <ul style="list-style-type: none"> <li>Weed transfer caused by construction vehicles, machinery and personnel movement between properties</li> <li>Introduction of new biosecurity issues to the region</li> </ul> | <b>Almost Certain</b> | <b>Moderate</b> | <b>H</b> | <ul style="list-style-type: none"> <li>All Project components shall be designed, constructed and maintained to Australian Standards and in accordance with Australian legislation. There will be a heavy emphasis on continued safe operation of all component parts of the project with several layers of engineering controls and continued monitoring and maintenance of the infrastructure and apparatus to ensure that the infrastructure is operated safely within its design limitations.</li> <li>GB Energy will prepare an Operational Environmental Management Plan (OEMP) for all components of the project. The OEMP will focus on analyzing operational environmental risk. It will nominate commitments and control measures that will be used to ensure compliance with regulatory conditions and include procedures and work instructions focused on the protection of the environment from the continued operation of the infrastructure.</li> <li>GB Energy will develop and maintain an environmental line list (ELL) that will record all environmental threats and values to native vegetation within the pipeline corridor. The ELL will be used to monitor and control localised soil stability, noxious weeds, pest animal species or other environmental threat. Any environmental values will be nominated and protected during operation of the GB Energy project. The ELL will be updated on a regular basis as new threats or values are identified and formally reviewed every five years.</li> </ul> | <b>Possible</b> | <b>Insignificant</b> | <b>L</b> |

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|  |  |  |  |  |  |  |  |  | <ul style="list-style-type: none"> <li>Any maintenance activity involving ground disturbance activity within an area containing a previously identified threat or value will be thoroughly evaluated prior to site mobilisation. Control measures will be put into place to ensure the protection of the environmental asset(s). This could include mitigation measures such as scheduling the timing of works so as to fall outside of breeding season so as to minimise impact to fauna species.</li> </ul> |  |  |  |
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### Traffic Management

| Environmental Aspect  | EES Referral Reference  | Additional Legislative Context   | Source of Risk                     | Potential Impact   | Untreated Likelihood  | Untreated Consequence | Untreated Risk Score | Management Commitments   | Treated Likelihood | Treated Consequence  | Residual Risk Rating |
|---|---|--|------------------------------------|--|-----------------------|-----------------------|----------------------|--|--------------------|----------------------|----------------------|
| Environmental impact from increased traffic movement related to the project | <ul style="list-style-type: none"> <li>Is the project likely to generate significant volumes of road traffic, during construction or operation?</li> <li>Is there a potential for significant effects on the amenity of residents, due to emissions of dust or odours or changes in visual, noise or traffic conditions?</li> </ul> | <ul style="list-style-type: none"> <li>Environmental Protection Act, 1970</li> <li>Catchment and Land Protection Act, 1994 (CaLP Act)</li> <li>Crown land (Reserves) Act, 1978</li> <li>A Guide for Machinery Hygiene for Civil Construction' (CCF, 2011)</li> </ul> | Movement of vehicles and equipment | <p>Reduced air quality and amenity</p> <p>Spread of weeds and pathogens</p> <p>Damage to third party property<br/>Impact to sensitive heritage or environmental assets</p> | <b>Almost Certain</b> | <b>Moderate</b>       | <b>H</b>             | <ul style="list-style-type: none"> <li>All construction personnel will receive induction training in procedures for personal weed control hygiene practices</li> <li>A Traffic Management Plan will be prepared as part of the CEMP prior to commencement of the works.</li> <li>The requirement for weed hygiene bays will be determined following landholder requests and observations from site walk throughs.</li> <li>All vehicles plant and equipment will be maintained in good working condition</li> <li>All vehicles and construction equipment will be cleaned by the contractor prior to arrival on the construction ROW in line with the Civil Contractor's Federation guidelines 'A Guide for Machinery Hygiene for Civil Construction' (CCF, 2011) to ensure they are certified clean and weed free.</li> <li>All vehicles, plant and equipment must remain on designated roads, access tracks and construction footprint at all times. Topsoil stripping to be only just in front of trenching crew to maintain subsoil moisture and reduce dust generation. Signage to be placed on roads effected by dust, speed and vehicle movement restrictions during high dust conditions.</li> </ul> | <b>Possible</b>    | <b>Insignificant</b> | <b>L</b>             |
|   |   |  | Refueling of project equipment     | Contamination of soil or water from fuel leaks   | <b>Likely</b>         | <b>Minor</b>          | <b>M</b>             | <ul style="list-style-type: none"> <li>Material contaminated as a result of a spill (e.g. soil or solid absorbent) must be removed (i.e. excavated or swept up) and placed in an appropriate container to prevent further contamination. An accredited chemical waste contractor will be engaged to dispose of the material and to provide copies of Waste Transport Certificates and Certificates of Disposal for each consignment. Records will be kept of all certificates.</li> <li>Appropriate spill response equipment will be located at all refueling and liquid chemical handling locations including containment and recovery equipment</li> </ul>   | <b>Possible</b>    | <b>Insignificant</b> | <b>L</b>             |

### Amenity Impacts

| Environmental Aspect              | EES Referral Reference   | Additional Legislative Context                                  | Source of Risk            | Potential Impact                   | Untreated Likelihood | Untreated Consequence | Untreated Risk Score | Management Commitments  | Treated Likelihood | Treated Consequence | Residual Risk Rating |
|-----------------------------------|--|---|---------------------------|------------------------------------|----------------------|-----------------------|----------------------|---|--------------------|---------------------|----------------------|
| Impacts on local Amenity - Noise, | <ul style="list-style-type: none"> <li>Is there a potential for exposure of a human</li> </ul> | <ul style="list-style-type: none"> <li>Environmental</li> </ul> | Disturbance caused by the | 1. Dust generation and propagation | <b>Likely</b>        | <b>Minor</b>          | <b>M</b>             | <ul style="list-style-type: none"> <li>Manage amenity impacts during construction in accordance with EPA</li> </ul> | <b>Unlikely</b>    | <b>Minor</b>        | <b>L</b>             |

|   |  |  |   |   |        |       |   |   |          |       |   |
|---|--|--|---|---|--------|-------|---|---|----------|-------|---|
| Dust, Traffic Movement and Access during the construction phase | <p>community to health or safety hazards, due to emissions to air or water or noise or chemical hazards or associated transport?</p> <ul style="list-style-type: none"> <li>Is there a potential for displacement of residences or severance of residential access to community resources due to the proposed development?</li> <li>Are non-residential land use activities likely to be displaced as a result of the project?</li> <li>Do any expected changes in non-residential land use activities have a potential to cause adverse effects on local residents/communities, social groups or industries?</li> </ul> | <ul style="list-style-type: none"> <li>Protection Act, 1970</li> <li>EPA policy - Environmental Guidelines for Major Construction Sites.</li> <li>Air Quality Management 2001</li> <li>Ambient Air Quality 1999</li> </ul> | <p>construction process, specifically:</p> <ul style="list-style-type: none"> <li>- Clearing of vegetation</li> <li>- Land disturbance</li> <li>- Soil movement and replacement</li> <li>- Vehicle and machinery movement</li> <li>- Formation of temporary site access</li> <li>- Laydown and vehicular turnaround preparation</li> <li>- Clearing and excavation associated with Horizontal Directional Drilling</li> </ul> | <p>as a result of construction activities - impacting local residents, businesses and other local stakeholders</p> <ol style="list-style-type: none"> <li>Noise emissions from construction activities and traffic movement impacting local residents, flora and fauna</li> <li>Fuel emissions as a result of machinery activities</li> <li>Damage to local roads from heavy vehicle movement - impacting local residents.</li> <li>Visual amenity - installation of pump stations impact local stakeholders view of surrounding environment.</li> <li>Poor management of waste on-site</li> <li>Fauna deaths as a result of impact with vehicles.</li> </ol> |        |       |   | <p>policy -Environmental Guidelines for Major Construction Sites.</p> <ul style="list-style-type: none"> <li>Minimise distance between clear and grade and trenching crews in order to maintain subsoil moisture</li> <li>All machinery to be serviced as per manufacturers recommendations</li> <li>Dust control measures should be implemented on site in accordance with adverse weather contingency plan.</li> <li>Avoid construction activities that have the potential to impact sensitive receptors during times of high dust generation and propagation i.e. dry, hot days with high winds.</li> <li>Machinery to undergo regular maintenance to ensure noise levels are below EPA guidelines and that engine emissions are within thresholds.</li> <li>Construction activities to occur within normal working hours (7am- 6pm Mon-Fri and 7am - 1pm Saturday (TBC)) to reduce impact to local residents.</li> <li>Local roads are to be maintained (e.g. graded regularly) using appropriate equipment to ensure the quality of the road remains the same and allows for safe and normal use by local residents.</li> <li>Mud tracked onto local roads must be cleaned to prevent damage to resident's vehicles and to maintain normal visual appearance.</li> <li>Remove waste into designated bin each day before close of business. Maintain housekeeping vigilance on site. Reuse materials wherever possible</li> <li>Vehicles to adhere to speed limits (40km/hr on RoW; 10km/h past active work fronts) at all times to reduce dust, damage to local roads and fauna deaths.</li> <li>Topsoil stripping to be only just in front of trenching crew to maintain subsoil moisture and reduce dust generation. Signage to be placed on roads effected by dust, speed and vehicle movement restrictions during high dust conditions.</li> </ul> |          |       |   |
|   |  | <ul style="list-style-type: none"> <li>Catchment and Land Protection Act, 1994</li> <li>(CaLP Act)</li> <li>Crown land (Reserves) Act, 1978</li> </ul>   | <ul style="list-style-type: none"> <li>Traffic use of unapproved access tracks</li> <li>Unauthorised access to properties</li> </ul>  | <p>Use of unauthorised access tracks - disgruntled local stakeholders.</p> <p>Unauthorised access to properties which may result in disgruntled landowners, negative impacts to company reputation, legal action from landowner and delays to project delivery,</p>   | Likely | Minor | M | <ul style="list-style-type: none"> <li>Land Access to all properties and roads/tracks to be approved by the landholder in advance of any track or property being entered. Property Access forms will contain land access content and will be kept on file for access by appropriate Staff when required.</li> </ul>   | Unlikely | Minor | L |

|   |  |   |   |  |        |       |   |  |          |       |   |
|---|--|---|---|--|--------|-------|---|--|----------|-------|---|
|   |  | <ul style="list-style-type: none"> <li>1411: Noise From Industry in Regional Victoria (Oct 2011)</li> </ul>   | Excessive noise emanating from the operation of pumping stations  | Noise emissions from operation activities and traffic movement impacting local residents, flora and fauna  | Likely | Minor | M | <ul style="list-style-type: none"> <li>Attenuate and mitigate noise generation by design engineering infrastructure, where required.</li> <li>Site specific noise assessment and modelling to assess proposed attenuation measures.</li> <li>Site planning to minimize noise generation.</li> <li>Prior to construction and other noisy activities, landholders and owners of any adjacent sensitive places will be notified of the nature and expected duration of noisy activities.</li> <li>Construction hours and operations will be in accordance approval conditions and requirements within 1411: Noise From Industry in Regional Victoria (Oct 2011)</li> <li>Operators of construction equipment will be aware of potential noise impacts and be required to employ techniques and/or equipment to minimise noise emissions as applicable</li> </ul>  | Unlikely | Minor | L |
| Impacts on local Amenity - Waste Management   | <ul style="list-style-type: none"> <li>What are the main forms of waste that would be generated by the project facility?</li> <li>What level of greenhouse gas emissions is expected to result directly from operation of the project facility?</li> </ul> | <ul style="list-style-type: none"> <li>IWRG 822.2: Waste Codes (April 2010)</li> <li>IWRG 821.2: Waste Transport Certificates (March 2013)</li> <li>Waste Acid Sulfate Soils No. S125, Gazette 18/9/1999</li> </ul>   | Inadequate management of waste on during construction and operation   | <ul style="list-style-type: none"> <li>Land / water contamination</li> <li>Non-compliance with project approvals and contractual obligations</li> <li>Complaints / Land access halted</li> <li>Reputation impacts</li> <li>Community disruption</li> </ul>   | Likely | Minor | M | <ul style="list-style-type: none"> <li>Regular inspections of the project site</li> <li>Identify and use authorised waste collection facilities</li> <li>Ensure that a waste tracking system is in place to account for all site waste disposal</li> <li>Project inductions to cover appropriate waste disposal management including location of waste receiving areas</li> <li>All waste to be taken to stack site daily. All workers educated about the three R's of waste management. Bins to be monitored daily by HSE staff to reduce likelihood of over filling.</li> <li>The hierarchy of waste management will be applied on the project.</li> <li>Housekeeping on site will form part of project induction and will be reinforced consistently during the course of the project (via pre-start meetings and focused toolbox talks).</li> </ul>  | Unlikely | Minor | L |
| Impacts on local Amenity - Noise, Dust, Waste, Traffic Movement and Access during the operational phase | <ul style="list-style-type: none"> <li>What are the main forms of waste that would be generated by the project facility?</li> <li>What level of greenhouse gas emissions is expected to result directly from operation of the project facility?</li> </ul> | <ul style="list-style-type: none"> <li>Environmental Protection Act, 1970</li> <li>EPA policy - Environmental Guidelines for Major Construction Sites.</li> <li>Air Quality Management 2001</li> <li>Ambient Air Quality 1999</li> <li>IWRG 822.2: Waste Codes (April 2010)</li> <li>IWRG 821.2: Waste Transport Certificates (March 2013)</li> <li>Waste Acid Sulfate Soils No. S125,</li> </ul> | Disturbances caused by operational activities: <ul style="list-style-type: none"> <li>- Vegetation maintenance activity;</li> <li>- Operational vehicle movement;</li> <li>- Soil disturbance during operation and maintenance activity (pipeline dig ups, etc.)</li> </ul> | <ol style="list-style-type: none"> <li>Dust generation and propagation as a result of construction activities - impacting local residents, businesses and other local stakeholders</li> <li>Noise emissions from construction activities and traffic movement impacting local residents, flora and fauna</li> <li>-Fuel emissions as a result of machinery activities</li> <li>Damage to local roads from heavy vehicle movement - impacting local residents.</li> </ol> | Likely | Minor | M | <ul style="list-style-type: none"> <li>All Project components shall be designed, constructed and maintained to Australian Standards and in accordance with Australian legislation. There will be a heavy emphasis on continued safe operation of all component parts of the project with several layers of engineering controls and continued monitoring and maintenance of the infrastructure and apparatus to ensure that the infrastructure is operated safely within its design limitations.</li> <li>GB Energy will prepare an OEMP for all components of the project. The OEMP will focus on analyzing operational environmental risk. It will nominate commitments and control measures that will be used to ensure compliance with regulatory conditions and include procedures and work instructions focused on the protection of the environment from the continued operation of the infrastructure.</li> <li>GB Energy will develop and maintain an ELL that will record all environmental threats and values to native vegetation within the pipeline corridor. The ELL will be</li> </ul> | Unlikely | Minor | L |

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|  |  | <p>Gazette 18/9/1999</p> <ul style="list-style-type: none"> <li>1411: Noise From Industry in Regional Victoria (Oct 2011)</li> </ul> |  | <p>4. Visual amenity - installation of pump stations impact local stakeholders view of surrounding environment.</p> <p>5. Poor management of waste on-site</p> <p>6. Fauna deaths as a result of impact with vehicles.</p> |  |  |  |  | <p>used to monitor and control localised soil stability, noxious weeds, pest animal species or other environmental threat. Any environmental values will be nominated and protected during operation of the GB Energy project. The ELL will be updated on a regular basis as new threats or values are identified and formally reviewed every five years.</p> <ul style="list-style-type: none"> <li>Any maintenance activity involving ground disturbance activity within an area containing a previously identified threat or value will be thoroughly evaluated prior to site mobilisation. Control measures will be put into place to ensure the protection of the environmental asset(s). This could include mitigation measures such as scheduling the timing of works so as to fall outside of breeding season so as to minimise impact to fauna species.</li> </ul> |  |  |  |
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### Fire Prevention, Fuel & Chemical Management

| Environmental Aspect                         | EES Referral Reference   | Additional Legislative Context  | Source of Risk  | Potential Impact  | Untreated Likelihood | Untreated Consequence | Untreated Risk Score | Management Commitments   | Treated Likelihood | Treated Consequence | Residual Risk Rating |
|--|--|---|---|---|----------------------|-----------------------|----------------------|--|--------------------|---------------------|----------------------|
| Impacts from Fuel & Chemical Storage and Use | <ul style="list-style-type: none"> <li>Is there a potential for exposure of a human community to health or safety hazards, due to emissions to air or water or noise or chemical hazards or associated transport?</li> </ul> | <ul style="list-style-type: none"> <li>Country Authority 1958</li> <li>Fire Act,</li> </ul> | Storage of fuels and chemicals at the warehouse and on the RoW  | Fuel and chemical spills on-site resulting in contamination of soil, groundwater, surface water or waterways. | Likely               | Moderate              | H                    | <ul style="list-style-type: none"> <li>Ensure chemicals and fuels are stored and handled in accordance with Australian Standards (AS1940-2004 – 'The storage and handling of flammable and combustible liquids').</li> <li>Ensure chemicals and fuels are stored and handled in accordance with the relevant Safety Data Sheets.</li> <li>Ensure chemicals and fuels are not stockpiled within 100 metres of waterways.</li> <li>Ensure a spill kits are onsite and available for the duration of construction. All workers trained in the use of spill kits</li> <li>Implement an emergency response procedure in the event of a chemical or fuel spill near waterways.</li> <li>All chemicals stored in bunded containers</li> <li>Chemicals onsite to kept to a minimum.</li> <li>Regular inspections of facilities and work crews.</li> </ul>  | Unlikely           | Minor               | L                    |
| Fire Prevention                              | <ul style="list-style-type: none"> <li>Are there any other activities in the vicinity of the proposed project that have a potential for cumulative effects?</li> </ul>   | <ul style="list-style-type: none"> <li>Country Authority 1958</li> <li>Fire Act,</li> </ul> | <p>Incorrect storage of fuels and hydrocarbons adjacent to uncontrolled ignition source.</p> <p>Construction activities being undertaken during times of high fire danger</p> | Incidence of fire on-site causing damage to land, property and biodiversity.                                  | Likely               | Moderate              | H                    | <ul style="list-style-type: none"> <li>Induction of employees and contractors prior to commencement of works of no-go zones due to high risk of flammability.</li> <li>Fire extinguishers will be provided and validated in all construction vehicles.</li> <li>Smoking will only be permitted in designated smoking areas at the construction depot and waste disposal sites.</li> <li>The construction ROW and surrounding area will be essentially free of combustible material prior to high risk construction activities such as welding or grinding.</li> <li>Vehicles will be regularly checked to ensure that combustible materials such as grass and debris do not build up in areas where ignition may occur.</li> <li>Diesel fueled vehicles will be used where practicable."</li> <li>Workers informed on the use of spill kits and other environmental mitigation equipment at inductions and toolboxes.</li> </ul> | Unlikely           | Minor               | L                    |

|                  |  |  |           |  |   |        |          |   |   |          |       |   |
|------------------|--|--|-----------|--|---|--------|----------|---|---|----------|-------|---|
| Emergency Events | <ul style="list-style-type: none"> <li>Are there any other activities in the vicinity of the proposed project that have a potential for cumulative effects?</li> </ul> | <ul style="list-style-type: none"> <li>Country Authority 1958</li> </ul> | Fire Act, | Safety incident causing environmental damage e.g. car fire | Adverse weather event (dust storm, flash flood, bushfire, severe heat wave) | Likely | Moderate | M | <ul style="list-style-type: none"> <li>HSE staff to be regular contact with all emergency services with app used to identify any possible hazards.</li> </ul> | Unlikely | Minor | L |
|------------------|--|--|-----------|--|---|--------|----------|---|---|----------|-------|---|

### Reinstatement

| Environmental Aspect                 | EES Referral Reference  | Additional Legislative Context   | Source of Risk   | Potential Impact   | Untreated Likelihood | Untreated Consequence | Untreated Risk Score | Management Commitments   | Treated Likelihood | Treated Consequence | Residual Risk Rating |
|--------------------------------------|---|--|--|--|----------------------|-----------------------|----------------------|--|--------------------|---------------------|----------------------|
| Rehabilitation of ground disturbance | <ul style="list-style-type: none"> <li>Are non-residential land use activities likely to be displaced as a result of the project</li> </ul> | <ul style="list-style-type: none"> <li>Environmental Protection Act, 1970</li> </ul> | Reinstatement works not within specification or incomplete | Landholder (key stakeholder) discontent<br>Poor re-establishment of Environmental Control Points that have been disturbed leading to negative environmental outcomes | Possible             | Moderate              | M                    | <ul style="list-style-type: none"> <li>GB Energy contractor(s) to comply with contractual conditions with regard to reinstatement following completion of construction activity on each property and land parcel.</li> <li>CEMP: Specific management requirements and methodologies designed to establish parameters for reinstatement shall be written into a CEMP for each stage of the Project, in consultation with DELWP, relevant Shire (s) and the West Gippsland CMA and then submitted to and endorsed by the Secretary of the Department administering the Conservation, Forests and Lands Act 1987.</li> <li>Ensure stable landform is re-established and landholder's have been consulted prior to completion.</li> <li>Ensure adequate monitoring post-construction to ensure ground cover re-establishment and satisfactory rehabilitation.</li> </ul> | Rare               | Minor               | L                    |