

## Appendix 1: Assessment against the provisions of the relevant Local and State Planning Codes

APPLICATION		PREMISES	
<b>FILE NO:</b>	23017	<b>ADDRESS:</b>	397 Speewah Road, Speewah Qld. 4881
<b>APPLICANT:</b>	Land Owners	<b>RPD:</b>	Lot 2 on RP718600
<b>LODGED BY:</b>	Scope Town Planning	<b>AREA:</b>	500,380m <sup>2</sup>
<b>DATE LODGED:</b>	September 2023	<b>OWNER :</b>	Jan and Claire Eldred
<b>TYPE OF APPROVAL:</b>	Development Permit		
<b>PROPOSED DEVELOPMENT:</b>	Operational Works (Agricultural Dam)		
<b>PLANNING SCHEME:</b>	Mareeba Shire Council Planning Scheme (2017)		
<b>ZONE:</b>	Rural Zone		
<b>LEVEL OF ASSESSMENT:</b>	Code		
<b>SUBMISSIONS:</b>	n/a		

As identified in Part 5 of the MSC Planning Scheme, this development is required to satisfy the Performance Criteria of the following Codes:

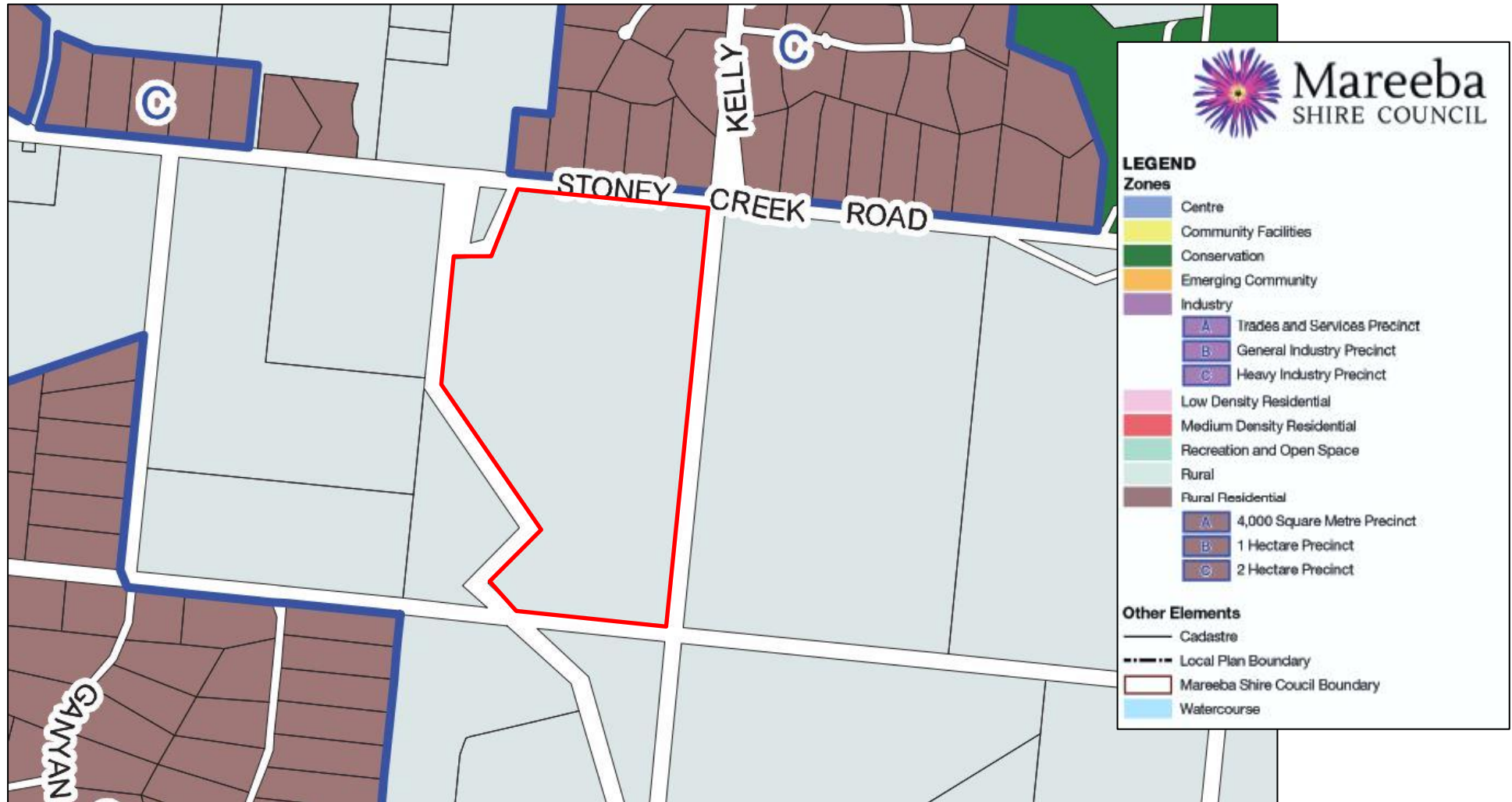
- 6.2.9 Rural Zone Code
- 8.2.4 Environmental Significance Overlay Code

As identified in Table 16.1 of the SDAP State Code 16: Native Vegetation Clearing, this development is required to satisfy the Performance Criteria of the following Codes:

- SDAP State Code 16 Table 16.2
- SDAP State Code 16 Table 16.3

### 6.2.9 Rural Zone Code

The proposed development is assessable against the provisions of the Rural Residential Zone of the Mareeba Shire Planning Scheme.



**6.2.9.3 Criteria for assessment**

**Table 6.2.9.3A— Rural zone code - For accepted development subject to requirements and assessable development**

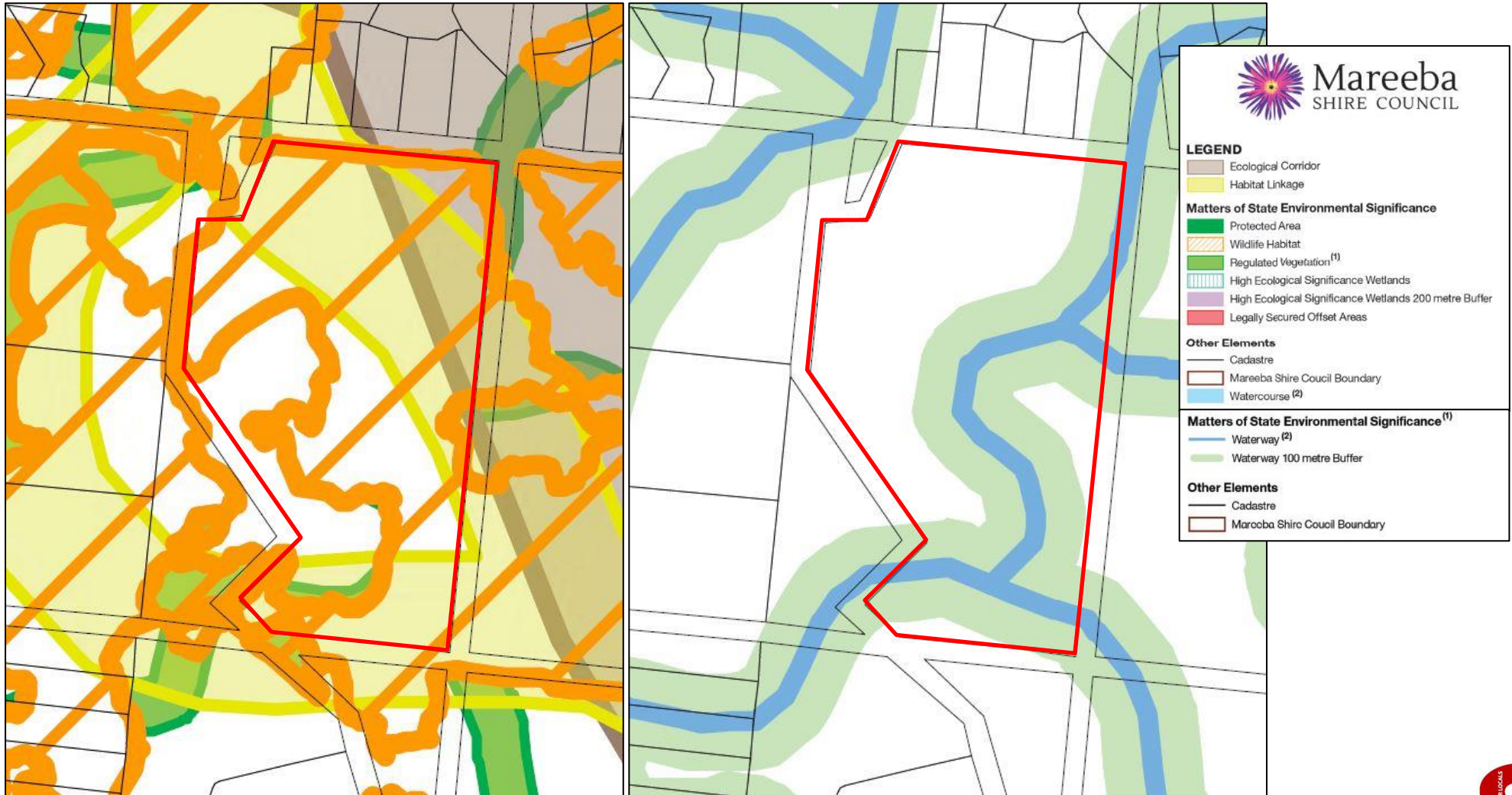
Performance outcomes	Acceptable outcomes	Compliance
<b>For accepted development subject to requirements and assessable development</b>		
<b>Height</b>		
<b>PO1</b> Building height takes into consideration and respects the following: (a) the height of existing buildings on adjoining premises; (b) the development potential, with respect to height, on adjoining premises; (c) the height of buildings in the vicinity of the site; (d) access to sunlight and daylight for the site and adjoining sites; (e) privacy and overlooking; and (f) site area and street frontage length.	<b>AO1.1</b> Development, other than buildings used for rural activities, has a maximum building height of: (a) 8.5 metres; and (b) 2 storeys above ground level.	<b>n/a</b> No buildings are proposed.
	<b>AO1.2</b> Buildings and structures associated with a rural activity including machinery, equipment, packing or storage buildings do not exceed 10 metres in height.	<b>n/a</b> No buildings are proposed.
<b>Siting, where not involving a Dwelling house</b> Note—Where for Dwelling house, the setbacks of the Queensland Development Code apply.		
<b>PO2</b> Development is sited in a manner that considers and respects: (a) the siting and use of adjoining premises; (b) access to sunlight and daylight for the site and adjoining sites; (c) privacy and overlooking; (d) air circulation and access to natural breezes; (e) appearance of building bulk; and (f) relationship with road corridors.	<b>AO2.1</b> Buildings and structures include a minimum setback of: (a) 40 metres from a frontage to a State-controlled road; and (b) 10 metres from a boundary to an adjoining lot.	<b>n/a</b> No buildings are proposed.
	<b>AO2.2</b> Buildings and structures, where for a Roadside stall, include a minimum setback of 0 metres from a frontage to a road that is not a State-controlled road.	<b>n/a</b> Development is not for a roadside stall.

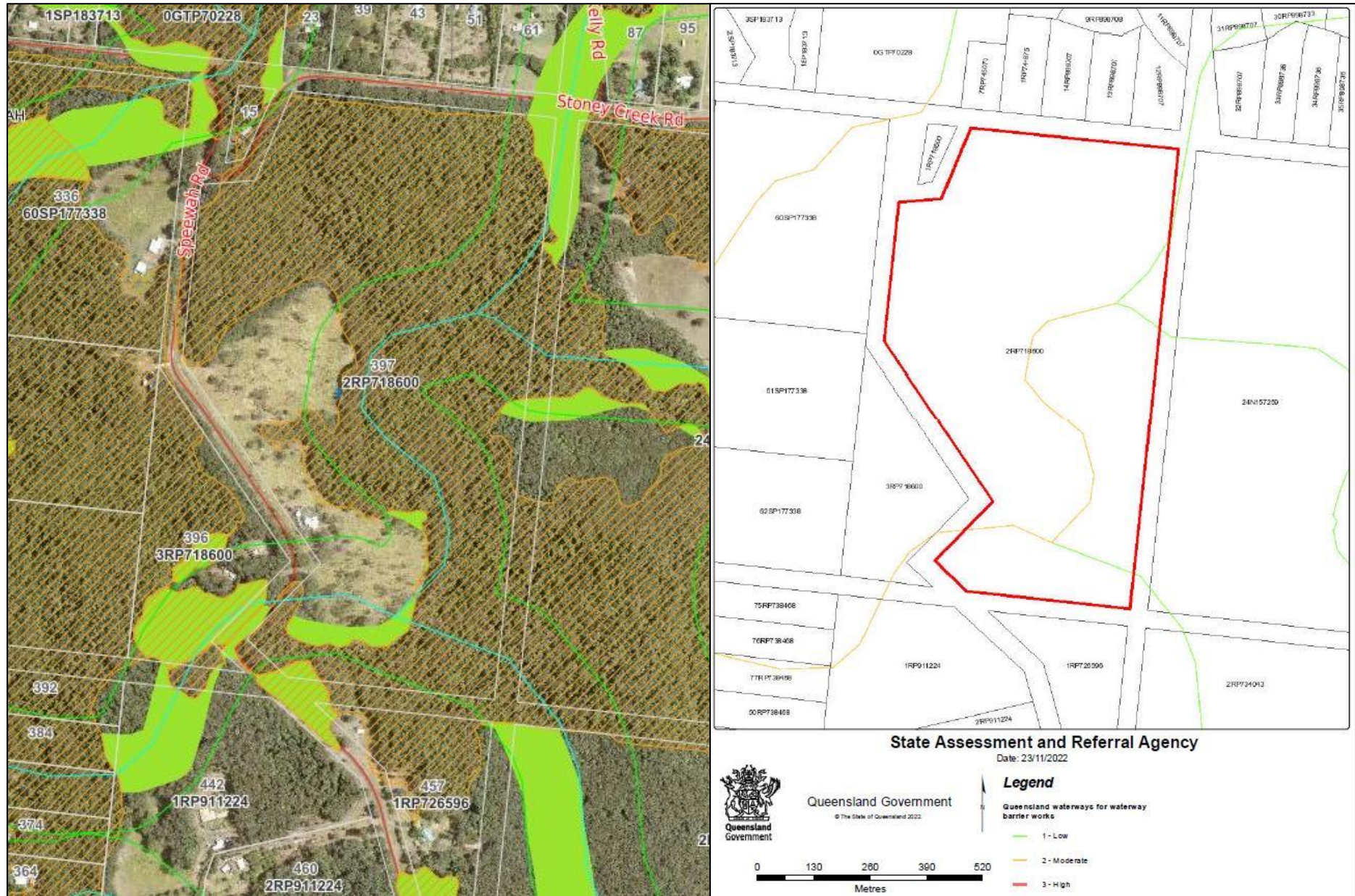
	<p><b>AO2.3</b> Buildings and structures, except where a Roadside stall, include a minimum setback of:</p> <ul style="list-style-type: none"> <li>(a) 10 metres from a frontage to a sealed road that is not a State-controlled road; and</li> <li>(b) 100 metres from a frontage to any other road that is not a State-controlled road;</li> </ul>	<p><b>n/a</b> No buildings are proposed.</p>
<b>Accommodation density</b>		
<p><b>PO3</b> The density of Accommodation activities:</p> <ul style="list-style-type: none"> <li>(a) respects the nature and density of surrounding land use;</li> <li>(b) is complementary and subordinate to the rural and natural landscape values of the area; and</li> <li>(c) is commensurate to the scale and frontage of the site.</li> </ul>	<p><b>AO3.1</b> Residential density does not exceed one dwelling house per lot.</p>	<p><b>n/a</b> Development is not for an Accommodation Activity.</p>
	<p><b>AO3.2</b> Residential density does not exceed two dwellings per lot and development is for:</p> <ul style="list-style-type: none"> <li>(a) a secondary dwelling; or</li> <li>(b) Caretaker's accommodation and includes building work or minor building work with a maximum gross floor area of 100m<sup>2</sup>; or</li> <li>(c) Rural worker's accommodation.</li> </ul>	<p><b>n/a</b> Development is not for an Accommodation Activity.</p>
<b>For assessable development</b>		
<b>Site cover</b>		
<p><b>PO4</b> Buildings and structures occupy the site in a manner that:</p> <ul style="list-style-type: none"> <li>(a) makes efficient use of land;</li> <li>(b) is consistent with the bulk and scale of buildings in the surrounding area; and</li> <li>(c) appropriately balances built and natural features.</li> </ul>	<p><b>AO4</b> No acceptable outcome is provided.</p>	<p><b>Complies</b> The proposed dam structure utilises the natural features of the land.</p>

<p><b>PO5</b> Development complements and integrates with the established built character of the Rural zone, having regard to:</p> <ul style="list-style-type: none"> <li>(a) roof form and pitch;</li> <li>(b) eaves and awnings;</li> <li>(c) building materials, colours and textures; and</li> <li>(d) window and door size and location.</li> </ul>	<p><b>AO5</b> No acceptable outcome is provided.</p>	<p><b>Complies</b> The proposed dam structure is suitably designed for the use and compatible with the built character of the local area.</p>
<b>Amenity</b>		
<p><b>PO6</b> Development must not detract from the amenity of the local area, having regard to:</p> <ul style="list-style-type: none"> <li>(a) noise;</li> <li>(b) hours of operation;</li> <li>(c) traffic;</li> <li>(d) advertising devices;</li> <li>(e) visual amenity;</li> <li>(f) privacy;</li> <li>(g) lighting;</li> <li>(h) odour; and</li> <li>(i) emissions.</li> </ul>	<p><b>AO6</b> No acceptable outcome is provided.</p>	<p><b>Complies</b> The proposed dam does not detract from the amenity of the local area.</p>
<p><b>PO7</b> Development must take into account and seek to ameliorate any existing negative environmental impacts, having regard to:</p> <ul style="list-style-type: none"> <li>(a) noise;</li> <li>(b) hours of operation;</li> <li>(c) traffic;</li> <li>(d) advertising devices;</li> <li>(e) visual amenity;</li> <li>(f) privacy;</li> <li>(g) lighting;</li> <li>(h) odour; and</li> <li>(i) emissions.</li> </ul>	<p><b>AO7</b> No acceptable outcome is provided.</p>	<p><b>Complies</b> The proposed Rural Activity will be responsibly managed to ameliorate any existing negative environmental impacts.</p>

### 8.2.4 Environmental Significance Overlay Code

The proposed development is assessable against the provisions of the Environmental Significance Overlay area of the Mareeba Shire Planning Scheme.





**8.2.4.3 Criteria for assessment**

**Table 8.2.4.3A - Environmental significance overlay code - For accepted development subject to requirements and assessable development**

Performance outcomes	Acceptable outcomes	Compliance
<b>For accepted development subject to requirements and assessable development</b>		
<b>Regulated vegetation</b>		
<p><b>PO1</b> Vegetation clearing in areas mapped as 'Regulated vegetation' identified on the <b>Environmental Significance Overlay Maps (OM-004a-o)</b> is avoided unless:</p> <ul style="list-style-type: none"> <li>(a) it is demonstrated that the area does not support regulated vegetation as mapped;</li> <li>(b) the loss or reduction in regulated vegetation is for community infrastructure and associated access facilities that cannot be avoided;</li> <li>(c) wildlife interconnectivity is maintained or enhanced at a local and regional scale; and</li> <li>(d) the loss or reduction in regulated vegetation is minimised and any residual impacts are offset.</li> </ul> <p>Note—A supporting Ecological Assessment Report is prepared in accordance with Planning Scheme Policy 2 – Ecological Assessment Reports.</p>	<p><b>AO1</b> No clearing of native vegetation is undertaken within areas of 'Regulated vegetation' identified on the <b>Environmental Significance Overlay Maps (OM-004a-o)</b>.</p>	<p><b>Complies</b> No clearing of native vegetation within areas of 'Regulated vegetation' is proposed.</p>



<p><b>PO2</b> Development on sites adjacent to areas of 'Regulated vegetation' identified on the <b>Environmental Significance Overlay Maps (OM-004a-o)</b> protects the environmental significance of regulated vegetation and:</p> <ul style="list-style-type: none"> <li>(a) does not interrupt, interfere, alter or otherwise impact on underlying natural ecosystem processes such as water quality, hydrology, geomorphology and biophysical processes;</li> <li>(b) does not negatively impact the movement of wildlife at a local or regional scale; and</li> <li>(c) avoids noise, light, vibration or other edge affects, including weed and pest incursion on identified environmental values.</li> </ul> <p>Note—A supporting Ecological Assessment Report is prepared in accordance with Planning Scheme Policy 2 – Ecological Assessment Reports.</p>	<p><b>AO2</b> Development (excluding roads, earthworks, drainage infrastructure and underground infrastructure) is not located within 20 metres of 'Regulated vegetation' areas identified on the <b>Environmental Significance Overlay Maps (OM-004a-o)</b>.</p>	<p><b>Complies</b> The proposed development is not located within 20 metres of any 'Regulated vegetation' mapped areas.</p>
<b>Regulated vegetation intersecting a watercourse</b>		
<p><b>PO3</b> Vegetation clearing in areas mapped as 'Regulated vegetation intersecting a watercourse', identified as 'Waterway' and 'Waterway buffer' on the <b>Environmental Significance - Waterway Overlay Maps (OM-004p-z)</b> is avoided unless wildlife interconnectivity between habitats is maintained or enhanced at a local and regional scale, to the extent that migration or normal movement of significant species between habitats or normal gene flow between populations is not inhibited.</p> <p>Note—A supporting Ecological Assessment Report is prepared in accordance with Planning Scheme Policy 2 – Ecological Assessment Reports.</p>	<p><b>Where within a 'Waterway buffer' on Environmental Significance - Waterway Overlay Maps (OM-004p-z)</b></p> <p><b>AO3.1</b> A minimum setback in accordance with <b>Table 8.2.4.3B</b> is provided between development and the top of the high bank of a 'Waterway' identified on the <b>Environmental Significance - Waterway Overlay Maps (OM-004p-z)</b>.</p>	<p><b>Complies</b> No clearing of native vegetation within areas of 'Waterway buffer' is proposed.</p> <p>The downstream waterway is a Stream Order 2 – Moderate waterway. The proposed Dam extends between 427m and 422m AHD and has a setback exceeding 25m from the top of the bank.</p>

	<p><b>Where within a ‘Waterway buffer’ on Environmental Significance - Waterway Overlay Maps (OM-004p-z)</b></p> <p><b>AO3.2</b> No clearing of native vegetation is undertaken within the minimum setback identified at <b>AO3.1</b>.</p>	<p><b>Complies</b> No clearing of native vegetation within areas of ‘Waterway buffer’ is proposed.</p>
<p><b>Waterways and wetlands</b></p>		
<p><b>PO4</b> ‘High ecological significance wetlands’ identified on the <b>Environmental Significance Overlay Maps (OM-004a-o)</b> and ‘Waterways’ on <b>Environmental Significance - Waterway Overlay Maps (OM-004p-z)</b> and are protected by:</p> <ul style="list-style-type: none"> <li>(a) maintaining adequate separation distances between waterways/wetlands and development;</li> <li>(b) maintaining and enhancing aquatic and terrestrial habitat including vegetated corridors to allow for native fauna (terrestrial and aquatic) movement;</li> <li>(c) maintaining waterway bank stability by minimising bank erosion and slumping;</li> <li>(d) maintaining water quality by providing buffers to allow filtering of sediments, nutrients and other pollutants; and</li> <li>(e) retaining and improving existing riparian vegetation and existing vegetation associated with a wetland.</li> </ul> <p>Note—A supporting Ecological Assessment Report is prepared in accordance with Planning Scheme Policy 2 – Ecological Assessment Reports.</p>	<p><b>Where within a ‘Waterway buffer’ on Environmental Significance - Waterway Overlay Maps (OM-004p-z)</b></p> <p><b>AO4.1</b> A minimum setback in accordance with <b>Table 8.2.4.3B</b> is provided between development and the top of the high bank of a ‘Waterway’ identified on the <b>Environmental Significance - Waterway Overlay Maps (OM-004p-z)</b>.</p>	<p><b>Complies</b> No clearing of native vegetation within areas of ‘Waterway buffer’ is proposed.</p> <p>The downstream waterway is a Stream Order 2 – Moderate waterway. The proposed Dam extends between 427m and 422m AHD and has a setback exceeding 25m from the top of the bank.</p>

	<p><b>Where within a ‘High ecological significance wetland buffer’ on Environmental Significance Overlay Maps (OM-004a-o)</b></p> <p><b>AO4.2</b> A minimum buffer of 200 metres is provided between development and the edge of a ‘High ecological significance wetland’ identified on the <b>Environmental Significance Overlay Maps (OM-004a-o)</b>.</p>	<p><b>n/a</b> The building site is not located within a ‘High ecological significance wetland buffer’.</p>
	<p><b>Where within a ‘Waterway buffer’ on Environmental Significance - Waterway Overlay Maps (OM-004p-z) or ‘High ecological significance wetland buffer’ on Environmental Significance Overlay Maps (OM-004a-o)</b></p> <p><b>AO4.3</b> No stormwater is discharged to a ‘Waterway’ on <b>Environmental Significance - Waterway Overlay Maps (OM-004p-z)</b> or ‘High ecological significance wetland’ identified on the <b>Environmental Significance Overlay Maps (OM-004a-o)</b>.</p> <p><small>Note— An alternative outcome is required to demonstrate that the ecological impacts of stormwater discharge to a ‘Waterway’ or ‘High ecological significance wetland’ are mitigated in accordance with PO3 through appropriate stormwater management / treatment (where possible).</small></p>	<p><b>n/a</b> The building site is not located within a ‘Waterway buffer’ or ‘High ecological significance wetland buffer’.</p> <p>No stormwater will be discharged to a waterway.</p>
	<p><b>Where within a ‘Waterway buffer’ on Environmental Significance - Waterway Overlay Maps (OM-004p-z) or ‘High ecological significance wetland buffer’ on Environmental Significance Overlay Maps (OM-004a-o)</b></p> <p><b>AO4.4</b> No wastewater is discharged to a ‘Waterway’ on <b>Environmental Significance - Waterway Overlay Maps (OM-004p-z)</b> or ‘High ecological significance wetland’ identified on the <b>Environmental Significance Overlay Map (OM-004a-z)</b>.</p> <p><small>Note— A alternative outcome is required to demonstrate that the ecological impacts of wastewater discharge to a ‘Waterway’ or ‘High ecological significance wetland’ are mitigated in accordance with PO3 through appropriate wastewater management / treatment (where possible).</small></p>	<p><b>n/a</b> The building site is not located within a ‘Waterway buffer’ or ‘High ecological significance wetland buffer’.</p> <p>No wastewater will be discharged to a waterway.</p>

<b>For assessable development</b>		
<b>Wildlife Habitat</b>		
<p><b>PO5</b> Development within a ‘Wildlife habitat’ area identified on the <b>Environmental Significance Overlay Maps (OM-004a-o)</b>:</p> <ul style="list-style-type: none"> <li>(a) protects and enhances the habitat of Endangered, Vulnerable and Near Threatened (EVNT) species and local species of significance;</li> <li>(b) incorporates siting and design measures to protect and retain identified ecological values and underlying ecosystem processes within or adjacent to the development site;</li> <li>(c) maintains or enhances wildlife interconnectivity at a local and regional scale; and</li> <li>(d) mitigates the impact of other forms of potential disturbance (such as presence of vehicles, pedestrian use, increased exposure to domestic animals, noise and lighting impacts) to protect critical life stage ecological processes (such as feeding, breeding or roosting).</li> </ul> <p><small>Note—Development applications must identify any EVNT species or their habitats that may be affected by the proposal. In particular, applications are to identify and describe how the development avoids adverse impacts on ecological processes within or adjacent to the development area. Note—A supporting Ecological Assessment Report is prepared in accordance with Planning Scheme Policy 2 – Ecological Assessment Reports.</small></p>	<p><b>AO5</b> No acceptable outcome is provided.</p>	<p><b>Complies</b> The dam site has been located to result in minimum environmental impacts and is situated within an outcrop of vegetation surrounded by cleared fields.</p> <p>A Protected Plants Report has been prepared in support of this application by Northern Ecology and is attached with the application as Appendix 3.</p>
<b>Legally secured offset areas</b>		
<p><b>PO6</b> Development within a ‘Legally secured offset area’ identified on the <b>Environmental Significance Overlay Maps (OM-004a-o)</b> or other known Legally Secured Offset Area is consistent with the binding requirements of the offset and does not prejudice, undermine, or negatively impact the inherent ecological values, including all naturally occurring native flora, fauna and their habitat within the Legally Secured Offset Area.</p> <p><small>Note—A supporting Ecological Assessment Report is prepared in accordance with Planning Scheme Policy 2 – Ecological Assessment Reports.</small></p>	<p><b>AO6</b> No acceptable outcome is provided.</p>	<p><b>n/a</b> The development site does not contain any ‘Legally secured offset’ mapped areas.</p>

<b>Protected areas</b>		
<p><b>PO7</b> Development within a 'Protected area' identified on the <b>Environmental Significance Overlay Maps (OM-004a-o)</b> is consistent with the values of the Protected Area and:</p> <ul style="list-style-type: none"> <li>(a) supports the inherent ecological and community values of the Protected Area asset;</li> <li>(b) maintains or enhances wildlife interconnectivity at a local and regional scale; and</li> <li>(c) does not prejudice, undermine, or negatively impact the inherent ecological values, including all naturally occurring native flora, fauna and their habitat within the Protected Area.</li> </ul> <p><small>Note—A supporting Ecological Assessment Report is prepared in accordance with Planning Scheme Policy 2 – Ecological Assessment Reports.</small></p>	<p><b>AO7</b> No acceptable outcome is provided.</p>	<p><b>n/a</b> The development site does not contain any mapped 'Protected areas'.</p>
<b>Ecological corridors and Habitat linkages</b>		
<p><b>PO8</b> Development located:</p> <ul style="list-style-type: none"> <li>(a) in the Conservation zone, Emerging community zone, Recreation and open space zone, Rural zone or Rural residential zone; and</li> <li>(b) within an 'Ecological corridor' or a 'Habitat linkage' identified on the <b>Environmental Significance Overlay Maps (OM-004a-o)</b></li> </ul>	<p><b>AO8</b> No acceptable outcome is provided.</p>	<p><b>n/a</b> The development site is not located within any 'Ecological corridor' or 'Habitat linkage' areas.</p>

<p>does not compromise the provision of habitat connectivity of the corridor/linkage, having regard to:</p> <ul style="list-style-type: none"> <li>(a) the environmental values of the area of the site identified in the 'Ecological corridor' or 'Habitat linkage';</li> <li>(b) the environmental values of adjoining and nearby land within the 'Ecological corridor' or 'Habitat linkage';</li> <li>(c) the extent of any modification proposed to the natural environment including (but not limited to) vegetation and topography;</li> <li>(d) the location and design of proposed improvements that may impact on the functions of the 'Ecological corridor' or 'Habitat linkage' including (but not limited to) buildings, structures, fences, lighting, vehicle movement areas and infrastructure services; and</li> <li>(e) the ability for the 'Ecological corridor' or 'Habitat linkage' to be enhanced to improve ecological connectivity.</li> </ul> <p>Note—A supporting Ecological Assessment Report prepared in accordance with Planning Scheme Policy 2 – Ecological Assessment Reports may be appropriate to demonstrate compliance with PO8.</p>		
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**Table 8.2.4.3B - Setback and buffer distances from waterways**

Stream order	Setback and buffer from waterways
1	10 metres from top of high bank
2-4	25 metres from top of high bank
5 or more	50 metres from top of high bank

Note—The stream order of a 'waterway' is to be determined on a case by case basis.

## State Code 16 – Native Vegetation Clearing

As identified in State Code 16, Table 1: Relevant code provisions for each type of development, the proposed development is assessable against the provisions of State Code 16 – Native Vegetation Clearing for ‘Public safety, **relevant infrastructure activities** and / or consequential development of IPA approval’, specifically Tables 16.2 and 16.3.

**Table 16.2: General**

Performance outcomes	Acceptable outcomes	Response
<p><b>PO1</b>  <b>Clearing of vegetation</b> is consistent with any <b>notice requiring compliance</b> on the land subject to the development application, unless a <b>better environmental outcome</b> can be achieved.</p>	No acceptable outcome is prescribed.	<p><b>Will Comply</b>                      Clearing of vegetation will be carried out in accordance with any conditions of approval.</p>
<p><b>PO2</b>  <b>Clearing of vegetation</b> is consistent with <b>vegetation management requirements</b> for <b>particular regulated areas</b> unless a <b>better environmental outcome</b> can be achieved.</p>	No acceptable outcome is prescribed.	<p><b>Will Comply</b>                      Clearing of vegetation will comply with any vegetation management requirements for particular regulated areas, the subject area being classified as ‘Category B’ vegetation.</p>
<p><b>PO3</b>  <b>Clearing of vegetation</b> in a <b>legally secured offset area</b>:</p> <ol style="list-style-type: none"> <li>1. is consistent with the <b>offset</b> delivery plan; or</li> <li>2. is consistent with an <b>agreement</b> for the <b>offset area</b> on the land subject to the development application; or</li> <li>3. only occurs if an additional <b>offset</b> is provided.</li> </ol>	No acceptable outcome is prescribed.	<p><b>n/a</b>                      The development site does not contain any legally secured offset areas.</p>

**Table 16.3: Public safety, relevant infrastructure activities and / or consequential development of IPA approval**

Performance outcomes	Acceptable outcomes	Response
<b>Clearing avoids and minimises impacts</b>		
<p><b>PO4</b>  <b>Clearing of vegetation and adverse impacts of clearing vegetation</b> do not occur unless the application has demonstrated that the <b>clearing</b> and the <b>adverse impacts of clearing</b> have been:</p> <ol style="list-style-type: none"> <li>1. reasonably avoided; or</li> <li>2. reasonably minimised where it cannot be reasonably avoided.</li> </ol>	No acceptable outcome is prescribed.	<p><b>Complies</b>                      Clearing of vegetation and adverse impacts of clearing vegetation has been minimised by locating the dam within a small outcrop of vegetation which is surrounded by cleared agricultural fields. Several trees will be retained where possible within the banks of the catchment.</p>
<b>Clearing associated with wetlands</b>		
<p><b>PO5</b>  <b>Clearing of vegetation</b> within a natural <b>wetland</b> and/or within 100 metres of the <b>defining bank</b> of a natural <b>wetland</b> maintains the composition, structure and function of any <b>regional ecosystem</b> associated with any natural <b>wetland</b> to protect all of the following:</p> <ol style="list-style-type: none"> <li>1. bank stability by protecting against bank erosion;</li> <li>2. water quality by filtering sediments, nutrients and other pollutants;</li> <li>3. aquatic habitat;</li> <li>4. terrestrial habitat.</li> </ol>	<p><b>A05.1</b>  <b>Clearing</b> does not occur in a natural <b>wetland</b> or within 100 metres of the <b>defining bank</b> of any natural <b>wetland</b>.</p> <p>OR</p> <p><b>A05.2</b>  <b>Clearing</b> within 100 metres of the <b>defining bank</b> of any natural <b>wetland</b>:</p> <ol style="list-style-type: none"> <li>1. does not occur within 10 metres of the <b>defining bank</b> of any natural <b>wetland</b>; and</li> <li>2. does not exceed widths in reference table 1 in this code.</li> </ol>	<p><b>Complies</b>                      Clearing does not occur in a natural wetland or within 100 metres of the defining bank of any natural wetland.</p>
<p><b>PO6</b>                      Where <b>clearing of vegetation</b> in a <b>regional ecosystem</b> associated with a natural <b>wetland</b> does not maintain the composition, structure and function of the <b>regional ecosystem</b>, and cannot be avoided and has been mitigated, an <b>offset</b> is provided for any acceptable <b>significant residual impact</b>.</p>	No acceptable outcome is prescribed.	<p><b>n/a</b>                      Clearing of vegetation is not located within a regional ecosystem associated with a natural wetland.</p>
<b>Clearing associated with watercourses and drainage features</b>		
<p><b>PO7</b>  <b>Clearing of vegetation</b> within a <b>watercourse</b> and/or <b>drainage feature</b> and/or within the relevant distance (listed in reference table 2) of a <b>watercourse</b> and/or <b>drainage feature</b>, maintains</p>	<p><b>A07.1</b>  <b>Clearing</b> does not occur in any of the following areas:</p> <ol style="list-style-type: none"> <li>1. inside the <b>defining bank</b> of a <b>watercourse</b> or <b>drainage feature</b>; and</li> </ol>	<p><b>Complies</b>                      The proposed Dam is located in a natural drainage feature which is not listed as a watercourse. Vegetation will be retained within the</p>



Performance outcomes	Acceptable outcomes	Response
<p>the composition, structure and function of the <b>regional ecosystem</b> associated with the <b>watercourse</b> and/or <b>drainage feature</b> to protect all of the following:</p> <ol style="list-style-type: none"> <li>1. bank stability by protecting against bank erosion;</li> <li>2. water quality by filtering sediments, nutrients and other pollutants;</li> <li>3. aquatic habitat;</li> <li>4. terrestrial habitat.</li> </ol>	<p>2. within the relevant distance of the <b>defining bank</b> of any <b>watercourse</b> or <b>drainage feature</b> in reference table 2 of this code.</p> <p>OR</p> <p><b>A07.2</b>  <b>Clearing</b> within any <b>watercourse</b> or <b>drainage feature</b>, or within the relevant distance of the <b>defining bank</b> of any <b>watercourse</b> or <b>drainage feature</b> in reference table 2 of this code:</p> <ol style="list-style-type: none"> <li>1. does not exceed the widths in reference table 1 of this code; and</li> <li>2. does not occur within 10 metres of the <b>defining bank</b>, unless <b>clearing</b> is required into or across the <b>watercourse</b> or <b>drainage feature</b>.</li> </ol>	<p>banks of the drainage feature where possible.</p> <p>The dam is situated outside of the buffer line of the mapped watercourse located downstream of the drainage feature.</p>
<p><b>PO8</b>  Where <b>clearing</b> of <b>vegetation</b> in a <b>regional ecosystem</b> associated with a <b>watercourse</b> and/or <b>drainage feature</b> does not maintain the composition, structure and function of the <b>regional ecosystem</b>, and cannot be avoided and has been mitigated, an <b>offset</b> is provided for any acceptable <b>significant residual impact</b>.</p>	<p>No acceptable outcome is prescribed.</p>	<p><b>n/a</b>  Clearing of vegetation is not located within a regional ecosystem associated with a watercourse.</p>
<b>Connectivity</b>		
<p><b>PO9</b>  <b>Regional ecosystems</b> on the subject land and any adjacent land retain sufficient <b>vegetation</b> to:</p> <ol style="list-style-type: none"> <li>1. maintain <b>ecological processes</b>; and</li> <li>2. ensure the <b>regional ecosystem</b> remains in the landscape despite <b>threatening processes</b>.</li> </ol>	<p><b>A09.1</b>  <b>Clearing</b> occurs in accordance with reference table 3 in this code.</p>	<p><b>n/a</b>  Clearing of vegetation is not located within a regional ecosystem. Sufficient vegetation is retained on site to protect the landscape and maintain ecological processes.</p>
<b>Soil erosion if the local government is not the assessment manager for the development application</b>		
<p><b>PO10</b>  <b>Clearing</b> of <b>vegetation</b> does not result in <b>accelerated soil erosion</b> within or outside the land the subject of the development application.</p>	<p><b>A010.1</b>  <b>Clearing</b> only occurs if an <b>erosion and sediment control plan</b> is developed and implemented to prevent increased <b>soil erosion and instability</b> resulting from the <b>clearing</b>.</p>	<p><b>Complies with PO10</b>  Vegetation will be retained within the banks of the drainage feature where possible.</p>

Performance outcomes	Acceptable outcomes	Response
<b>Salinity</b>		
<p><b>PO11</b>  <b>Clearing of vegetation</b> within 100 metres of a <b>salinity expression area</b> does not contribute to or accelerate <b>land degradation</b> through either of the following:</p> <ol style="list-style-type: none"> <li><b>waterlogging</b>;</li> <li>the <b>salinisation</b> of <b>groundwater</b>, surface water or soil.</li> </ol>	<p><b>AO11.1</b>  <b>Clearing</b> does not occur within 100 metres of a <b>salinity expression area</b>.</p>	<p><b>n/a</b>  Clearing of vegetation does not occur within 100 metres of a salinity expression area.</p>
<b>Conserving least concern regional ecosystems - Minimising clearing of areas temporarily required to enable construction of the infrastructure</b>		
<p><b>PO12</b>  <b>Clearing of vegetation</b> for temporary use areas to construct necessary infrastructure, such as temporary use roads or access tracks, maintains the composition, structure and function of <b>least concern regional ecosystems</b>.</p>	<p><b>AO12.1</b>  <b>Clearing</b> for temporary use areas to construct necessary infrastructure does not occur in a <b>least concern regional ecosystem</b>.</p> <p>OR</p> <p><b>AO12.2</b>  Total <b>clearing</b> for temporary use areas to construct necessary infrastructure in any <b>regional ecosystem</b> combined does not exceed the widths prescribed in table reference table 1 of this code.</p> <p>OR</p> <p><b>AO12.3</b>  Total <b>clearing</b> for temporary use areas to construct necessary infrastructure in any <b>regional ecosystem</b> combined does not exceed areas prescribed in table reference table 1 of this code.</p>	<p><b>n/a</b>  Clearing of vegetation is for permanent use.</p>
<p><b>PO13</b>  Where <b>clearing of vegetation</b> in a <b>regional ecosystem</b> for temporary use areas to construct necessary infrastructure does not maintain the composition, structure and function of the <b>regional ecosystem</b>, and cannot be avoided and has been mitigated, the <b>cleared area is rehabilitated</b>.</p>	<p>No acceptable outcome is prescribed.</p>	<p><b>n/a</b>  Clearing of vegetation is not located within a regional ecosystem.</p>

<b>Conserving endangered and of concern regional ecosystems</b>		
<p><b>PO14</b>  <b>Clearing of vegetation</b> maintains the composition, structure and function of <b>endangered regional ecosystems</b> and/or <b>of concern regional ecosystems</b>.</p>	<p><b>AO14.1</b>  <b>Clearing</b> does not occur in an <b>endangered regional ecosystem</b> or an <b>of concern regional ecosystem</b>.</p> <p>OR</p> <p><b>AO14.2</b>                      Total <b>clearing of endangered regional ecosystems</b> and <b>of concern regional ecosystems</b> combined does not exceed the widths prescribed in table reference table 1 of this code.</p> <p>OR</p> <p><b>AO14.3</b>                      Total <b>clearing of endangered regional ecosystems</b> and <b>of concern regional ecosystems</b> combined does not exceed areas prescribed in table reference table 1 of this code.</p>	<p><b>n/a</b>                      Clearing of vegetation is not located within an endangered regional ecosystem or of concern regional ecosystem.</p>
<p><b>PO15</b>                      Where <b>clearing of vegetation</b> in an <b>endangered regional ecosystem</b> or an <b>of concern regional ecosystems</b> does not maintain the composition, structure and function of the <b>regional ecosystem</b>, and cannot be avoided and has been mitigated, the cleared area:</p> <ol style="list-style-type: none"> <li>1. is <b>rehabilitated</b>; or</li> <li>2. where the <b>cleared</b> area cannot reasonably be <b>rehabilitated</b>, an <b>offset</b> is provided for any acceptable <b>significant residual impact</b>.</li> </ol>	<p>No acceptable outcome is prescribed.</p>	<p><b>n/a</b>                      Clearing of vegetation is not located within an endangered regional ecosystem or of concern regional ecosystem.</p>
<b>Essential habitat excluding essential habitat for <i>Phascolarctos cinereus</i> (koalas) if development is assessable under Schedule 10, Part 10 of the Planning Regulation 2017</b>		
<p><b>PO16</b>  <b>Clearing of vegetation</b> in a <b>regional ecosystem</b> that is an area of <b>essential habitat</b> maintains the composition, structure and function of the <b>regional ecosystem</b> for each <b>protected wildlife</b> species individually.</p>	<p><b>AO16.1</b>  <b>Clearing</b> does not occur in <b>essential habitat</b>.</p> <p>OR</p> <p><b>AO16.2</b>  <b>Clearing in essential habitat</b> does not exceed the widths prescribed in reference table 1 of this</p>	<p><b>n/a</b>                      The proposed development is not assessable under Schedule 10, Part 10 of the Planning Regulation 2017.</p>

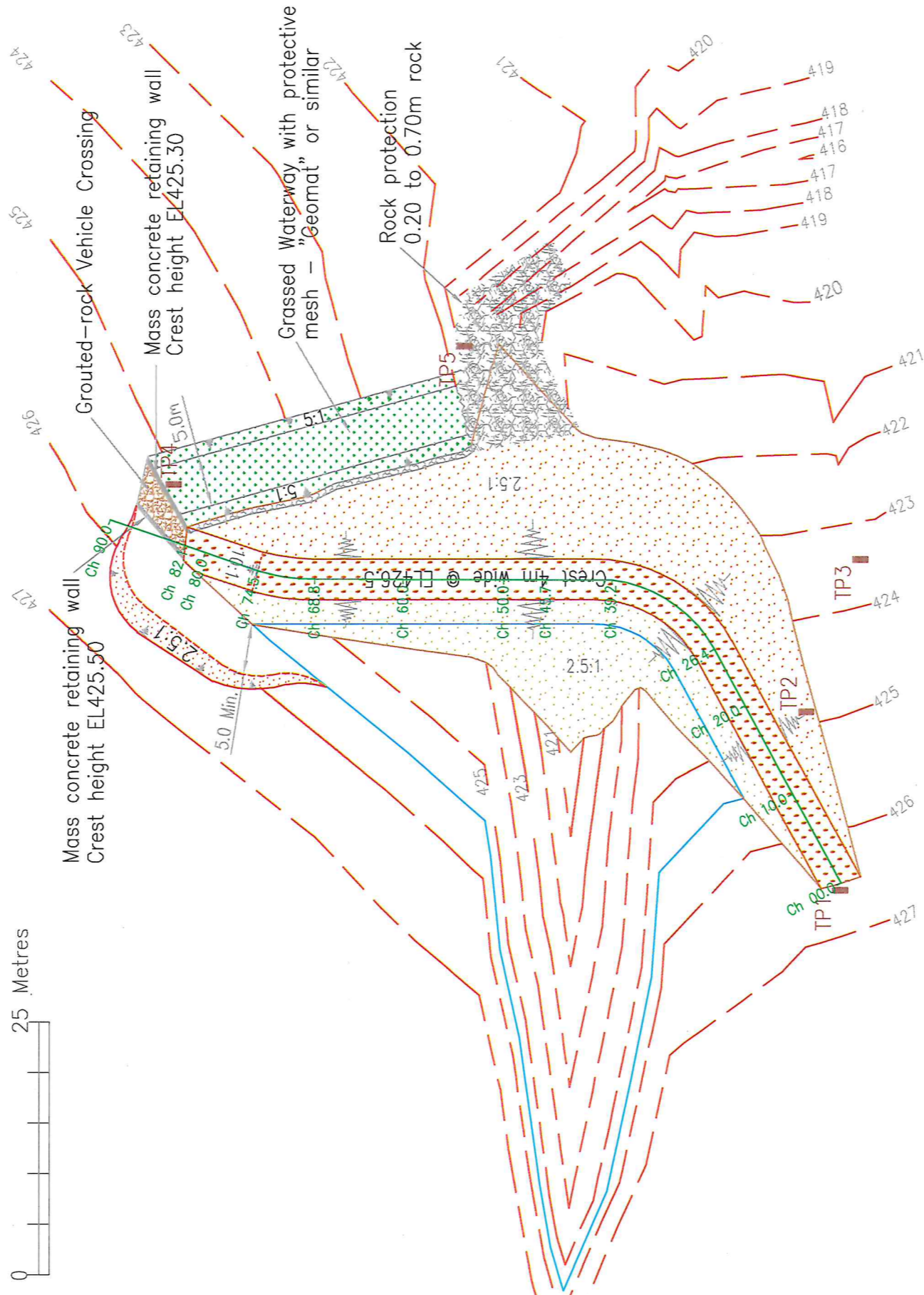
	code. OR <b>AO16.3</b> <b>Clearing</b> in <b>essential habitat</b> does not exceed the areas prescribed in table reference table 1 of this code.	
<b>PO17</b> Where <b>clearing</b> of <b>vegetation</b> in a <b>regional ecosystem</b> that is an area of <b>essential habitat</b> does not maintain the composition, structure and function of the <b>regional ecosystem</b> , and cannot be avoided and has been mitigated, an <b>offset</b> is provided for any acceptable <b>significant residual impact</b> for each <b>protected wildlife</b> species individually.	No acceptable outcome is prescribed.	<b>n/a</b> The proposed development is not assessable under Schedule 10, Part 10 of the Planning Regulation 2017.
<b>Acid sulfate soils if the local government is not the assessment manager for the development application</b>		
<b>PO18</b> <b>Clearing</b> of <b>vegetation</b> does not result in, or accelerate, disturbance of acid sulfate soils or changes to the hydrology of the location that will result in either of the following: 1. aeration of horizons containing iron sulphides; 2. mobilisation of acid or metals.	<b>AO18.1</b> <b>Clearing</b> does not occur in <b>land zone 1, land zone 2</b> or <b>land zone 3</b> . OR <b>AO18.2</b> <b>Clearing</b> in <b>land zone 1, land zone 2</b> or <b>land zone 3</b> in areas below the five metre Australian Height Datum only occurs where: 1. <b>mechanical clearing</b> does not disturb the soil to a depth greater than 30 centimetres; and 2. acid sulfate soils are managed consistent with the soil management guidelines in the Queensland Acid Sulfate Soil Technical Manual.	<b>n/a</b> The local government (Mareeba Shire Council) is the assessment manager for this application.

**NORTH AUSTRALIAN  
WATER STRATEGIES  
SPEEWAH QLD. 4881**

Enquiries: Jeff Benjamin  
Mobile Phone: 0409 892 933  
E-Mail: jeff.benjamin60@gmail.com

**NOTES**

1. Azimuth: Grid North—UTM GDA94
2. Elevation Datum: AHD



*TSA* 13/9/23



**IRRIGATING THE GRASSED WATERWAY**

It is recommended that a simple irrigation system is set-up to ensure establishment of a good cover of protective grass. Such a system may comprise LDP spraylines on either side of the waterway fitted with low-pressure, under-tree sprinklers. A suitable sprinkler is Toro Water-bird or similar, with 1.6mm nozzle operating at 100 kPa. Sprinkler discharge is 110 LPH. Spacing should be approx. 5.5 m in a triangular pattern. Irrigation application rate will be approx. 3.65 mm per hour. Operating both spraylines simultaneously will require a total flow-rate of ~ 0.4 l/s.

**ELDRED-KING EMPIRE TRUST**  
295 Speewah Rd.  
SPEEWAH QLD. 4881

**PROPOSED GULLY DAM PROJECT**  
Dwg: ELD\_001\_A3 Drawn: JAB  
Design: JAB Chkd: TSA 12 Aug. 2023

**DESIGN NOTES**

**EMBANKMENT DETAILS**

Emb. Crest 4.0 m wide @ EL426.50  
 Emb. Total Length: 82.0 m  
 Batter Slopes: 2.5 : 1 U/S & D/S  
 Max. Emb. Height above D/S toe: ~8.5 m  
 Maximum Emb. Height @ Centre-line: ~6.7 m  
 Estim. Embankment Volume: 3 420 cu metres  
 (Including top-soil stripping & 5% settlement)  
 Embankment Foot-print: ~1 405 sq m

**STORAGE DETAILS**

Impoundment Full Supply Level (FSL): EL425.50  
 Surface Area @ FSL: ~1 150 sq m  
 Length of Shore-line: 190 m  
 Maximum Storage Depth: 5.0 m  
 Mean Storage Depth: ~2.7 m  
 Natural Storage Volume: ~ 1.7 ML  
 Total Potential Impoundment Volume: ~4.5 ML

**SPILLWAY DETAILS**

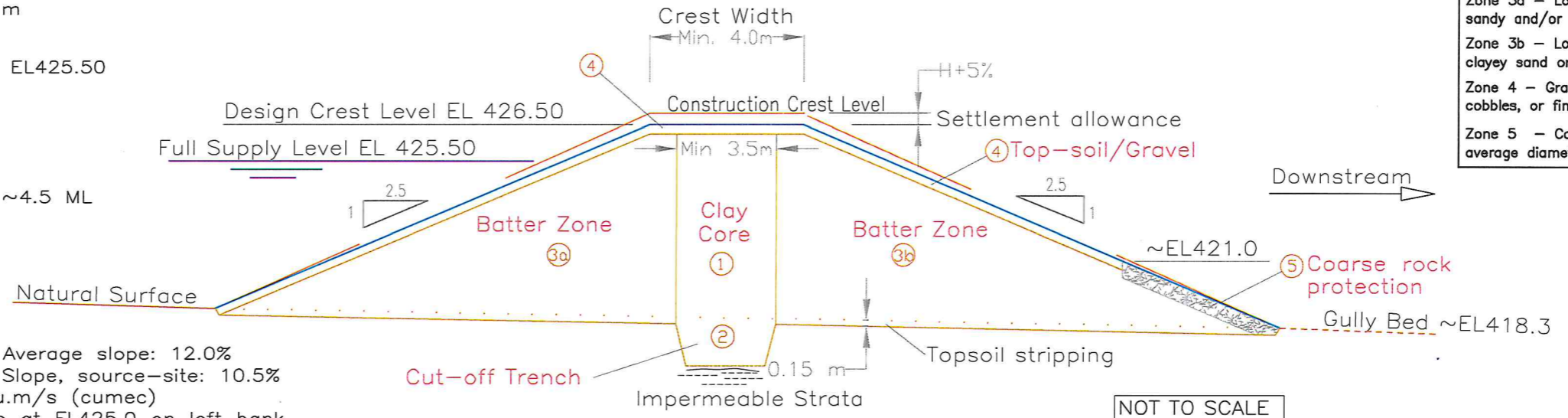
Direct catchment area: 1.9 ha      Average slope: 12.0%  
 Length, source-site: 200 m      Slope, source-site: 10.5%  
 Estimated Q1/100 discharge: ~0.6 cu.m/s (cumec)  
 Excavate spillway bench min. 5m wide at EL425.0 on left bank  
 Estimated spillway capacity for 0.25m surcharge: 0.9 cu.m/s (cumecs)

**SPILLWAY PROTECTIVE WORKS**

Spillway return chute to comprise a waterway of 5 m base width with base and batters sown with grass-seed or runners planted into into a prepared topsoil seed-bed. Additional protection to be provided by a suitable 3-D plastic or organic mesh-"Geomat" or similar

**NORTH AUSTRALIAN WATER STRATEGIES**  
 SPEEWAH QLD. 4881  
 Enquiries: Jeff Benjamin  
 Mobile Phone: 0409 892 933  
 E-Mail: jeff.benjamin60@gmail.com

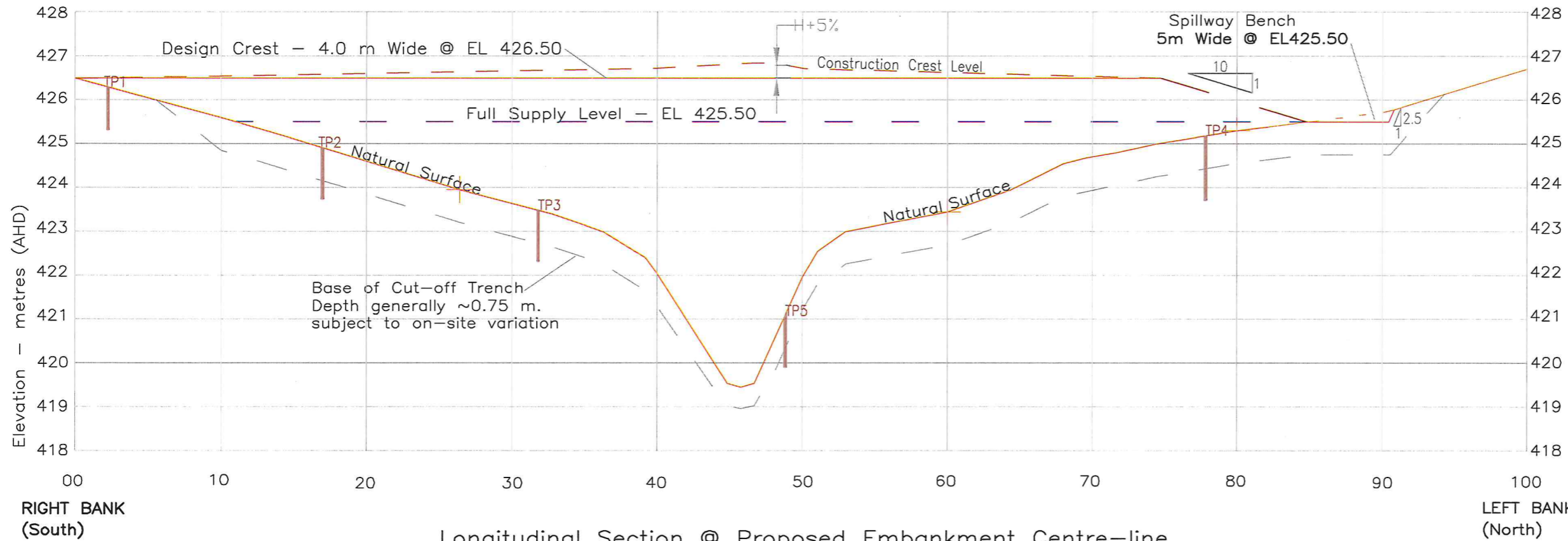
**NOTES**  
 Zones 1 & 2 - Compacted, selected medium plasticity clay or sandy clay  
 Zone 3a - Low to medium plasticity sandy and/or gravelly clay  
 Zone 3b - Low plasticity silty to clayey sand or clayey - silty gravel  
 Zone 4 - Gravelly, sandy topsoil, cobbles, or fine to medium road-base.  
 Zone 5 - Coarse well-graded quarry rock average diameter 200 to 700 mm



**Proposed Embankment Cross-section**  
 At Maximum Height Above Bed of Gully

**ESTABLISHING GRASS COVER**

It is recommended that a simple, temporary irrigation system is set-up to ensure establishment of a good cover of protective grass. See the note on Plan ELD\_001 for irrigation system suggestion.



*TSA* 13/9/23  
**Trevor S. Adil**  
 MIEAust CPEng  
 Chartered Professional Engineer  
 Membership No. 371004  
 The Institution of Engineers, Australia

**Eldred-King Empire Trust**  
 295 Speewah Rd  
 SPEEWAH QLD.  
 PROPOSED DAM-SITE  
 Design Details, Notes &  
 Embankment Sections

Dwg: ELD\_002\_A3  
 Drawn: JAB  
 Design: JAB  
 Chkd: TSA  
 12 August 2023      Sheet 2 of 2

# Protected Plant Flora Survey Report: 397 Speewah Road, Speewah

Report Reference: ELD22.12.01a  
Prepared for: Jan Eldred  
Prepared by: Northern Ecology

Gemma Horner



21<sup>st</sup> December 2022

I certify that:

- a) I have adhered to all statutory requirements and flora survey guideline requirements; and
- b) In the area surveyed I have found plants (as detailed in this report) that are currently listed as extinct, extinct in the wild, critically endangered, endangered, vulnerable or near threatened in the *Nature Conservation (Plants) Regulation 2020*; and





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This report does not purport to give legal advice; if required, the client should seek independent legal advice.

REVISION	DATE	PREPARED BY	REVIEWED BY	ISSUED BY
Draft (1)	21/12/2022	G. Horner	J. Middleton	G. Horner
Final	23/12/2022	G. Horner	-	G. Horner

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## 1.0 INTRODUCTION

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Northern Ecology has been commissioned by Jan Eldred (the 'Client') to undertake a Protected Plant survey at 397 Speewah Road, Speewah (2/RP718600), approximately 17km north-west of the Cairns CBD.

The Client is proposing to construct a new dam, approximately 2500m<sup>2</sup> in size, in an area currently mapped as remnant vegetation. The exact location and configuration of the dam yet to be determined.

The proposed dam location is located within a 'high risk' area for Protected Plants, and as such a flora survey is required to be conducted in accordance with the Flora Survey Guidelines – Protected Plants ('the Guidelines'), under Queensland's *Nature Conservation Act 1992* (NC Act).

The objective of the survey is to determine the presence of any flora listed under the *Nature Conservation (Plants) Regulation 2020* (NC (Plants) Regulation).

The purpose of this report is to provide the results of the flora survey to support any permits that may be required as a prerequisite for undertaking works.

## 2.0 METHODOLOGY

---

### 2.1 Desktop Review

Prior to the flora survey, online database searches and spatial dataset interrogations were conducted on relevant Commonwealth and State resources. A NC Act - Wildlife Online search was performed on the central location of the proposed footprint (-16.8888, 145.6173), with a 10km buffer (refer Table 1 below).

Search results were used to identify any threatened flora that may be present and to assist targeted on-ground searches for these species.

### 2.2 Field Survey

A field survey was undertaken by Northern Ecology botanist Gemma Horner on 13th December 2022 in overcast conditions. The survey area was based on the proposed dam location as provided by client (refer APPENDIX 1 – Map 1). Note the proposed dam area shown in Map 1 covers an area greater than the final dam footprint (estimated to be 2500m<sup>2</sup>) but comprises the area within which the final dam footprint will be located. The most suitable final dam footprint will be determined by the results of the ecological assessment at the site.

No access to adjoining properties was required and the entire Clearing Impact Area ('CIA') was able to be surveyed (refer APPENDIX 1 – Map 1).

Flora listed as threatened or near threatened under the NC (Plant) Regulation were targeted. The location of listed species encountered during the survey were marked using a Garmin 64sx GPS.

GPS waypoints were taken at the meander start points, end points and at 2-5minute interval points. A 3m-5m spatial error should be anticipated for points captured with a Garmin 64sx GPS.

## 2.2.1 Flora survey method (Protected Plants)

Under the Guidelines, a flora survey is not required where an activity comprises clearing protected plants that are not ‘in the wild’, where ‘in the wild’ is defined as growing “*in an independent state of natural liberty*”, i.e., not cultivated. In this instance prior to commencing the survey the proposed clearing footprint was confirmed to be ‘in the wild’.

The flora survey method at the site followed the Guidelines, given it is located within a ‘high risk area’ for Protected Plants mapped under the NC Act.

### 2.2.1.1. Clearing impact area

The clearing impact area (‘CIA’) covers a total 1.54 ha, with mapping (QLD Herbarium V12.02) showing only one Regional Ecosystem (RE) present, (refer Section 3.1.2 and APPENDIX 1 – Map 1).

APPENDIX 1 – Map 1 shows the results from the timed meander survey completed within the CIA.

### 2.2.1.2. Suitably qualified person

The survey was conducted by Gemma Horner, who is a self-assessed suitably qualified person. Ms. Horner has the required 100 points of qualification, knowledge and ability and field experience as set out in the Guidelines. Gemma Horner has almost 10 years of experience in tropical ecology, and:

- A BSc in Tropical Ecology and Conservation, and
- Over ten years of experience in undertaking surveys for threatened species in the Wet Tropics and Cape York bioregions.

A CV for Gemma Horner is provided in APPENDIX 5.

### 2.2.1.3. Timing of survey

The survey was conducted at the beginning of the wet season (December 2022), with the area having recent rainfall in the weeks prior to survey. Several species had fertile material available, and all were identifiable to species level.

There were no environmental constraints present which inhibited the detection and identification of species.

### 2.2.1.4. Survey method

A timed meander survey method was used across the CIA.

The total CIA covered approximately 1.54 ha. The Guidelines require that a minimum of two meanders be conducted within areas of habitat between 2ha - 10ha or when the entire area of habitat type is surveyed.

Only one discernible vegetation community was present in the CIA, mesophyll vine forest. In total, two extensive meanders were conducted across the CIA. This was deemed sufficient to locate and quantify any Protected Plants that may occur.

No plot surveys were conducted. Rather, where threatened/near threatened species were encountered, the entire habitat was traversed and all individuals within the CIA were recorded.

Results from the timed-meander surveys are provided in APPENDICES 1 and 3.

#### 2.2.1.5. Unidentified plant species

All plant taxon recorded within the CIA were identified to species level.

Nomenclature used within the report follows Brown (2021).

## 3.0 RESULTS

---

### 3.1 Desktop Study

#### 3.1.1 Threatened and/or near threatened species online search results

Desktop searches returned a list of 40 potential threatened or near threatened flora species that may occur in the CIA. Assessment of each species' likelihood to occur, conducted prior to field survey, identified 11 flora species considered possible or likely to occur within the vicinity of the survey.

This assessment allowed targeted searches to be undertaken during the field studies as necessary. A summary of the online search results is shown in Table 1 below.

**Table 1: Threatened and near threatened flora species (NC (Plants) Regulation) 10km buffer, online search results (highlight indicates species possible or likely to occur).**

Scientific Name	Common Name	NCA 1992 (Qld) Status	EPBC Act 1999 (Federal) Status	Growth Form	Distribution (Aust)	Habitat	Occurrence Likelihood
<i>Acalypha lyonsii</i>	-	V	-	Shrub	Known only from two locations in Cairns; Redlynch Valley and west of Edmonton, from sea level to 200m a.s.l.	Grows in lowland rainforest	Unlikely due to lack of suitable habitat
<i>Alloxylon flammeum</i>	Red silky oak	V	V	Tree	Endemic to the Wet Tropics. Found between Danbulla to Upper Barron River in the Atherton Tablelands, between 700-1100m asl.	Grows in well-developed upland rain forest, particularly on soils derived from basalt and on humus-rich gravelly loam from granite.	Unlikely due to lack of suitable habitat
<i>Alpinia hylandii</i>	Slender ginger	NT	-	Herb	Endemic to north-east QLD between Mt Windsor in the north to Topaz in the south.	Altitudinal range from 400-1000 m. Grows as an understory shrub in undisturbed upland and mountain rain forest. This species appears to be restricted to drier types of rain forests, often associated with Kauri Pine ( <i>Agathis robusta</i> ). Usually found on deep soils on granite.	Possible
<i>Archontophoenix myolensis</i>	Myola palm	E	E	Palm	Only found in the Myola area on the Atherton Tableland in north QLD along Warrill Creek and the Barron River.	Grows along creeks and drainage lines in rainforest between 350-400m asl, on volcanic soils.	Possible
<i>Bryobium dischorensis</i> (syn. <i>Eria dischorensis</i> )	-	V	-	Epiphytic or lithophytic orchid	Recorded only in the Whitfield range in the Cairns region	Grows as an epiphyte in rainforest.	Unlikely due to lack of suitable habitat
<i>Canarium acutifolium</i>	-	V	V	Tree	Restricted to the area between Mossman and Tully.	Grows along creek and riverbanks in mesophyll vine forest. Found between 0-100m asl.	Possible
<i>Carronia pedicellata</i>	-	E	E	Vine	Endemic to north-east QLD between Bellenden Ker and Mission Beach with disjunct populations in Noah and Cooper Creek catchments near Cape Tribulation.	Grows in complex mesophyll or notophyll vine forest on deep soils derived from granite, basalt, or metamorphic substrates. Found between 0-520m asl.	Possible
<i>Crepidomanes majoriae</i>	-	V	-	Filmy fern	Found between Lamb Range and Mount Spec	Occurs in mesic mid-to-upper montane tropical vine forest.	Unlikely due to lack of suitable habitat



Scientific Name	Common Name	NCA 1992 (Qld) Status	EPBC Act 1999 (Federal) Status	Growth Form	Distribution (Aust)	Habitat	Occurrence Likelihood
<i>Dansiea elliptica</i>	Dansiea	NT	-	Tree	Found in eastern QLD, in two disjunct populations around Rockhampton - Agnes Waters and the Atherton Tablelands.	Grows in drier rainforest or the margins of rainforest, on sandy alluviums or rhyolite-derived soils, occasionally along creek banks. Found between 100-500m asl.	Possible
<i>Dendrobium bigibbum</i> (syn. <i>Dendrobium lithocola</i> , <i>Vappodes lithocola</i> )	Cooktown orchid	V	E	Epiphytic or lithophytic orchid	Found in the coastal ranges of north QLD, from Cairns to the Daintree, between 300-800m asl.	Occurs on coastal ranges and mountains. Grows on rocks, boulders, cliff faces, ridges, and slopes. They are tolerant of full sun and can withstand long periods of hot dry conditions during which they defoliate.	Unlikely due to lack of suitable habitat
<i>Dendrobium callitrophilum</i> (syn. <i>Tropilis callitrophilis</i> )	Thin feather orchid	V	V	Epiphytic or lithophytic orchid	Occurs on the Evelyn, Mt Windsor, Atherton, and Carbine Tablelands.	An epiphytic orchid. Grows in or close to rainforest, favouring <i>Callitris macleayana</i> and shrubby myrtles including <i>Austromyrtus</i> spp. Found between 760-1500m a.s.l.	Unlikely due to lack of suitable habitat
<i>Dendrobium mirbelianum</i> (syn. <i>Durabaculum mirbelianum</i> )	Dark-stemmed antler orchid	E	E	Epiphytic orchid	Found in north-east QLD from Daintree to Innisfail with a disjunct population in the Torres Strait.	Grows in mangroves and coastal swamps in humid, high light situations growing on trees and less often on rocks.	Unlikely due to lack of suitable habitat
<i>Diplazium cordifolium</i>	-	V	V	Fern	Restricted to the area around Cairns, Herberton and Woornooran.	Found in rainforest, along creek banks. Found between 80-100m asl. Although, a population in Palmerston Valley grows at 475m asl.	Unlikely due to lack of suitable habitat
<i>Diplazium pallidum</i>	-	E	E	Fern	Found in the Wet Tropics and only known from five populations with a geographic range of less than 100km.	Grows in basalt soils in lowland rainforest, particularly near streams but is not found growing in creeks.	Unlikely due to lack of suitable habitat
<i>Leichhardtia araujacea</i> (syn. <i>Marsdenia araujacea</i> )	-	CR	EX	Vine	Endemic to far north QLD between Cooktown and Ingham.	Grows in lowland rainforest.	Unlikely due to lack of suitable habitat
<i>Linospadix palmerianus</i>	Walking stick palm	NT	-	Small palm	Known from Mt Bartle Frere and Bellenden Ker Range and the surrounding foothills and the Bloomfield - Mossman Gorge area.	Altitudinal range sea level to 1600 m. Grows as an understory plant in lowland, upland, and mountain rain forests.	Unlikely due to known species range

Scientific Name	Common Name	NCA 1992 (Qld) Status	EPBC Act 1999 (Federal) Status	Growth Form	Distribution (Aust)	Habitat	Occurrence Likelihood
<i>Macadamia ternifolia</i>	Bopple nut	V	V	Tree	Known from Kin Kin near Gympie to north of Brisbane. Several cultivated records are present in far north QLD, between Cairns and Cardwell.	Occurs in lowland complex notophyll vine forest in south-east QLD. Note, records from FNQ are all cultivated.	Unlikely due to lack of suitable habitat
<i>Myrmecodia beccarii</i>	Ant plant	V	V	Epiphyte	Found between Cape York and Townsville.	Grows in open coastal woodlands dominated by <i>Melaleuca</i> spp. or mangroves. Host trees vary and although the species is most common on <i>Melaleuca</i> spp. and mangrove hosts, the species has been recorded on <i>Corymbia</i> and <i>Allocasuarina</i> .	Unlikely due to lack of suitable habitat
<i>Phaius australis</i>	Lesser swamp-orchid	E	E	Ground orchid	Occurs in eastern QLD and northern NSW. There is a disjunction in QLD between Kirrima and Mackay. Historically the species was recorded near Port Macquarie.	Grows in coastal wet heath / sedgeland wetlands, swampy grassland, or swampy forest and often where <i>Melaleuca leucadendra</i> or <i>Eucalyptus robusta</i> are found.	Unlikely due to lack of suitable habitat
<i>Phaius pictus</i>	Forest swamp-orchid	V	V	Ground orchid	Occurs in north-east QLD in the Mcllwraith Range, Bloomfield River and Kirrima Range and is highly localised.	Grows in sheltered humid sites close to streams and seepage among forest litter on boulders. Found between 0-600m a.s.l.	Unlikely due to lack of suitable habitat
<i>Phalaenopsis rosenstromii</i> (syn. <i>Phalaenopsis amabilis</i> var. <i>rosenstromii</i> )	Native moth orchid	E	E	Epiphytic or lithophytic orchid	Occurs in north-east QLD sporadically from Iron Range in the north to Paluma Range in the south.	Grows in trees, rarely on rocks, in humid airy situations on sheltered slopes and in gullies, in deep gorges and close to streams in rainforest. Found between 200-500m a.s.l.	Possible
<i>Phlegmariurus creber</i> (syn. <i>P. filiformis</i> ; <i>Huperzia filiformis</i> )	Rat's tail tassel-fern	CE	E	Epiphytic fern	It occurs in canopy trees on the Mt Carbine-Mt Lewis Tableland northeast QLD and in the Mt Hypipamee Crater area on the Atherton Tableland and possibly on the coastal ranges between Hinchinbrook Island and Cairns and between Mossman and Cooktown.	Grows as an epiphyte on canopy trees in complex vine forest. Usually found >800m a.s.l.	Unlikely due to lack of suitable habitat

Scientific Name	Common Name	NCA 1992 (Qld) Status	EPBC Act 1999 (Federal) Status	Growth Form	Distribution (Aust)	Habitat	Occurrence Likelihood
<i>Phlegmariurus dalhousieanus</i> (syn. <i>Huperzia dalhousieana</i> )	Blue tassel-fern	CE	E	Epiphytic fern	Known from only two collections in QLD, both of which are in lowland swamp forest near Cairns, one of which has been lost to urban development. Found from the Daintree River and Cooktown, and in the Mcllwraith Range.	Grows as an epiphyte on trees in the upper canopy of swampy forests and on rocks in rainforests. It grows in habitat along freshwater creeks. It has been recorded growing in clumps of <i>Platyserium</i> (staghorn).	Possible
<i>Phlegmariurus squarrosus</i>	Rock tassel-fern	CE	CE	Epiphytic fern	Restricted to north-east QLD, where it has been recorded from Mcllwraith Range, Cape Tribulation region, the Mossman region, around Mt Bellenden Ker.	Occurs on rocks, particularly around waterfalls, or on tree trunks in lowland swamps and low to mid-altitude rainforest	Unlikely due to lack of suitable habitat
<i>Phlegmariurus tetrastichoides</i>	Square tassel-fern	V	V	Epiphytic fern	Occurs in north-eastern QLD from the Daintree, south to Hinchinbrook Island, and west of Mackay.	Grows as an epiphyte on rainforest trees, Found from sea level to 1100 m altitude.	Possible
<i>Polyphlebium endlicherianum</i> (syn. <i>Crepidomanes endlicherianum</i> )	Middle filmy fern	V	E	Filmy fern	In Australia the species occurs in north-east QLD and Norfolk Island. In QLD the species has been recorded on the Atherton Tablelands around Tinaroo and the Malaan.	Grows on damp rocks and tree trunks, often near streams or beside waterfalls. Sites are moist and shaded.	Possible
<i>Polyscias bellendenkerensis</i>	-	V	V	Shrub to small tree	Known from north-east QLD, occurring on Mt Bellenden Ker-Mt Bartle Frere and Mossman Bluff.	Grows in microphyll vine / fern thickets, notophyll vine forest and stunted shrublands on granite substrates. Found between 1100-1600m a.s.l.	Unlikely due to lack of suitable habitat
<i>Prostanthera clotteniana</i>	Mint bush	E	CE	Shrub	Confined to the Atherton-Ravenshoe area of north-east QLD. All records are from the upper Walsh and Herbert River catchments in locations straddling the interface between the Wet Tropics and Einasleigh Uplands bioregions.	Grows in rocky steep hills with shallow acidic soils in drier woodlands on rhyolite.	Unlikely due to lack of suitable habitat
<i>Randia audasii</i>	Daintree gardenia	NT	-	Small tree	Restricted to the area between Cooktown, Cairns, and Atherton	Grows as an understory tree in well-developed upland and lowland rainforest. Found between 0-600m a.s.l.	Possible
<i>Rhodamnia sessiliflora</i>	Iron malletwood	E	-	Small tree	Widespread in north-east QLD between Townsville and Cooktown, from 0-1000m a.s.l.	Grows in lowland and upland rain forest on a variety of sites, also found in drier rain forest often associated with Kauri Pine ( <i>Agathis robusta</i> ).	Likely

Scientific Name	Common Name	NCA 1992 (Qld) Status	EPBC Act 1999 (Federal) Status	Growth Form	Distribution (Aust)	Habitat	Occurrence Likelihood
<i>Rhodomyrtus canescens</i>	Crater ironwood	E	-	Shrub	Occurs in north-east QLD between Julatten and Ravenshoe, from 500-1200m a.s.l.	Grows in disturbed areas particularly road edges and snig tracks in upland and mountain rain forest, also found in wet sclerophyll forest.	Unlikely due to lack of suitable habitat
<i>Rhodomyrtus pervagata</i>	Rusty rhodomyrtus	E	-	Small tree	Occurs in north-east QLD between Townsville and Cooktown, from 300-1250m a.s.l.	Grows in well-developed upland and mountain rain forest. This species is favoured by disturbance and is a characteristic component of rain forest regrowth.	Unlikely due to lack of suitable habitat
<i>Rhomboda polygonoides</i> (syn. <i>Zeuxine polygonoides</i> )	Velvet jewel orchid	V	V	Ground orchid	Occurs between the Paluma Range and Daintree River.	A terrestrial orchid. Grows on rainforest floors or among rocks. Found between 450-600m a.s.l.	Unlikely due to lack of suitable habitat
<i>Senegalia albizioides</i>	Climbing wattle	NT	-	Vine	Grows in three distinct locations; in north-east QLD between Innisfail and Trinity Beach, in CYP and Western Australia.	Altitudinal range from near sea level to 550 m. Grows in monsoon forest, lowland, and upland rain forest.	Unlikely due to known species range
<i>Spathoglottis paulinae</i>	Small purple orchid	NT	-	Ground orchid	Found in north-eastern QLD from Cooktown to Ingham and in the NT in the Habgood River catchment.	Altitude 300-800 m. Locally common. Occurs in open forests in wet situations, growing among grass. It is frequently found in soaks and moist depressions, often in heavy clay soils. The plants can become deciduous in drought, but quickly regrow their leaves with the first rains.	Unlikely due to lack of suitable habitat
<i>Syzygium hodgkinsoniae</i>	Smooth-bark rose apple	V	V	Tree	Occurs in south-east QLD, northern NSW with disjunct populations recorded near Thornton Peak and Goldsborough, north QLD	Grows in riverine rainforest on rich alluvial or basaltic soils.	Unlikely due to known species range
<i>Tomophyllum walleri</i>	-	V	V	Fern	Endemic to north-east QLD, sporadically recorded at high elevations. Historically found at Mt Finnigan, Mt Lewis, Mt Spurgeon, Mt Fisher, Herberton Range and Tully Falls.	Grows as an epiphyte on tree trunks or canopy branches or as a lithophyte on granite or rhyolite in complex notophyll vine forest or in low windswept rainforest. Found above 1000m a.s.l.	Unlikely due to lack of suitable habitat
<i>Vincetoxicum rupicola</i> (syn. <i>Tylophora rupicola</i> )	-	E	E	Vine	Known from five locations in northeast QLD; two near Herberton, two south of Gordonvale, and one east of Mareeba.	Occurs in grassy open forests of <i>Allocasuarina torulosa</i> , <i>Corymbia rhodops</i> and <i>Eucalyptus granitica</i> on soils derived from granite. This species grows among rocks and grass above permanent water.	Unlikely due to lack of suitable habitat

Scientific Name	Common Name	NCA 1992 (Qld) Status	EPBC Act 1999 (Federal) Status	Growth Form	Distribution (Aust)	Habitat	Occurrence Likelihood
<i>Wetria australiensis</i>	-	V	-	Small tree	Recorded in only two locations in the Cairns Region, one in Kamerunga and the other in Redlynch Valley.	Altitudinal range not known but thought to be small, from near sea level to 100 m. Grows as an understory plant in seasonal lowland rain forest.	Unlikely due to lack of suitable habitat
<i>Whyanbeelia terrae-reginae</i>	-	NT	-	Tree	Restricted to the area between the Daintree and Johnstone Rivers. Altitudinal range from 100-400 m	Grows in well-developed upland and lowland rainforests.	Unlikely due to known species range

CE – Critically Endangered, E – Endangered, V – Vulnerable, NT – Near Threatened, EX – Extinct

### 3.1.2 Regional Ecosystems

One Regional Ecosystem (RE) (V12.02: QLD Herbarium) is mapped within the CIA (refer APPENDIX 1 – Map 1), shown below in Table 2.

Composition of the vegetation identified during the field survey is discussed further in Section 4.0.

**Table 2: Mapped RE's**

RE	VM Status	Biodiversity Status	Description
7.11.7	Least Concern	No Concern at Present	Mesophyll vine forest. Lowlands and foothills on metamorphics. Very wet and wet rainfall zones. Not a Wetland (BVG1M: 2a)

## 4.0 FIELD RESULTS

Only one vegetation community was present within the CIA, mesophyll vine forest, corresponding to RE7.11.7 (refer Table 2). Although the interior, and most of the CIA comprised remnant vegetation (refer Plate 1), along the forest edges and along an old track network, the vegetation comprised older regrowth vegetation (refer Plate 2). This was evident by the absence of large stems of secondary forest species and the dominance of pioneer species (*Acacia celsa*, *A. cincinnata*, *Corymbia torelliana* and *Alstonia muelleriana*), which typically occur at higher densities in previously disturbed areas. These regrowth areas are estimated to be approximately 25 years old, based on the size and structure of vegetation and the historical imagery available (Department of Resources, 2022)

The mesophyll vine forest community is dominated by a diverse mixture of canopy species, the most conspicuous being hickory ash (*Flindersia iffllana*), cadaghi (*Corymbia torelliana*), QLD kauri (*Agathis robusta*), Kuranda satinash (*Syzygium kuranda*), river cherry (*Syzygium tierneyanum*), black wattle (*Acacia celsa*), Daintree wattle (*Acacia cincinnata*) and brown tulip oak (*Argyrodendron polyandrum*) to 25m. The complex sub-canopy is dominated by white croton (*Croton triacros*), along with northern malletwood (*Rhodamnia spongiosa*), orange jacket (*Xylopia maccreae*), native mangosteen (*Garcinia warrenii*) brown silky oak (*Grevillea baileyana*), prickly alyxia (*Alyxia oblongata*) and lawyer cane (*Calamus* spp.). Scattered through the ground storey is small-fruited saw sedge (*Gahnia sieberiana*), morse fern (*Taenitis pinnata*) and rainforest seedlings.

Vines and lianas are common throughout the community and include, blood vine (*Austrosteensia blackii*), burny vine (*Trophis scandens*), climbing pandan (*Freycinetia scandens*), conch vine (*Connarus conchocarpus* subsp. *conchocarpus*), and white supplejack (*Ripogonum album*). Epiphytic ferns, including long-leaf felt-fern (*Pyrrhosia longifolia*), birds nest fern (*Drynaria rigidula*) were scattered throughout the site.

Weeds were sparse and restricted to the forest edge. One weed species listed under Commonwealth, State or Local weed schedules was recorded, scattered along the forest boundary, lantana (*Lantana camara*\*).

A complete flora species list, compiled during the survey is provided in APPENDIX 2.



**Plate 1: Remnant mesophyll vine forest (RE7.11.7a) within CIA**



**Plate 2: Regrowth mesophyll vine forest (RE7.11.7) in CIA**

## 4.1 Threatened Flora

Prior to the field survey, desktop assessment identified 11 listed flora species potentially occurring within the vicinity (refer Table 1).

During the survey, only one species listed under the NC Act was recorded within the CIA, iron malletwood (*Rhodamnia sessiliflora*) (refer Plate 3).

Iron malletwood is listed as Endangered under the NC (Plants) Regulation. The species was upgraded from Least Concern in April 2022, due to a restricted distribution (specifically, an area of occupancy <500 km<sup>2</sup>) and continuing decline associated with the introduced pathogen Myrtle rust (*Austropuccinia psidii*). It is unclear how significant this the threat of myrtle rust is at this site as no myrtle rust spores were observed during the survey.

The species grows in the understorey of lowland and upland rainforest between 0-1000m above sea level. *R. sessiliflora* is a small tree or shrub, growing to 3m with white flowers and globular blue/black berries. Records available from Atlas of Living Australia (ALA) show the species occurs between Townsville and Bloomfield.

Within the CIA, six individuals were recorded east of the proposed dam footprint, within the 100m buffer. APPENDICES 1 and 3 show the location of the species in the CIA (waypoints: 497,498,515,625,630 and 632).



**Plate 3: Iron malletwood (*Rhodamnia sessiliflora*) - Endangered (NC (Plants) Regulation**



## 5.0 SUMMARY

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This report details the outcomes of a recent flora survey for the proposed clearing associated with the construction of a new dam at 397 Speewah Road, Speewah.

A survey was conducted across the proposed dam footprint and within the CIA as per the Guidelines. The area surveyed comprises both remnant and regrowth vegetation of high quality comprising an upland rainforest community, containing many local, endemic species.

Prior to the survey, desktop assessment identified 11 listed flora species that may be present within the vicinity of the dam. Survey identified one listed species in six locations within the CIA. All six individuals are located outside of the proposed dam footprint but within the 100m buffer. As such, all works, including ancillary works (i.e. access tracks, laydown areas) should be contained within the proposed dam footprint or adjacent non-remnant areas to avoid direct impacts on the species.

As Protected Plants have been identified within the CIA, a Protected Plant Clearing Permit will be required under the NC Act prior to any clearing. This report, along with an Impact Management Plan will need to be submitted with the permit application for assessment by the Department of Environment and Science (DES).

## 6.0 REFERENCES

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Brown, G. (2021). *Census of the Queensland Flora 2021*. Queensland Department of Environment and Science, Queensland Government.

Department of Resources (2022) QImagery, Image: Cairns, August 1998, Film QAP5681, Frame 164. State of Queensland, Department of Resources. Accessed 17<sup>th</sup> December 2022, <https://qimagery.information.qld.gov.au/?sid=air-photo-where&sval=NAME%3D%27QAP5681164%27>

## APPENDIX 1: MAPS

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Date: 18/12/2022	Title: Protected Plant Survey, Map 1
Client:	Client Contact: Jan Eldred
Copyright: Northern Ecology 2022	Disclaimer: This document may only be used by Northern Ecology clients for the purpose in which it was prepared. All efforts have been made by Northern Ecology to ensure the information provided is accurate at the time of the publication but does not guarantee or warrant the accuracy or currency of spatial information contained within this map from online data sources.
Project Manager: G. Horner	GIS/Map: J. Middleton

## APPENDIX 2: FLORA SPECIES LIST

Family	Scientific name	Common name	Life form
Acanthaceae	<i>Pseuderanthemum variabile</i>	Pastel flower	Herb
Anacardiaceae	<i>Euroschinus falcata</i> var. <i>falcata</i>	Ribbonwood	Tree
Annonaceae	<i>Melodorum uhrii</i>	-	Vine
Annonaceae	<i>Xylopia maccraeae</i>	Orange jacket	Tree
Apocynaceae	<i>Alstonia muelleriana</i>	Milkwood	Tree
Apocynaceae	<i>Alyxia oblongata</i>	Prickly alyxia	Shrub
Araliaceae	<i>Polyscias australiana</i>	Ivory basswood	Tree
Araliaceae	<i>Polyscias elegans</i>	Celerywood	Tree
Araucariaceae	<i>Agathis robusta</i>	QLD kauri pine	Tree
Arecaceae	<i>Calamus australis</i>	Wait-a-while	Vine
Arecaceae	<i>Calamus caryotoides</i>	Fish-tail lawyer cane	Vine
Arecaceae	<i>Calamus moti</i>	Yellow lawyer cane	Vine
Arecaceae	<i>Calamus radicalis</i>	Viscious hairy mary	Vine
Arecaceae	<i>Linospadix minor</i>	Minor walking stick palm	Palm
Aristolochiaceae	<i>Pararistolochia deltantha</i>	Native dutchman's pipe	Vine
Byttneriaceae	<i>Commersonia bartramia</i>	Brown kurrajong	Tree
Cannabaceae	<i>Trema cannabina</i>	Poison peach	Tree
Celastraceae	<i>Salacia disepala</i>	Lolly vine	Vine
Clusiaceae	<i>Garcinia warrenii</i>	Native mangosteen	Tree

Family	Scientific name	Common name	Life form
Combretaceae	<i>Terminalia sericocarpa</i> (syn. <i>T. microcarpa</i> )	Damson plum	Tree
Connaraceae	<i>Connarus conchocarpus</i> subsp. <i>conchocarpus</i>	Conch vine	Vine
Cunoniaceae	<i>Davidsonia pruriens</i>	Davidson plum	Tree
Cunoniaceae	<i>Pseudoweinmannia apetala</i>	Scrub rosewood	Tree
Cyperaceae	<i>Gahnia sieberiana</i>	Small-fruited saw sedge	Sedge
Cyperaceae	<i>Scleria polycarpa</i>	-	Sedge
Dennstaedtiaceae	<i>Pteridium esculentum</i>	Common bracken	Fern
Dilleniaceae	<i>Tetracera nordtiana</i>	Small-leaf fire vine	Vine
Ebenaceae	<i>Diospyros laurina</i>	Brown ebony	Small tree
Elaeocarpaceae	<i>Elaeocarpus bancroftii</i>	Kuranda quandong	Tree
Elaeocarpaceae	<i>Sloanea australis</i> subsp. <i>parviflora</i>	Blush carabeen	Tree
Euphorbiaceae	<i>Baloghia inophylla</i>	Ivory birch	Tree
Euphorbiaceae	<i>Croton triacros</i>	White croton	Tree
Euphorbiaceae	<i>Homalanthus novoguineensis</i>	Bleeding heart	Tree
Euphorbiaceae	<i>Macaranga subdentata</i>	Needle bark	Tree
Euphorbiaceae	<i>Mallotus polyadenos</i>	Kamala	Tree
Flagellariaceae	<i>Flagellaria indica</i>	Supplejack	Vine
Hemerocallidaceae	<i>Dianella caerulea</i>	Flax lily	Herb
Lamiaceae	<i>Clerodendrum tracyanum</i>	Tracey's clerodendron	Small tree
Lamiaceae	<i>Mesosphaerum suaveolens</i> *	Horehound	Herb
Lauraceae	<i>Beilschmiedia bancroftii</i>	Yellow walnut	Tree
Lauraceae	<i>Beilschmiedia obtusifolia</i>	Blush walnut	Tree

Family	Scientific name	Common name	Life form
Lauraceae	<i>Cryptocarya mackinnoniana</i>	Rusty laurel	Tree
Lauraceae	<i>Cryptocarya murrayi</i>	Murray's laurel	Tree
Lauraceae	<i>Cryptocarya vulgaris</i>	Northern laurel	Tree
Lauraceae	<i>Endiandra hypotephra</i>	Rose walnut	Tree
Lauraceae	<i>Litsea leefeana</i>	Brown bollygum	Tree
Laxmanniaceae	<i>Cordyline cannifolia</i>	Palm lily	Herb
Laxmanniaceae	<i>Lomandra hystrix</i>	Mat rush	Herb
Leguminosae (Caesalpinioideae, mimosoid clade)	<i>Acacia celsa</i>	Black wattle	Tree
Leguminosae (Caesalpinioideae, mimosoid clade)	<i>Acacia cincinnata</i>	Daintree wattle	Tree
Leguminosae (Caesalpinioideae, mimosoid clade)	<i>Falcataria toona</i>	Mackay cedar	Tree
Leguminosae (Papilionoideae)	<i>Austrosteenisia blackii</i> var. <i>blackii</i>	Blood vine	Vine
Leguminosae (Papilionoideae)	<i>Derris</i> sp. (Claudie River L.J.Webb+ 8348)	Northern derris	Vine
Lygodiaceae	<i>Lygodium reticulatum</i>	Coarse climbing fern	Vine
Melastomataceae	<i>Melastoma malabathricum</i> subsp. <i>malabathricum</i>	Blue tongue	Shrub
Meliaceae	<i>Dysoxylum oppositifolium</i>	Pink mahogany	Tree
Menispermaceae	<i>Carronia protensa</i>	-	Vine
Menispermaceae	<i>Hypserpa decumbens</i>	Hairy hypserpa	Vine
Menispermaceae	<i>Hypserpa laurina</i>	Laurel-leaf hypserpa	Vine
Monimiaceae	<i>Wilkiea pubescens</i>	Tetra beech	Small tree
Moraceae	<i>Ficus congesta</i>	Red leaf fig	Tree
Moraceae	<i>Ficus fraseri</i>	White sandpaper fig	Tree
Moraceae	<i>Ficus opposita</i>	Sandpaper fig	Tree

Family	Scientific name	Common name	Life form
Moraceae	<i>Ficus watkinsiana</i>	Watkin's fig	Tree
Moraceae	<i>Trophis scandens</i>	Burny vine	Vine
Myrtaceae	<i>Acmena resa</i>	Water gum	Tree
Myrtaceae	<i>Corymbia torelliana</i>	Cadaghi	Tree
Myrtaceae	<i>Gossia myrsinocarpa</i>	Malanda ironwood	Small tree
Myrtaceae	<i>Pilidiostigmaropicum</i>	Apricot myrtle	Small tree
Myrtaceae	<i>Rhodamnia sessiliflora</i>	Iron malletwood	Small tree
Myrtaceae	<i>Rhodamnia spongiosa</i>	Northern malletwood	Small tree
Myrtaceae	<i>Syzygium canicortex</i>	Yellow satinash	Tree
Myrtaceae	<i>Syzygium cormiflorum</i>	Bumpy satinash	Tree
Myrtaceae	<i>Syzygium kuranda</i>	Kuranda satinash	Tree
Myrtaceae	<i>Syzygium tierneyanum</i>	River cherry	Tree
Myrtaceae	<i>Syzygium wilsonii</i>	Powderpuff lilly pilly	Small tree
Myrtaceae	<i>Xanthostemon whitei</i>	Red penda	Tree
Oleaceae	<i>Jasminum didymum</i> subsp. <i>didymum</i>	Native jasmine	Vine
Orchidaceae	<i>Cymbidium madidum</i>	Giant boat-lip orchid	Epiphytic orchid
Orchidaceae	<i>Dienia montana</i>	Common snout orchid	Ground orchid
Pandanaceae	<i>Benstonea monticola</i>	Scrub breadfruit	Pandan
Pandanaceae	<i>Freycinetia scandens</i>	Climbing pandan	Pandan
Phyllanthaceae	<i>Breynia cernua</i>	Coffee bush	Small tree
Phyllanthaceae	<i>Cleistanthus semiopacus</i>	Rusty cleistanthus	Small tree
Phyllanthaceae	<i>Glochidion sumatranum</i>	Sumatran buttonwood	Tree

Family	Scientific name	Common name	Life form
Pittosporaceae	<i>Pittosporum wingii</i>	Mountain pittosporum	Tree
Poaceae	<i>Imperata cylindrica</i>	Blady grass	Grass
Poaceae	<i>Megathyrsus maximus</i> var. <i>maximus</i> *	Guinea grass	Grass
Podocarpaceae	<i>Podocarpus grayae</i>	Brown pine	Tree
Polypodiaceae	<i>Drynaria rigidula</i>	Basket fern	Fern
Polypodiaceae	<i>Pyrrhosia longifolia</i>	Long-leaf felt fern	Fern
Primulaceae	<i>Myrsine subsessilis</i> subsp. <i>cryptostemon</i>	Red muttonwood	Shrub
Proteaceae	<i>Darlingia darlingiana</i>	Brown silky oak	Tree
Proteaceae	<i>Grevillea baileyana</i>	Brown silky oak	Tree
Proteaceae	<i>Grevillea hilliana</i>	White silky oak	Tree
Proteaceae	<i>Helicia australasica</i>	Austral oak	Tree
Proteaceae	<i>Stenocarpus sinuatus</i>	Wheel-of-fire	Tree
Pteridaceae	<i>Adiantum hispidulum</i>	Rough maidenhair fern	Fern
Pteridaceae	<i>Taenitis pinnata</i>	Morse fern	Fern
Rhamnaceae	<i>Alphitonia excelsa</i>	Red ash	Tree
Rhamnaceae	<i>Alphitonia whitei</i>	Northern red ash	Tree
Rhamnaceae	<i>Emmenosperma alphitonioides</i>	Bonewood	Tree
Rhamnaceae	<i>Ventilago ecorollata</i>	-	Vine
Ripogonaceae	<i>Ripogonum album</i>	White supplejack	Vine
Rosaceae	<i>Rubus alceifolius</i> *	Giant bramble	Vine
Rosaceae	<i>Rubus moluccanus</i>	Wild raspberry	Vine
Rubiaceae	<i>Aidia racemosa</i>	Archer cherry	Small tree



Family	Scientific name	Common name	Life form
Rubiaceae	<i>Atractocarpus fitzalanii</i> subsp. <i>fitzalanii</i>	Brown gardenia	Small tree
Rubiaceae	<i>Atractocarpus hirtus</i>	Hairy gardenia	Shrub
Rubiaceae	<i>Gardenia ovularis</i>	Native gardenia	Small tree
Rubiaceae	<i>Gynochthodes jasminoides</i>	-	Vine
Rubiaceae	<i>Hedyotis auricularia</i> var. <i>melanesica</i>	-	Herb
Rubiaceae	<i>Ophiorrhiza australiana</i>	Australian snakeroot	Shrub
Rubiaceae	<i>Psydrax odorata</i> f. <i>foveolata</i>	Shiny leaf canthium	Shrub
Rubiaceae	<i>Tarenna monticola</i>	Tree ixora	Small tree
Rutaceae	<i>Acronychia acronychioides</i>	White aspen	Tree
Rutaceae	<i>Acronychia laevis</i>	Hard aspen	Tree
Rutaceae	<i>Flindersia brayleana</i>	QLD maple	Tree
Rutaceae	<i>Flindersia ifflana</i>	Hickory ash	Tree
Rutaceae	<i>Glycosmis trifoliata</i>	Pink fruited lime berry	Small tree
Salicaceae	<i>Scolopia braunii</i>	Flintwood	Tree
Sapindaceae	<i>Cupaniopsis foveolata</i>	Narrow-leaf tuckeroo	Tree
Sapindaceae	<i>Guioa acutifolia</i>	Glossy tamarind	Tree
Sapindaceae	<i>Harpullia rhyticarpa</i>	Slender harpullia	Small tree
Sapindaceae	<i>Jagera pseudorhus</i> var. <i>pseudorhus</i>	Foam bark	Tree
Sapindaceae	<i>Mischocarpus exangulatus</i>	Red bell mischocarp	Tree
Sapindaceae	<i>Mischocarpus stipitatus</i>	Purple aril mischocarp	Tree
Sapotaceae	<i>Planchonella myrsinodendron</i>	Yellow boxwood	Tree
Sapotaceae	<i>Pleioluma xerocarpa</i>	Northern coonoo	Tree

Family	Scientific name	Common name	Life form
Smilacaceae	<i>Smilax aculeatissima</i>	-	Vine
Solanaceae	<i>Solanum mauritianum</i> *	Tobacco weed	Small tree
Sterculiaceae	<i>Argyrodendron polyandrum</i>	Brown tulip oak	Tree
Symplocaceae	<i>Symplocos puberula</i>	White hazelwood	Tree
Urticaceae	<i>Dendrocnide moroides</i>	Stinging tree	Small tree
Verbenaceae	<i>Lantana camara</i> *	Lantana	Shrub
Vitaceae	<i>Cissus hastata</i>	-	Vine
Vitaceae	<i>Cissus penninervis</i>	-	Vine
Vitaceae	<i>Tetrastigma nitens</i>	Three-leaf water vine	Vine

(\*) indicates exotic species

## APPENDIX 3: WAYPOINT TABLE

### Threatened species

Waypoint	Description	Latitude	Longitude	Within CIA
484	<i>Rhodamnia sessiliflora</i>	-16.888951	145.617891	No
494	<i>Rhodamnia sessiliflora</i>	-16.889331	145.617848	No
497	<i>Rhodamnia sessiliflora</i>	-16.889428	145.617498	Yes
498	<i>Rhodamnia sessiliflora</i>	-16.889442	145.617494	Yes
515	<i>Rhodamnia sessiliflora</i>	-16.889873	145.61758	Yes
540	<i>Rhodamnia sessiliflora</i>	-16.890755	145.617574	No
625	<i>Rhodamnia sessiliflora</i>	-16.89002	145.617005	Yes
630	<i>Rhodamnia sessiliflora</i>	-16.890455	145.616958	Yes
632	<i>Rhodamnia sessiliflora</i>	-16.890505	145.617015	Yes

### Timed-meander survey

Waypoint	Description	Latitude	Longitude	Time
464	Meander 1 START	-16.889821	145.615978	8:11am
465	Meander 1	-16.889761	145.616238	8:16am
466	Meander 1	-16.889773	145.616295	8:21am
467	Meander 1	-16.889763	145.616318	8:26am
468	Meander 1	-16.889772	145.61651	8:33am
469	Meander 1	-16.889783	145.616546	8:38am

Waypoint	Description	Latitude	Longitude	Time
470	Meander 1	-16.889659	145.616838	8:44am
471	Meander 1	-16.889596	145.616875	8:50am
472	Meander 1	-16.889598	145.617025	8:53am
473	Meander 1	-16.889721	145.617175	8:59am
474	Meander 1	-16.889731	145.617306	9:05am
475	Meander 1	-16.889398	145.617334	9:08am
476	Meander 1	-16.889301	145.617347	9:14am
477	Meander 1	-16.889185	145.617319	9:16am
478	Meander 1	-16.889042	145.617464	9:19am
479	Meander 1	-16.889084	145.617452	9:22am
480	Meander 1	-16.889046	145.617472	9:31am
481	Meander 1	-16.889009	145.617483	9:36am
482	Meander 1	-16.888978	145.617412	9:46am
483	Meander 1	-16.88901	145.61766	9:50am
485	Meander 1	-16.888966	145.617994	9:53am
486	Meander 1	-16.888929	145.618004	9:55am
487	Meander 1	-16.889093	145.617972	9:57am
488	Meander 1	-16.889137	145.618009	9:59am
489	Meander 1	-16.889104	145.618045	10:04am
490	Meander 1	-16.889169	145.617861	10:10am
491	Meander 1	-16.889248	145.617878	10:13am
492	Meander 1	-16.889257	145.617817	10:17am

Waypoint	Description	Latitude	Longitude	Time
493	Meander 1	-16.889323	145.617896	10:21am
495	Meander 1	-16.889361	145.617849	10:14am
496	Meander 1	-16.889375	145.617736	10:16am
499	Meander 1	-16.889584	145.617514	10:19am
500	Meander 1	-16.88956	145.617463	10:22am
501	Meander 1	-16.889306	145.617404	10:23am
503	Meander 1	-16.889493	145.617459	10:28am
504	Meander 1	-16.889543	145.617438	10:27am
505	Meander 1	-16.889587	145.617378	10:34am
506	Meander 1	-16.889646	145.617413	10:40am
507	Meander 1	-16.889683	145.617553	10:42am
508	Meander 1	-16.889726	145.617588	10:47am
510	Meander 1	-16.889812	145.617634	10:50am
511	Meander 1	-16.889665	145.617635	10:53am
513	Meander 1	-16.889931	145.617682	10:57am
514	Meander 1	-16.889907	145.61757	11:01am
516	Meander 1	-16.889872	145.617519	11:04am
517	Meander 1	-16.889915	145.617483	11:08am
519	Meander 1	-16.88997	145.61761	11:10am
523	Meander 1	-16.890194	145.617312	11:13am
526	Meander 1	-16.890327	145.617192	11:16am
528	Meander 1	-16.890445	145.617289	11:19am

Waypoint	Description	Latitude	Longitude	Time
529	Meander 1	-16.890461	145.617175	11:22am
531	Meander 1	-16.890528	145.617325	11:26am
532	Meander 1	-16.890515	145.617343	11:34am
533	Meander 1	-16.890437	145.617407	11:37am
538	Meander 1	-16.890723	145.617339	11:42am
539	Meander 1	-16.890688	145.617596	11:49am
541	Meander 1	-16.890791	145.61728	11:52am
542	Meander 1	-16.890751	145.617312	11:58am
543	Meander 1	-16.890664	145.617254	12:09pm
544	Meander 1	-16.890689	145.617156	12:14pm
545	Meander 1	-16.890709	145.617147	12:20pm
547	Meander 1 END	-16.889989	145.616093	12:28pm
548	Meander 2 START	-16.889884	145.616378	12:42pm
550	Meander 2	-16.889885	145.616599	12:48pm
551	Meander 2	-16.889793	145.616844	12:52pm
552	Meander 2	-16.889781	145.616853	12:58pm
553	Meander 2	-16.889704	145.616862	1:05pm
554	Meander 2	-16.88966	145.61697	1:08pm
556	Meander 2	-16.889844	145.617162	1:11pm
557	Meander 2	-16.889846	145.617233	1:15pm
563	Meander 2	-16.890057	145.617013	1:19pm
582	Meander 2	-16.889976	145.616491	1:23pm

Waypoint	Description	Latitude	Longitude	Time
594	Meander 2	-16.889943	145.616234	1:27pm
606	Meander 2	-16.889809	145.616523	1:30pm
607	Meander 2	-16.889735	145.616621	1:33pm
614	Meander 2	-16.889721	145.616877	1:39pm
621	Meander 2	-16.889787	145.6169	1:42pm
622	Meander 2	-16.889789	145.616816	1:45pm
623	Meander 2	-16.889787	145.616816	1:48pm
624	Meander 2	-16.889833	145.617012	1:50pm
626	Meander 2	-16.890224	145.616971	1:53pm
631	Meander 2	-16.890499	145.616963	1:57pm
633	Meander 2	-16.890507	145.617038	2:01pm
635	Meander 2	-16.890731	145.616986	2:06pm
636	Meander 2	-16.890578	145.616925	2:10pm
637	Meander 2	-16.890439	145.616862	2:12pm
638	Meander 2	-16.890355	145.616882	2:14pm
640	Meander 2	-16.890107	145.616888	2:17pm
641	Meander 2	-16.889995	145.617014	2:21pm
642	Meander 2	-16.889958	145.617054	2:25pm
643	Meander 2	-16.889971	145.617113	2:28pm
644	Meander 2	-16.890089	145.617165	2:35pm
645	Meander 2	-16.890041	145.617281	2:39pm
646	Meander 2	-16.890043	145.617364	2:44pm

Waypoint	Description	Latitude	Longitude	Time
647	Meander 2	-16.889951	145.6174	2:51pm
648	Meander 2	-16.889839	145.617455	2:59pm
649	Meander 2	-16.889753	145.617382	3:03pm
650	Meander 2 END	-16.889759	145.616518	3:12pm



## APPENDIX 4: HIGH RISK FLORA SURVEY TRIGGER MAP

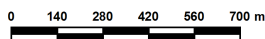
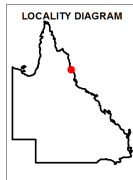
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### Protected Plants Flora Survey Trigger Map

#### Legend

- Selected Lot and Plan
- High risk area
- Other land parcel boundaries
- Freeways / motorways / highways
- Secondary roads / streets



This product is projected into:  
GDA 1994 Queensland Albers

This map shows areas where particular provisions of the Nature Conservation Act 1992 apply to the clearing of protected plants.

Land parcel boundaries are provided as locational aid only.

This map is produced at a scale relevant to the size of the area selected and should be printed as A4 size in portrait orientation.

For further information or assistance with interpretation of this product, please contact the Department of Environment and Science at [palm@des.qld.gov.au](mailto:palm@des.qld.gov.au)

**Disclaimer:**  
While every care is taken to ensure the accuracy of the data used to generate this product, the Queensland Government makes no representations or warranties about its accuracy, reliability, completeness or suitability for any particular purpose and disclaim all responsibility and all liability (including without limitation, liability in negligence) for all expenses, losses, damages (including indirect or consequential damages) and costs which might be incurred as a consequence of reliance on the data, or as a result of the data being inaccurate or incomplete in any way and for any reason.

# Protected plants flora survey trigger map

The protected plants flora survey trigger map identifies 'high risk areas' where threatened and near threatened plants are known to exist or are likely to exist. Under the *Nature Conservation Act 1992* (the Act) it is an offence to clear protected plants that are 'in the wild' unless you are authorised or the clearing is exempt, for more information see [section 89](#) of the Act.

Please see the Department of Environment and Science webpage on the [clearing of protected plants](#) for information on what exemptions may apply in your circumstances, whether you may need to undertake a flora survey, and whether you may need a protected plants clearing permit.

## Updates to the data informing the flora survey trigger map

The flora survey trigger map will be reviewed, and updated if necessary, at least every 12 months to ensure the map reflects the most up-to-date and accurate data available.

## Species information

Please note that flora survey trigger maps do not identify species associated with 'high risk areas'. While some species information may be publicly available, for example via the [Queensland Spatial Catalogue](#), the Department of Environment and Science does not provide species information on request. Regardless of whether species information is available for a particular high risk area, clearing plants in a high risk area may require a flora survey and/or clearing permit. Please see the Department of Environment and Science webpage on the [clearing of protected plants](#) for more information.

## APPENDIX 5: CV (GEMMA HORNER)

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# Curriculum vitae - Gemma Horner

51 Gadgarra Road, Lake Barrine Queensland 4884 | Mobile: 0401 179 575 | Email: [gemma.horner@outlook.com](mailto:gemma.horner@outlook.com)

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## Education / Qualifications

Bachelor of Science (Ecology and Conservation) James Cook University, Cairns	2011 - 2014
Certificate III (Conservation and Land Management) TAFE NSW, North Ryde	2010
Suitably Qualified Person under the <i>Nature Conservation Act 1992</i>	2016 - Current

## Relevant Certifications

Senior First Aid and CPR  
Certificate Working Safely at Heights – Statement of Attainment  
Reptile and Venomous Snake Handling Certificate  
CASA RPA Operator Accreditation  
Ergon – Working near powerlines  
Construction White Card

## Memberships / Affiliations

Environment Institute of Australia and New Zealand (EIANZ)  
Trees of the Evelyn and Atherton Tablelands (TREAT)  
Birdlife North Queensland  
Tree Kangaroo and Mammal Group  
North Queensland Natural History Group

## Employment

<b>Principal / Environmental Scientist / Botanist</b> Self-employed, Lake Barrine, Queensland	August 2022 - Current
<b>Senior Environmental Scientist / Botanist</b> Biotropica Australia Pty Ltd, Tarzali, Queensland	2021-2022
<b>Environmental Scientist / Botanist</b> Biotropica Australia Pty Ltd, Tarzali, Queensland	2014-2021
<b>Technical Assistant – Botany</b> Biotropica Australia Pty Ltd, Tarzali, Queensland	2012-2014
<b>Land Manager – Regeneration</b> Bush-it Pty Ltd, Annandale, New South Wales	2010-2011

## Personal Profile

With over 10 years of experience working throughout Far North Queensland, I have been able to develop an excellent knowledge of flora species and communities in the region. Prior to this I gained experience working in landscape restoration in New South Wales, where I obtained a practical knowledge of a variety of on-ground works.

For the past 10 years I was employed at a local consultancy, Biotropica Australia. My role there primarily focussed on tropical botany and ecology and involved undertaking field surveys across Far North Queensland. I have extensive knowledge in the flora of the Wet Tropics and Cape York Peninsula regions and have also worked in Papua New Guinea from the lowland savannah near Port Moresby, to the montane rainforests of the Southern Highlands. I am considered a Suitably Qualified Person under Queensland's *Nature Conservation Act 1992*.

My experience includes, but is not limited to, threatened species management and planning, flora and fauna assessment, environmental impact assessment, weed assessment and management, rehabilitation planning, ecological monitoring, BioCondition assessment and more. I also have an excellent understanding of statutory and policy frameworks at the Local, State and Commonwealth level.

With previous experience in bushland management and natural area restoration, I have a keen interest in conservation as well as all aspects of plant ecology.

I am an avid student of tropical botany and continuously aim to expand my knowledge of local tropical flora. I am actively involved in local botanical groups and continue to increase my botanical knowledge through travelling and exploring the natural environments of Far North Queensland.

## Skills Summary

- Over 10 years of experience in environmental consulting and botanical / ecological surveys in Far North QLD and Papua New Guinea.
- Comprehensive understanding of environmental legislation and planning at all levels of government.
- Data collection, storage and organisation.
- Excellent computer / IT skills and understanding of GIS.
- Experience in the preparation of Environmental Management Plans, Weed Management Plans, Impact Management Plans, Restoration / Rehabilitation Plans and more.
- Ability to undertake and prepare Environmental Impact Assessments.
- Threatened species mitigation planning, translocation, monitoring and management.
- Experience working in remote areas and/or difficult conditions for prolonged periods.

## Curriculum vitae - Gemma Horner

51 Gadgarra Road, Lake Barrine Queensland 4884 | Mobile: 0401 179 575 | Email: [gemma.horner@outlook.com](mailto:gemma.horner@outlook.com)

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- Excellent written and verbal communication / presentation skills.
- Project management – ability to lead and work within a team as well as work alone.

### Professional Experience (Key Projects)

- Protected Plant Survey – Lockhart River (Energy QLD/Biotropica Pty Ltd) (November 2022)
- Ecological Assessment and Protected Plant Survey – Airlie Beach (RPS Group) (October 2022)
- Ecological Assessment and Protected Plant Survey – East Trinity MYAC Ecotourism Project (MYAC / BMT / Biotropica Pty Ltd) (October 2022)
- Ecological Assessment – Cairns South Water Security Project (AECOM / Biotropica Pty Ltd) (October 2022)
- Ecological Assessment, Weed Survey, Protected Plant Survey – Kidston Connection Project Kidston to Mount Fox, North QLD (2022)
- Ecological Assessment, Ecotourism Project, Hook Island (BMT) (July 2022)
- Protected Plant Flora Survey, Lockhart River, Portlands Road Upgrade (June 2022)
- Mareeba Bypass Ecological Assessment (Department of Transport and Main Roads) – Mareeba (May 2022)
- Development of the engineered waste rock dump rehabilitation trials – OK Tedi Mine, Western Province Papua New Guinea (OK Tedi Mining Ltd) (July 2022)
- Ecological Assessment, Weed Survey, Protected Plant Survey – Kidston Connection Project (2022), Kidston to Mount Fox, North QLD
- Protected Plant Flora Survey, Lockhart River, Portlands Road Upgrade (June 2022)
- Mareeba Bypass Ecological Assessment (flora), Mareeba (May 2022)
- Developed and co-ordinated threatened species mitigation programs including translocation and ongoing monitoring and permit compliance, for *Cajanus mareebensis* and *Myrmecodia beccarii* (2015-2022)
- Environmental Impact Assessment and Protected Plant Survey – Cooktown Airport (July 2021)
- Biodiversity Assessment (including threatened flora and fauna assessments, weed survey, and constraints assessments) for the Kuranda Scenic Railway (July 2021)
- Flora component of EIS for proposed Galalar Sand Mine, Cape Bedford, North Queensland (2019-2021)
- Environmental Management Plans for Kareeya and Barron Gorge Power Stations (2019)
- Bruce Highway Safety Upgrades Ecological Assessments between Cardwell and Cairns, North Queensland (2018)
- Townsville South Road Capacity Upgrade, Ecological Assessment, Townsville (2018)

## Curriculum vitae - Gemma Horner

51 Gadgarra Road, Lake Barrine Queensland 4884 | Mobile: 0401 179 575 | Email: [gemma.horner@outlook.com](mailto:gemma.horner@outlook.com)

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- Flora component of Cairns Shipping Development Project EIS, East Trinity and Northern Sands, Queensland (2017-2018)
- Upper Burdekin Rangelands BioCondition Assessments – NQ Dry tropics (2017)
- Environmental Management Plans for working within the Wet Tropics World Heritage Area, Department of Transport and Main Roads (2016-2017)
- Burke Developmental Road Resource Areas, Ecological Assessment (flora), Cape York Peninsula, North Queensland (2017)
- P'nyang Appraisal Drilling – Pre-Construction Survey (Flora); Conducted terrestrial flora surveys within areas associated with the P'nyang Project in Western Province – Coffey Environments Australia Pty Ltd (2016)
- Reinstatement and Weed Audits – PNG LNG Project, Papua New Guinea – Exxon Mobil Corporation (2015-2016)
- Delivered training on 'Working within the Wet Tropics World Heritage Area' for various entities (2015-2021)
- Developed a Papua New Guinea weed identification manual "Weeds of the Kikori Basin" (2014)
- Mangrove Monitoring – Aquis Resort at the Great Barrier Reef (2013-2015)
  
- Compiled a Weed Identification Manual, PNG LNG Project – Papua New Guinea (2012)
- Botanical surveys across Cape York to document the distribution of *Cajanus mareebensis* (2012-2013)

### Publications

Tng, D.Y.P., Horner, G., Bovini, M.G. (2021) A South American in Australia: *Wissadula contracta* (Malvaceae), a distinctive adventive shrub. *North Queensland Naturalist* 51: 62-66.

Page, T., Horner, G., Murphy, M and Mizrahi, M. (2013) *Landowner priority trees for planting and their field identification in YUS LLG, Huon Peninsula, PNG*. Report for the TKCP Project, James Cook University, Cairns

### Referees

Available upon request



# DEVELOPMENT APPLICATION

## DEVELOPMENT PERMIT:

### **OPERATIONAL WORKS**

#### Agricultural Dam

397 Speewah Road, Speewah Qld. 4881

Lot 2 on RP718600

Prepared by: Scope Town Planning

September 2023



# PLANNING FOR LOCALS

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<b>APPLICATION SUMMARY</b>	
<b>DEVELOPMENT APPLICATION</b>	<b>Operational Works</b>
<b>PROPOSAL</b>	<b>Dam (Agricultural)</b>
<b>ASSESSMENT LEVEL</b>	<b>Code</b>
<b>STREET ADDRESS</b>	<b>397 Speewah Road, Speewah Qld. 4881</b>
<b>REAL PROPERTY ADDRESS</b>	<b>Lot 2 on RP718600</b>
<b>LAND AREA</b>	<b>500,380m<sup>2</sup></b>
<b>APPLICANT</b>	<b>Scope Town Planning c/- Land Owner</b>
<b>LAND OWNER</b>	<b>Jan and Claire Eldred</b>
<b>LOCAL GOVERNMENT AREA</b>	<b>Mareeba Shire Council</b>
<b>PLANNING SCHEME</b>	<b>Mareeba Shire Planning Scheme (2017)</b>
<b>ZONE</b>	<b>Rural Zone</b>
<b>PRECINCT</b>	<b>n/a</b>
<b>LOCAL PLAN</b>	<b>n/a</b>
<b>EASEMENTS</b>	<b>nil</b>
<b>IMPROVEMENTS</b>	<b>Dwelling Houses, Sheds</b>
<b>APPLICABLE PLANNING CODES</b>	<b>Rural Zone Code</b>
	<b>Environmental Significance Overlay Code</b>
	<b>Hill and Slope Overlay Code</b>
<b>APPLICABLE REFERALS</b>	<b>SARA (Clearing of Native Vegetation)</b>



# 1 Proposal

## 1.1 Introduction

This application seeks a Development Permit for Operational Works (Agricultural Dam) over land at 397 Speewah Road, Speewah Qld. 4881 formally known as Lot 2 on RP718600 being located within the Rural Zone of the Mareeba Shire LGA.

The application is classified as Code Assessable Development subject to compliance with the requirements of the relevant codes of the Mareeba Shire Planning Scheme (Alignment Amendment 2017) for Operational Works in the Environmental Significance Overlay and Hill & Slope Overlay.

## 1.2 Proposed Development

The proposed development is the construction of a new 4.5ML (Total PIV) dam for agricultural purposes at 397 Speewah Rd., Speewah. The dam will supply water for the irrigation of the property which will be used to cultivate grass to support an equine training business for which a facility is already approved (App. No. MCU/23/0007, 9 May 2023).

As illustrated in **Figure 1**, the new dam is to be located within the naturally occurring gully around the centre of the property, making use of the natural site contours to minimize earthworks and environmental disruption. The location of the new dam will require vegetation clearing of ~2000m<sup>2</sup> which is categorized as Wildlife Habitat within the Environmental Significance Overlay.

The proposed Dam will be constructed with a 6.7m earth mound wall with a spillway for overflow mitigation and controlled draining into the naturally occurring creek running below the dam site. A suitably qualified Civil Engineer (Northern Australian Water Strategies) has been engaged to design and engineer the dam (Appendix 2) while a suitably qualified Environmental Scientist (Northern Ecology) has been engaged to prepare an Ecological Assessment of the impact of the proposed vegetation clearing (Appendix 3).

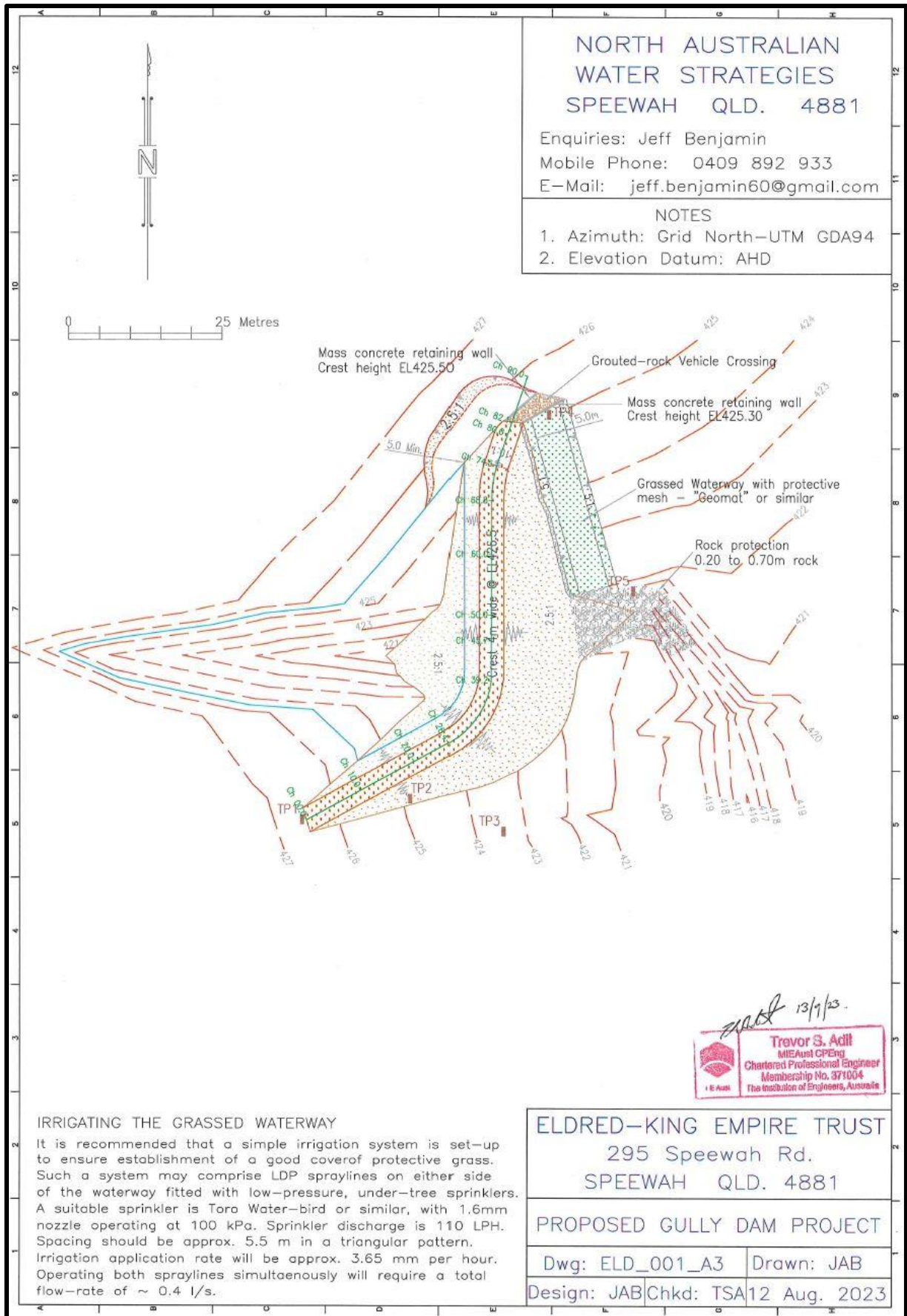


Figure 1: Proposed Dam. (Northern Australian Water Strategies)



### 1.3 Site and Locality

The proposal site is situated on Speewah Road which gains direct access to the Kennedy Highway and is located amongst similar subdivisions of large vegetated or partially cleared Rural lots containing grazing land and/or improved with Dwellings and associated Outbuildings.

The site is zoned Rural and is currently utilized for agricultural purposes, being improved with a Dwelling House and associated Outbuildings. The site has frontage to Speewah Road (west) and Stoney Creek Road (north) and is bound by gazette Road spaces (unimproved) to the south and east, Rural allotments to the west, east and south and Rural Residential allotments to the north. The site is mostly vegetated by native vegetation being partially cleared for agricultural use.

The site is partially affected by the Bushfire Hazard Overlay (not affecting the proposed works), Environmental Significance Overlay and Hill and Slope Overlay. The site is not located within a Local Plan or Precinct.



**Figure 2:** Aerial view of 397 Speewah Road (Qld. Globe).

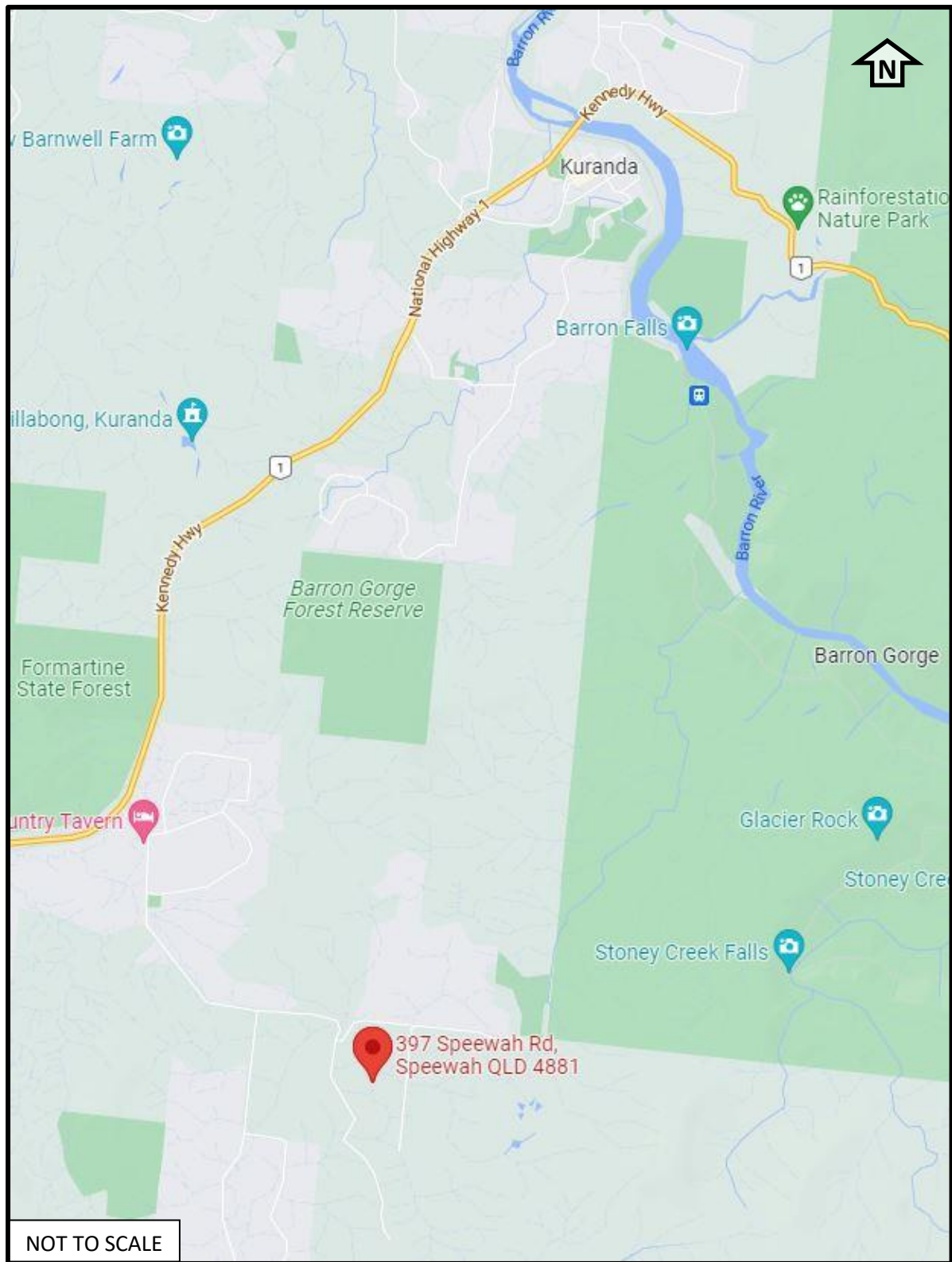


Figure 3: Development Site location map (Google Maps).

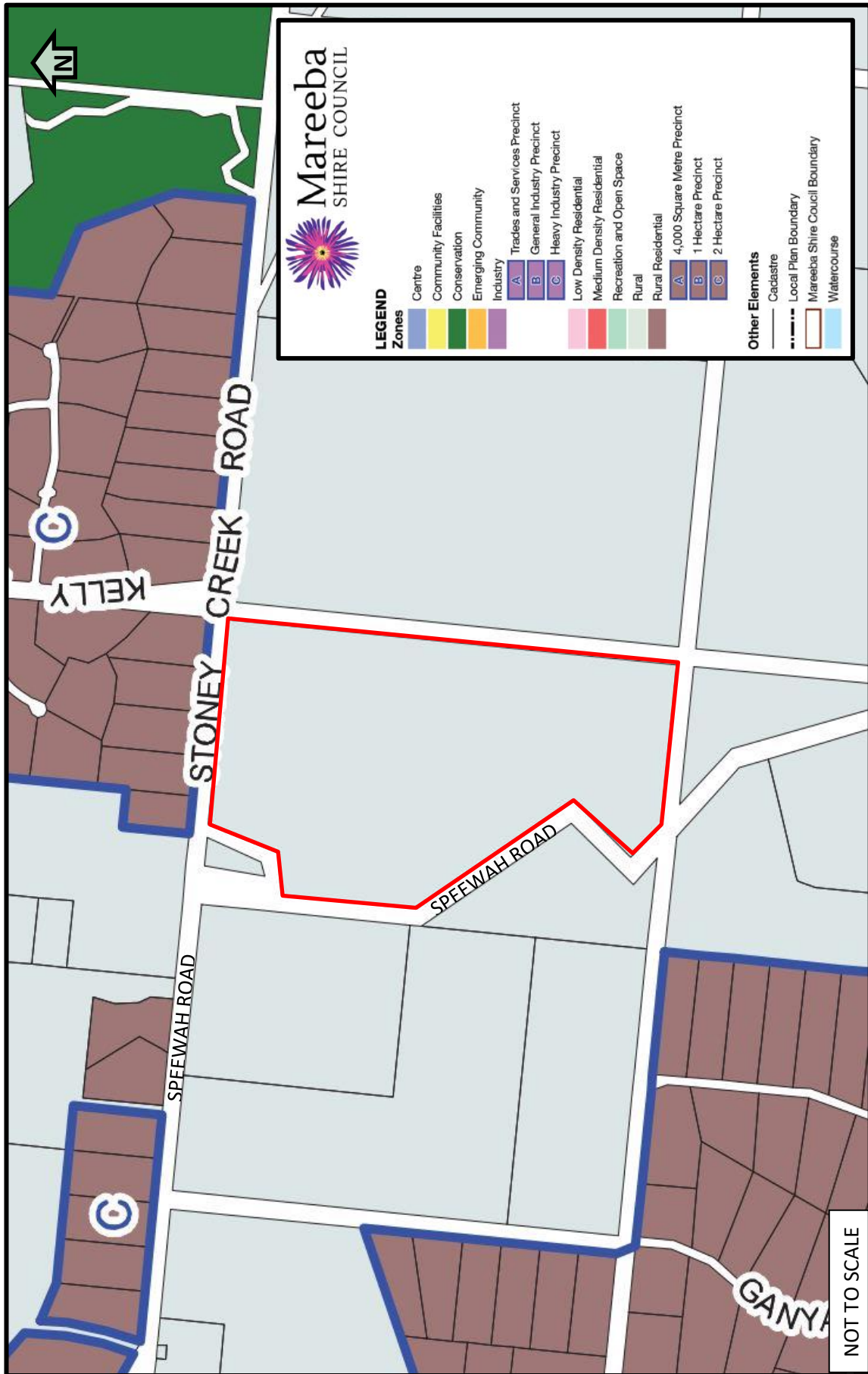


Figure 4: Development Site located in the Rural Zone.



## **2 Planning Considerations**

### **2.1 Compliance with Planning Scheme**

This site is located within the Rural Zone and mapped within several Overlays. The proposed development for Operational Works is Code Assessable Development under being assessable against provisions of the following Codes of the Mareeba Shire Planning Scheme (2017);

- 6.2.9 Rural Zone Code
- 8.2.4 Environmental Significance Overlay Code
- 8.2.8 Hill and Slope Overlay Code

An assessment of the development proposal against the applicable Codes is provided in Appendix 1 – Code Assessment.

The site is not subject to a Local Plan and all relevant Policies are considered to be appropriately addressed in the relevant Planning Codes.

### **2.2 State agency referral items**

As the proposed Operational Works involves the clearing of native vegetation mapped as Category B on the Regulated Vegetation Management Map, this application triggers referral to SARA for assessment.

#### **State Code 16: Native Vegetation Clearing**

As the proposal sites are mapped within Category B of the Regulated Vegetation Management Map (**Figure 5**), this Development Application is assessed against the relevant provisions of State Code 16: Native Vegetation Clearing.

The purpose of the proposed Operational Works is the construction of a new dam for agricultural purposes, specifically the irrigation of field grass for equine grazing. The dam has been located within a naturally occurring gully which will significantly reduce the volume of earthworks and environmental impact of its construction. The selected location contains mature, native vegetation, which will be cleared only as required to accommodate the dam.

The proposed vegetation clearing is supported by an Ecological Assessment conducted by a suitably qualified Environmental Scientist (Northern Ecology) attached to this report as Appendix 3.

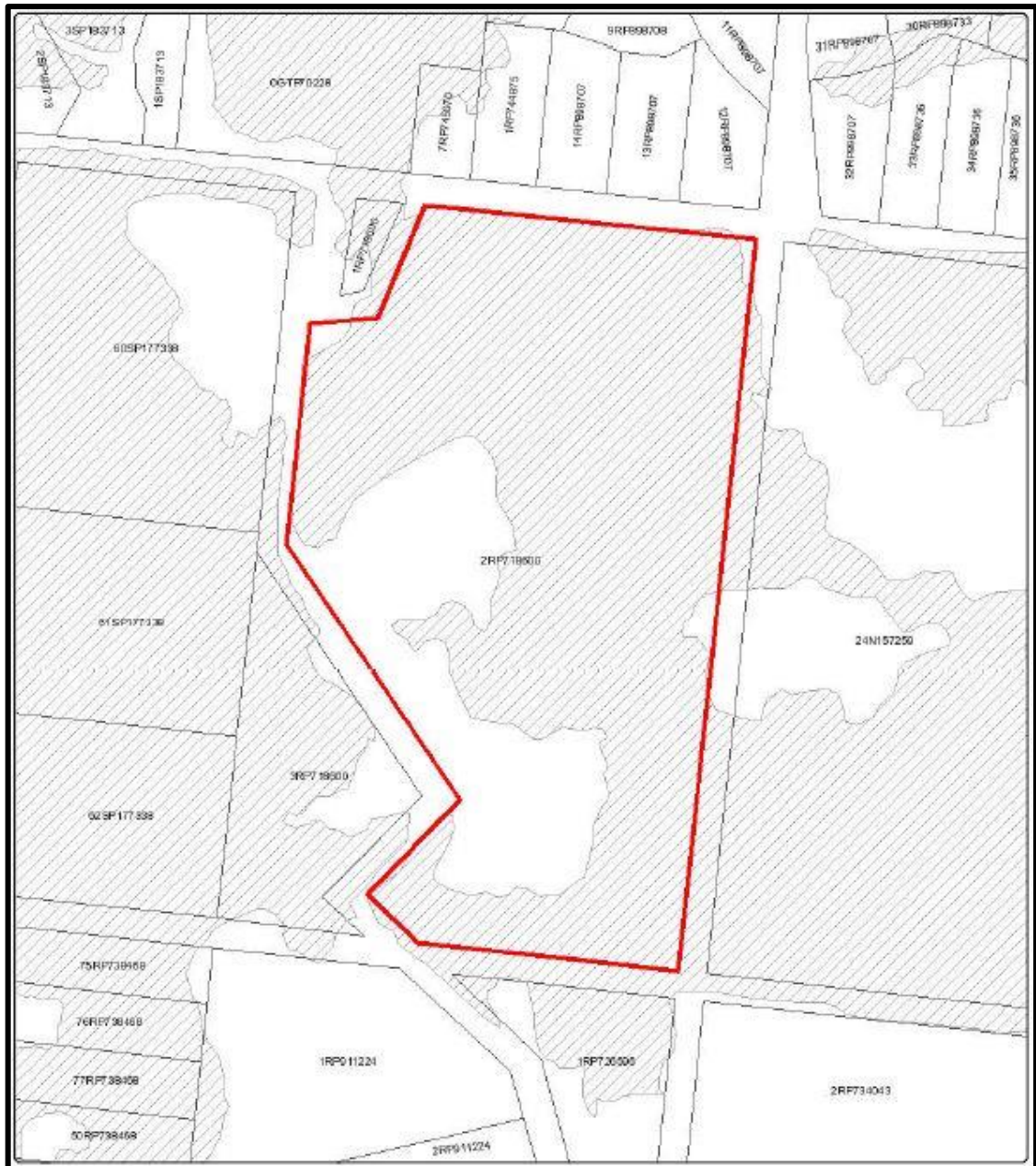
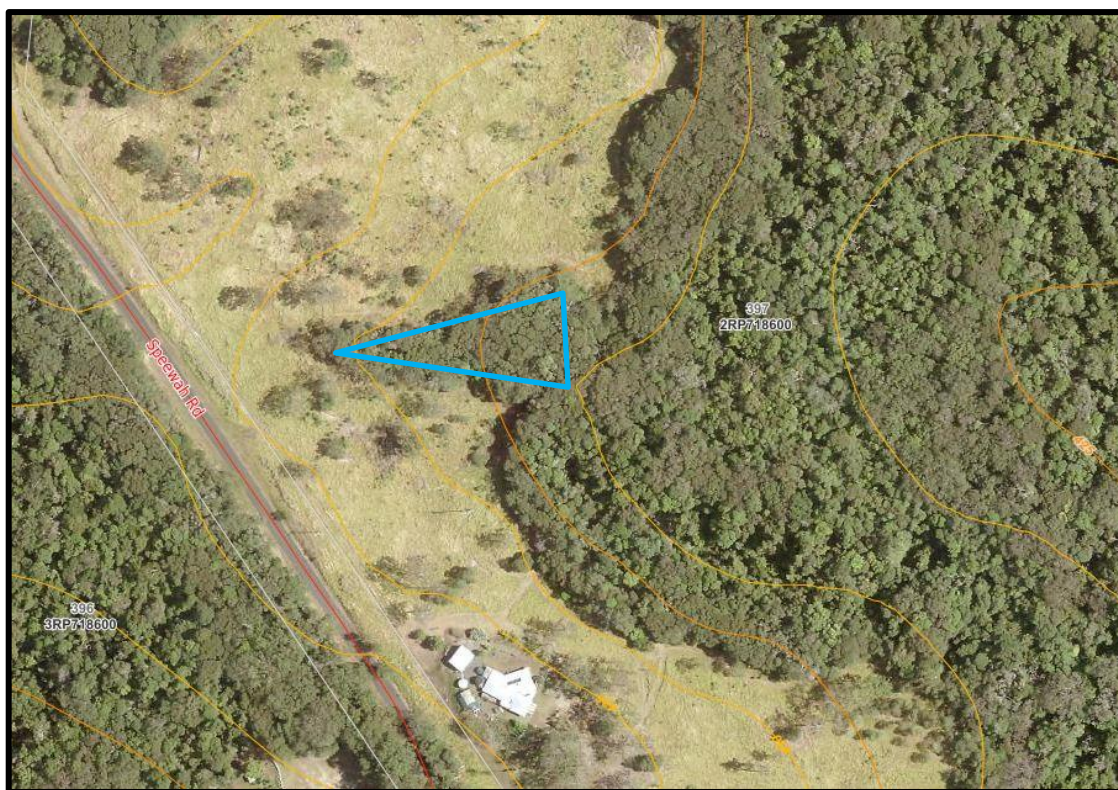


Figure 5: Category B Regulated Vegetation mapped over development site (DAMS).



**Figure 6:** Aerial image of Dam site relative to existing Vegetation (MSC Mapping).

As prescribed by Table 16.1: Relevant code provisions for each type of development of SDAP (v3.0), State Code 16: Native Vegetation Clearing, the relevant provisions for the proposed Operational Works, being clearing for relevant infrastructure activities, are found in Tables 16.2 and 16.3 of State Code 16 which are addressed in Appendix 1.

### **3 Planning Summary**

This application seeks a Development Permit for Operational Works (Agricultural Dam) over land at 397 Speewah Road, Speewah Qld. 4881 formally known as Lot 2 on RP718600 being located within the Rural Zone of the Mareeba Shire LGA.

The application is classified as Code Assessable Development subject to compliance with the requirements of the relevant codes of the Mareeba Shire Planning Scheme (Alignment Amendment 2017) for Operational Works in the Environmental Significance Overlay and Hill & Slope Overlay and is referable to SARA for assessment of the required vegetation clearing.

The proposed development is the construction of a new 4.5ML (Total PIV) dam for agricultural purposes at 397 Speewah Rd., Speewah. The dam will supply water for the irrigation of the property which will be used to cultivate grass to support an equine training business for which a facility is already approved (App. No. MCU/23/0007, 9 May 2023).



## 4 Recommendation

It is the professional opinion of Scope Town Planning that the proposed Operational Works over the development site satisfies the desired outcomes and requirements of the Mareeba Shire Planning Scheme and that this application should be fairly assessed and approved by Mareeba Shire Council with reasonable conditions.



**Johnathan Burns**

Senior Town Planner | **Scope** Town Planning

**Individual owner's consent for making a development application under the *Planning Act 2016***

I, Claire Elizabeth Eldred

*[Insert full name.]*

as owner of the premises identified as follows:

Lot 2 on RP718600  
397 Speewah Road, Speewah Qld. 4881

consent to the making of a development application under the *Planning Act 2016* by:

Scope Town Planning

on the premises described above for:

Operational Works (new dam)

*[signature of owner and date signed]*



21/03/23

**Individual owner's consent for making a development application under the *Planning Act 2016***

I, Jan Eldred

[Insert full name.]

as owner of the premises identified as follows:

Lot 2 on RP718600  
397 Speewah Road, Speewah Qld. 4881

consent to the making of a development application under the *Planning Act 2016* by:

Scope Town Planning

on the premises described above for:

Operational Works (new dam)

[signature of owner and date signed]



21/03/2023

# DA Form 1 – Development application details

Approved form (version 1.3 effective 28 September 2020) made under section 282 of the Planning Act 2016.

This form **must** be used to make a development application **involving code assessment or impact assessment**, except when applying for development involving only building work.

For a development application involving **building work only**, use *DA Form 2 – Building work details*.

For a development application involving **building work associated with any other type of assessable development (i.e. material change of use, operational work or reconfiguring a lot)**, use this form (*DA Form 1*) and parts 4 to 6 of *DA Form 2 – Building work details*.

Unless stated otherwise, all parts of this form **must** be completed in full and all required supporting information **must** accompany the development application.

One or more additional pages may be attached as a schedule to this development application if there is insufficient space on the form to include all the necessary information.

This form and any other form relevant to the development application must be used to make a development application relating to strategic port land and Brisbane core port land under the *Transport Infrastructure Act 1994*, and airport land under the *Airport Assets (Restructuring and Disposal) Act 2008*. For the purpose of assessing a development application relating to strategic port land and Brisbane core port land, any reference to a planning scheme is taken to mean a land use plan for the strategic port land, Brisbane port land use plan for Brisbane core port land, or a land use plan for airport land.

**Note:** All terms used in this form have the meaning given under the Planning Act 2016, the Planning Regulation 2017, or the Development Assessment Rules (DA Rules).

## PART 1 – APPLICANT DETAILS

### 1) Applicant details

Applicant name(s) <i>(individual or company full name)</i>	Jan and Claire Eldred
Contact name <i>(only applicable for companies)</i>	Johnathan Burns, Scope Town Planning
Postal address <i>(P.O. Box or street address)</i>	38 Kowa St
Suburb	Mareeba
State	Qld
Postcode	4880
Country	Australia
Contact number	0450 781 841
Email address <i>(non-mandatory)</i>	jburns@scopetownplanning.com.au
Mobile number <i>(non-mandatory)</i>	
Fax number <i>(non-mandatory)</i>	
Applicant's reference number(s) <i>(if applicable)</i>	22017

### 2) Owner's consent

#### 2.1) Is written consent of the owner required for this development application?

- Yes – the written consent of the owner(s) is attached to this development application  
 No – proceed to 3)

## PART 2 – LOCATION DETAILS

### 3) Location of the premises (complete 3.1) or 3.2), and 3.3) as applicable)

**Note:** Provide details below and attach a site plan for any or all premises part of the development application. For further information, see DA Forms Guide: Relevant plans.

#### 3.1) Street address and lot on plan

- Street address **AND** lot on plan (all lots must be listed), **or**  
 Street address **AND** lot on plan for an adjoining or adjacent property of the premises (appropriate for development in water but adjoining or adjacent to land e.g. jetty, pontoon. All lots must be listed).

a)	Unit No.	Street No.	Street Name and Type	Suburb
		397	Speewah Road	Speewah
	Postcode	Lot No.	Plan Type and Number (e.g. RP, SP)	Local Government Area(s)
	4881	2	RP718600	Mareeba Shire
b)	Unit No.	Street No.	Street Name and Type	Suburb
	Postcode	Lot No.	Plan Type and Number (e.g. RP, SP)	Local Government Area(s)

#### 3.2) Coordinates of premises (appropriate for development in remote areas, over part of a lot or in water not adjoining or adjacent to land e.g. channel dredging in Moreton Bay)

**Note:** Place each set of coordinates in a separate row.

- Coordinates of premises by longitude and latitude

Longitude(s)	Latitude(s)	Datum	Local Government Area(s) (if applicable)
		<input type="checkbox"/> WGS84 <input type="checkbox"/> GDA94 <input type="checkbox"/> Other: <input type="text"/>	

- Coordinates of premises by easting and northing

Easting(s)	Northing(s)	Zone Ref.	Datum	Local Government Area(s) (if applicable)
		<input type="checkbox"/> 54 <input type="checkbox"/> 55 <input type="checkbox"/> 56	<input type="checkbox"/> WGS84 <input type="checkbox"/> GDA94 <input type="checkbox"/> Other: <input type="text"/>	

#### 3.3) Additional premises

- Additional premises are relevant to this development application and the details of these premises have been attached in a schedule to this development application  
 Not required

#### 4) Identify any of the following that apply to the premises and provide any relevant details

- In or adjacent to a water body or watercourse or in or above an aquifer

Name of water body, watercourse or aquifer:

- On strategic port land under the *Transport Infrastructure Act 1994*

Lot on plan description of strategic port land:

Name of port authority for the lot:

- In a tidal area

Name of local government for the tidal area (if applicable):

Name of port authority for tidal area (if applicable):

- On airport land under the *Airport Assets (Restructuring and Disposal) Act 2008*

Name of airport:



<input type="checkbox"/> Listed on the Environmental Management Register (EMR) under the <i>Environmental Protection Act 1994</i>
EMR site identification: <input type="text"/>
<input type="checkbox"/> Listed on the Contaminated Land Register (CLR) under the <i>Environmental Protection Act 1994</i>
CLR site identification: <input type="text"/>

**5) Are there any existing easements over the premises?**

*Note: Easement uses vary throughout Queensland and are to be identified correctly and accurately. For further information on easements and how they may affect the proposed development, see [DA Forms Guide](#).*

- Yes – All easement locations, types and dimensions are included in plans submitted with this development application
- No

## PART 3 – DEVELOPMENT DETAILS

### Section 1 – Aspects of development

**6.1) Provide details about the first development aspect**

a) What is the type of development? *(tick only one box)*

- Material change of use     Reconfiguring a lot     Operational work     Building work

b) What is the approval type? *(tick only one box)*

- Development permit     Preliminary approval     Preliminary approval that includes a variation approval

c) What is the level of assessment?

- Code assessment     Impact assessment *(requires public notification)*

d) Provide a brief description of the proposal *(e.g. 6 unit apartment building defined as multi-unit dwelling, reconfiguration of 1 lot into 3 lots):*

New Dam

e) Relevant plans

*Note: Relevant plans are required to be submitted for all aspects of this development application. For further information, see [DA Forms guide: Relevant plans](#).*

- Relevant plans of the proposed development are attached to the development application

**6.2) Provide details about the second development aspect**

a) What is the type of development? *(tick only one box)*

- Material change of use     Reconfiguring a lot     Operational work     Building work

b) What is the approval type? *(tick only one box)*

- Development permit     Preliminary approval     Preliminary approval that includes a variation approval

c) What is the level of assessment?

- Code assessment     Impact assessment *(requires public notification)*

d) Provide a brief description of the proposal *(e.g. 6 unit apartment building defined as multi-unit dwelling, reconfiguration of 1 lot into 3 lots):*

e) Relevant plans

*Note: Relevant plans are required to be submitted for all aspects of this development application. For further information, see [DA Forms Guide: Relevant plans](#).*

- Relevant plans of the proposed development are attached to the development application

**6.3) Additional aspects of development**

- Additional aspects of development are relevant to this development application and the details for these aspects that would be required under Part 3 Section 1 of this form have been attached to this development application

- Not required

## Section 2 – Further development details

7) Does the proposed development application involve any of the following?	
Material change of use	<input type="checkbox"/> Yes – complete division 1 if assessable against a local planning instrument
Reconfiguring a lot	<input type="checkbox"/> Yes – complete division 2
Operational work	<input checked="" type="checkbox"/> Yes – complete division 3
Building work	<input type="checkbox"/> Yes – complete <i>DA Form 2 – Building work details</i>

### Division 1 – Material change of use

**Note:** This division is only required to be completed if any part of the development application involves a material change of use assessable against a local planning instrument.

8.1) Describe the proposed material change of use			
Provide a general description of the proposed use	Provide the planning scheme definition <i>(include each definition in a new row)</i>	Number of dwelling units <i>(if applicable)</i>	Gross floor area (m <sup>2</sup> ) <i>(if applicable)</i>

8.2) Does the proposed use involve the use of existing buildings on the premises?	
<input type="checkbox"/> Yes	
<input type="checkbox"/> No	

### Division 2 – Reconfiguring a lot

**Note:** This division is only required to be completed if any part of the development application involves reconfiguring a lot.

9.1) What is the total number of existing lots making up the premises?	

9.2) What is the nature of the lot reconfiguration? <i>(tick all applicable boxes)</i>	
<input type="checkbox"/> Subdivision <i>(complete 10)</i>	<input type="checkbox"/> Dividing land into parts by agreement <i>(complete 11)</i>
<input type="checkbox"/> Boundary realignment <i>(complete 12)</i>	<input type="checkbox"/> Creating or changing an easement giving access to a lot from a constructed road <i>(complete 13)</i>

10) Subdivision				
10.1) For this development, how many lots are being created and what is the intended use of those lots:				
Intended use of lots created	Residential	Commercial	Industrial	Other, please specify:
Number of lots created				

10.2) Will the subdivision be staged?	
<input type="checkbox"/> Yes – provide additional details below	
<input type="checkbox"/> No	
How many stages will the works include?	
What stage(s) will this development application apply to?	

**11) Dividing land into parts by agreement – how many parts are being created and what is the intended use of the parts?**

Intended use of parts created	Residential	Commercial	Industrial	Other, please specify:
Number of parts created				

**12) Boundary realignment**

**12.1) What are the current and proposed areas for each lot comprising the premises?**

Current lot		Proposed lot	
Lot on plan description	Area (m <sup>2</sup> )	Lot on plan description	Area (m <sup>2</sup> )

**12.2) What is the reason for the boundary realignment?**

**13) What are the dimensions and nature of any existing easements being changed and/or any proposed easement? (attach schedule if there are more than two easements)**

Existing or proposed?	Width (m)	Length (m)	Purpose of the easement? (e.g. pedestrian access)	Identify the land/lot(s) benefitted by the easement

**Division 3 – Operational work**

**Note:** This division is only required to be completed if any part of the development application involves operational work.

**14.1) What is the nature of the operational work?**

<input type="checkbox"/> Road work	<input type="checkbox"/> Stormwater	<input checked="" type="checkbox"/> Water infrastructure
<input type="checkbox"/> Drainage work	<input checked="" type="checkbox"/> Earthworks	<input type="checkbox"/> Sewage infrastructure
<input type="checkbox"/> Landscaping	<input type="checkbox"/> Signage	<input checked="" type="checkbox"/> Clearing vegetation
<input type="checkbox"/> Other – please specify: _____		

**14.2) Is the operational work necessary to facilitate the creation of new lots? (e.g. subdivision)**

Yes – specify number of new lots: \_\_\_\_\_

No

**14.3) What is the monetary value of the proposed operational work? (include GST, materials and labour)**

\$ to be determined

**PART 4 – ASSESSMENT MANAGER DETAILS**

**15) Identify the assessment manager(s) who will be assessing this development application**

Mareeba Shire Council

**16) Has the local government agreed to apply a superseded planning scheme for this development application?**

Yes – a copy of the decision notice is attached to this development application

The local government is taken to have agreed to the superseded planning scheme request – relevant documents attached

No

## PART 5 – REFERRAL DETAILS

### 17) Does this development application include any aspects that have any referral requirements?

**Note:** A development application will require referral if prescribed by the Planning Regulation 2017.

No, there are no referral requirements relevant to any development aspects identified in this development application – proceed to Part 6

#### Matters requiring referral to the **Chief Executive of the Planning Act 2016:**

- Clearing native vegetation
- Contaminated land (*unexploded ordnance*)
- Environmentally relevant activities (ERA) (*only if the ERA has not been devolved to a local government*)
- Fisheries – aquaculture
- Fisheries – declared fish habitat area
- Fisheries – marine plants
- Fisheries – waterway barrier works
- Hazardous chemical facilities
- Heritage places – Queensland heritage place (*on or near a Queensland heritage place*)
- Infrastructure-related referrals – designated premises
- Infrastructure-related referrals – state transport infrastructure
- Infrastructure-related referrals – State transport corridor and future State transport corridor
- Infrastructure-related referrals – State-controlled transport tunnels and future state-controlled transport tunnels
- Infrastructure-related referrals – near a state-controlled road intersection
- Koala habitat in SEQ region – interfering with koala habitat in koala habitat areas outside koala priority areas
- Koala habitat in SEQ region – key resource areas
- Ports – Brisbane core port land – near a State transport corridor or future State transport corridor
- Ports – Brisbane core port land – environmentally relevant activity (ERA)
- Ports – Brisbane core port land – tidal works or work in a coastal management district
- Ports – Brisbane core port land – hazardous chemical facility
- Ports – Brisbane core port land – taking or interfering with water
- Ports – Brisbane core port land – referable dams
- Ports – Brisbane core port land – fisheries
- Ports – Land within Port of Brisbane’s port limits (*below high-water mark*)
- SEQ development area
- SEQ regional landscape and rural production area or SEQ rural living area – tourist activity or sport and recreation activity
- SEQ regional landscape and rural production area or SEQ rural living area – community activity
- SEQ regional landscape and rural production area or SEQ rural living area – indoor recreation
- SEQ regional landscape and rural production area or SEQ rural living area – urban activity
- SEQ regional landscape and rural production area or SEQ rural living area – combined use
- Tidal works or works in a coastal management district
- Reconfiguring a lot in a coastal management district or for a canal
- Erosion prone area in a coastal management district
- Urban design
- Water-related development – taking or interfering with water
- Water-related development – removing quarry material (*from a watercourse or lake*)
- Water-related development – referable dams
- Water-related development – levees (*category 3 levees only*)
- Wetland protection area

#### Matters requiring referral to the **local government:**

- Airport land
- Environmentally relevant activities (ERA) (*only if the ERA has been devolved to local government*)

<input type="checkbox"/> Heritage places – Local heritage places
Matters requiring referral to the <b>Chief Executive of the distribution entity or transmission entity:</b>
<input type="checkbox"/> Infrastructure-related referrals – Electricity infrastructure
Matters requiring referral to:
<ul style="list-style-type: none"> <li>• The <b>Chief Executive of the holder of the licence</b>, if not an individual</li> <li>• The <b>holder of the licence</b>, if the holder of the licence is an individual</li> </ul>
<input type="checkbox"/> Infrastructure-related referrals – Oil and gas infrastructure
Matters requiring referral to the <b>Brisbane City Council:</b>
<input type="checkbox"/> Ports – Brisbane core port land
Matters requiring referral to the <b>Minister responsible for administering the Transport Infrastructure Act 1994:</b>
<input type="checkbox"/> Ports – Brisbane core port land <i>(where inconsistent with the Brisbane port LUP for transport reasons)</i>
<input type="checkbox"/> Ports – Strategic port land
Matters requiring referral to the <b>relevant port operator</b> , if applicant is not port operator:
<input type="checkbox"/> Ports – Land within Port of Brisbane's port limits <i>(below high-water mark)</i>
Matters requiring referral to the <b>Chief Executive of the relevant port authority:</b>
<input type="checkbox"/> Ports – Land within limits of another port <i>(below high-water mark)</i>
Matters requiring referral to the <b>Gold Coast Waterways Authority:</b>
<input type="checkbox"/> Tidal works or work in a coastal management district <i>(in Gold Coast waters)</i>
Matters requiring referral to the <b>Queensland Fire and Emergency Service:</b>
<input type="checkbox"/> Tidal works or work in a coastal management district <i>(involving a marina (more than six vessel berths))</i>

**18) Has any referral agency provided a referral response for this development application?**

- Yes – referral response(s) received and listed below are attached to this development application
- No

Referral requirement	Referral agency	Date of referral response

Identify and describe any changes made to the proposed development application that was the subject of the referral response and this development application, or include details in a schedule to this development application *(if applicable)*.

## PART 6 – INFORMATION REQUEST

**19) Information request under Part 3 of the DA Rules**

- I agree to receive an information request if determined necessary for this development application
- I do not agree to accept an information request for this development application

**Note:** By not agreeing to accept an information request I, the applicant, acknowledge:

- that this development application will be assessed and decided based on the information provided when making this development application and the assessment manager and any referral agencies relevant to the development application are not obligated under the DA Rules to accept any additional information provided by the applicant for the development application unless agreed to by the relevant parties
- Part 3 of the DA Rules will still apply if the application is an application listed under section 11.3 of the DA Rules.

Further advice about information requests is contained in the [DA Forms Guide](#).

## PART 7 – FURTHER DETAILS

20) Are there any associated development applications or current approvals? (e.g. a preliminary approval)			
<input type="checkbox"/> Yes – provide details below or include details in a schedule to this development application <input checked="" type="checkbox"/> No			
List of approval/development application references	Reference number	Date	Assessment manager
<input type="checkbox"/> Approval <input type="checkbox"/> Development application			
<input type="checkbox"/> Approval <input type="checkbox"/> Development application			

21) Has the portable long service leave levy been paid? (only applicable to development applications involving building work or operational work)		
<input type="checkbox"/> Yes – a copy of the receipted QLeave form is attached to this development application <input type="checkbox"/> No – I, the applicant will provide evidence that the portable long service leave levy has been paid before the assessment manager decides the development application. I acknowledge that the assessment manager may give a development approval only if I provide evidence that the portable long service leave levy has been paid <input checked="" type="checkbox"/> Not applicable (e.g. building and construction work is less than \$150,000 excluding GST)		
Amount paid	Date paid (dd/mm/yy)	QLeave levy number (A, B or E)
\$		

22) Is this development application in response to a show cause notice or required as a result of an enforcement notice?
<input type="checkbox"/> Yes – show cause or enforcement notice is attached <input checked="" type="checkbox"/> No

23) Further legislative requirements			
<b>Environmentally relevant activities</b>			
23.1) Is this development application also taken to be an application for an environmental authority for an <b>Environmentally Relevant Activity (ERA)</b> under section 115 of the <i>Environmental Protection Act 1994</i> ?			
<input type="checkbox"/> Yes – the required attachment (form ESR/2015/1791) for an application for an environmental authority accompanies this development application, and details are provided in the table below <input checked="" type="checkbox"/> No <i>Note: Application for an environmental authority can be found by searching "ESR/2015/1791" as a search term at <a href="http://www.qld.gov.au">www.qld.gov.au</a>. An ERA requires an environmental authority to operate. See <a href="http://www.business.qld.gov.au">www.business.qld.gov.au</a> for further information.</i>			
Proposed ERA number:		Proposed ERA threshold:	
Proposed ERA name:			
<input type="checkbox"/> Multiple ERAs are applicable to this development application and the details have been attached in a schedule to this development application.			
<b>Hazardous chemical facilities</b>			
23.2) Is this development application for a <b>hazardous chemical facility</b> ?			
<input type="checkbox"/> Yes – Form 69: Notification of a facility exceeding 10% of schedule 15 threshold is attached to this development application <input checked="" type="checkbox"/> No <i>Note: See <a href="http://www.business.qld.gov.au">www.business.qld.gov.au</a> for further information about hazardous chemical notifications.</i>			

### **Clearing native vegetation**

23.3) Does this development application involve **clearing native vegetation** that requires written confirmation that the chief executive of the *Vegetation Management Act 1999* is satisfied the clearing is for a relevant purpose under section 22A of the *Vegetation Management Act 1999*?

- Yes – this development application includes written confirmation from the chief executive of the *Vegetation Management Act 1999* (s22A determination)
- No

**Note:** 1. Where a development application for operational work or material change of use requires a s22A determination and this is not included, the development application is prohibited development.  
2. See <https://www.qld.gov.au/environment/land/vegetation/applying> for further information on how to obtain a s22A determination.

### **Environmental offsets**

23.4) Is this development application taken to be a prescribed activity that may have a significant residual impact on a **prescribed environmental matter** under the *Environmental Offsets Act 2014*?

- Yes – I acknowledge that an environmental offset must be provided for any prescribed activity assessed as having a significant residual impact on a prescribed environmental matter
- No

**Note:** The environmental offset section of the Queensland Government's website can be accessed at [www.qld.gov.au](http://www.qld.gov.au) for further information on environmental offsets.

### **Koala habitat in SEQ Region**

23.5) Does this development application involve a material change of use, reconfiguring a lot or operational work which is assessable development under Schedule 10, Part 10 of the Planning Regulation 2017?

- Yes – the development application involves premises in the koala habitat area in the koala priority area
- Yes – the development application involves premises in the koala habitat area outside the koala priority area
- No

**Note:** If a koala habitat area determination has been obtained for this premises and is current over the land, it should be provided as part of this development application. See koala habitat area guidance materials at [www.des.qld.gov.au](http://www.des.qld.gov.au) for further information.

### **Water resources**

23.6) Does this development application involve **taking or interfering with underground water through an artesian or subartesian bore, taking or interfering with water in a watercourse, lake or spring, or taking overland flow water under the Water Act 2000**?

- Yes – the relevant template is completed and attached to this development application and I acknowledge that a relevant authorisation or licence under the *Water Act 2000* may be required prior to commencing development
- No

**Note:** Contact the Department of Natural Resources, Mines and Energy at [www.dnrme.qld.gov.au](http://www.dnrme.qld.gov.au) for further information.

DA templates are available from <https://planning.dsdmip.qld.gov.au/>. If the development application involves:

- Taking or interfering with underground water through an artesian or subartesian bore: complete DA Form 1 Template 1
- Taking or interfering with water in a watercourse, lake or spring: complete DA Form 1 Template 2
- Taking overland flow water: complete DA Form 1 Template 3.

### **Waterway barrier works**

23.7) Does this application involve **waterway barrier works**?

- Yes – the relevant template is completed and attached to this development application
- No

DA templates are available from <https://planning.dsdmip.qld.gov.au/>. For a development application involving waterway barrier works, complete DA Form 1 Template 4.

### **Marine activities**

23.8) Does this development application involve **aquaculture, works within a declared fish habitat area or removal, disturbance or destruction of marine plants**?

- Yes – an associated resource allocation authority is attached to this development application, if required under the *Fisheries Act 1994*
- No

**Note:** See guidance materials at [www.daf.qld.gov.au](http://www.daf.qld.gov.au) for further information.

### Quarry materials from a watercourse or lake

23.9) Does this development application involve the **removal of quarry materials from a watercourse or lake** under the *Water Act 2000*?

- Yes – I acknowledge that a quarry material allocation notice must be obtained prior to commencing development  
 No

**Note:** Contact the Department of Natural Resources, Mines and Energy at [www.dnrme.qld.gov.au](http://www.dnrme.qld.gov.au) and [www.business.qld.gov.au](http://www.business.qld.gov.au) for further information.

### Quarry materials from land under tidal waters

23.10) Does this development application involve the **removal of quarry materials from land under tidal water** under the *Coastal Protection and Management Act 1995*?

- Yes – I acknowledge that a quarry material allocation notice must be obtained prior to commencing development  
 No

**Note:** Contact the Department of Environment and Science at [www.des.qld.gov.au](http://www.des.qld.gov.au) for further information.

### Referable dams

23.11) Does this development application involve a **referable dam** required to be failure impact assessed under section 343 of the *Water Supply (Safety and Reliability) Act 2008* (the *Water Supply Act*)?

- Yes – the 'Notice Accepting a Failure Impact Assessment' from the chief executive administering the *Water Supply Act* is attached to this development application  
 No

**Note:** See guidance materials at [www.dnrme.qld.gov.au](http://www.dnrme.qld.gov.au) for further information.

### Tidal work or development within a coastal management district

23.12) Does this development application involve **tidal work or development in a coastal management district**?

- Yes – the following is included with this development application:
- Evidence the proposal meets the code for assessable development that is prescribed tidal work (*only required if application involves prescribed tidal work*)
  - A certificate of title
- No

**Note:** See guidance materials at [www.des.qld.gov.au](http://www.des.qld.gov.au) for further information.

### Queensland and local heritage places

23.13) Does this development application propose development on or adjoining a place entered in the **Queensland heritage register** or on a place entered in a local government's **Local Heritage Register**?

- Yes – details of the heritage place are provided in the table below  
 No

**Note:** See guidance materials at [www.des.qld.gov.au](http://www.des.qld.gov.au) for information requirements regarding development of Queensland heritage places.

Name of the heritage place:		Place ID:	
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### Brothels

23.14) Does this development application involve a **material change of use for a brothel**?

- Yes – this development application demonstrates how the proposal meets the code for a development application for a brothel under Schedule 3 of the *Prostitution Regulation 2014*  
 No

### Decision under section 62 of the Transport Infrastructure Act 1994

23.15) Does this development application involve new or changed access to a state-controlled road?

- Yes – this application will be taken to be an application for a decision under section 62 of the *Transport Infrastructure Act 1994* (subject to the conditions in section 75 of the *Transport Infrastructure Act 1994* being satisfied)  
 No



### Walkable neighbourhoods assessment benchmarks under Schedule 12A of the Planning Regulation

23.16) Does this development application involve reconfiguring a lot into 2 or more lots in certain residential zones (except rural residential zones), where at least one road is created or extended?

- Yes – Schedule 12A is applicable to the development application and the assessment benchmarks contained in schedule 12A have been considered
- No

**Note:** See guidance materials at [www.planning.dsdmip.qld.gov.au](http://www.planning.dsdmip.qld.gov.au) for further information.

## PART 8 – CHECKLIST AND APPLICANT DECLARATION

### 24) Development application checklist

I have identified the assessment manager in question 15 and all relevant referral requirement(s) in question 17	<input checked="" type="checkbox"/> Yes
<b>Note:</b> See the <i>Planning Regulation 2017</i> for referral requirements	
If building work is associated with the proposed development, Parts 4 to 6 of <a href="#">DA Form 2 – Building work details</a> have been completed and attached to this development application	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> Not applicable
Supporting information addressing any applicable assessment benchmarks is with the development application	<input checked="" type="checkbox"/> Yes
<b>Note:</b> This is a mandatory requirement and includes any relevant templates under question 23, a planning report and any technical reports required by the relevant categorising instruments (e.g. local government planning schemes, State Planning Policy, State Development Assessment Provisions). For further information, see <a href="#">DA Forms Guide: Planning Report Template</a> .	
Relevant plans of the development are attached to this development application	<input checked="" type="checkbox"/> Yes
<b>Note:</b> Relevant plans are required to be submitted for all aspects of this development application. For further information, see <a href="#">DA Forms Guide: Relevant plans</a> .	
The portable long service leave levy for QLeave has been paid, or will be paid before a development permit is issued (see 21)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> Not applicable

### 25) Applicant declaration

- By making this development application, I declare that all information in this development application is true and correct
- Where an email address is provided in Part 1 of this form, I consent to receive future electronic communications from the assessment manager and any referral agency for the development application where written information is required or permitted pursuant to sections 11 and 12 of the *Electronic Transactions Act 2001*

**Note:** It is unlawful to intentionally provide false or misleading information.

**Privacy** – Personal information collected in this form will be used by the assessment manager and/or chosen assessment manager, any relevant referral agency and/or building certifier (including any professional advisers which may be engaged by those entities) while processing, assessing and deciding the development application. All information relating to this development application may be available for inspection and purchase, and/or published on the assessment manager's and/or referral agency's website.

Personal information will not be disclosed for a purpose unrelated to the *Planning Act 2016*, *Planning Regulation 2017* and the DA Rules except where:

- such disclosure is in accordance with the provisions about public access to documents contained in the *Planning Act 2016* and the *Planning Regulation 2017*, and the access rules made under the *Planning Act 2016* and *Planning Regulation 2017*; or
- required by other legislation (including the *Right to Information Act 2009*); or
- otherwise required by law.

This information may be stored in relevant databases. The information collected will be retained as required by the *Public Records Act 2002*.

**PART 9 – FOR COMPLETION OF THE ASSESSMENT MANAGER – FOR OFFICE USE ONLY**

Date received:  Reference number(s):

Notification of engagement of alternative assessment manager	
Prescribed assessment manager	
Name of chosen assessment manager	
Date chosen assessment manager engaged	
Contact number of chosen assessment manager	
Relevant licence number(s) of chosen assessment manager	

QLeave notification and payment			
<i>Note: For completion by assessment manager if applicable</i>			
Description of the work			
QLeave project number			
Amount paid (\$)		Date paid (dd/mm/yy)	
Date receipted form sighted by assessment manager			
Name of officer who sighted the form			

# Template 3 – Taking overland flow water

(version 1.2 effective 7 February 2020)

This template must be completed and submitted with *DA Form 1 – Development application details* for all development applications for operational works involving taking overland flow water.

A separate Template 3 must be completed for each overland flow works proposed.

It is mandatory to complete the details in all applicable parts in this form and provide any supporting information identified on the form as being required to accompany your development application, unless stated otherwise.

Additional pages may be attached if there is insufficient space on this form for any questions.

**Note:** All terms used within this template have the meaning given under the *Planning Act 2016*, the *Planning Regulation 2017*, or the *Development Assessment Rules (DA Rules)*.

<b>Works name or identifier</b> <small>(e.g. Paddock drain)</small>	Agricultural Dam
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<b>1) Are the works existing?</b> <small>Note: Ensure that the relevant plans that accompany the development application identify the location of existing works and proposed works.</small>	<input type="checkbox"/> Yes – provide construction date (if known): <input style="width: 150px;" type="text"/> <input checked="" type="checkbox"/> No
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<b>2) Will the proposed works replace or amend existing authorised works?</b>	<input type="checkbox"/> Yes – provide the authorisation number: <input style="width: 150px;" type="text"/> provide the description of the authorisation: <input style="width: 150px;" type="text"/> <input checked="" type="checkbox"/> No
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<b>3) What type of overland flow works are proposed?</b>	<input checked="" type="checkbox"/> Dam <input type="checkbox"/> Sump <input type="checkbox"/> Pump <input type="checkbox"/> Drain/Channel <input type="checkbox"/> Other – specify: <input style="width: 150px;" type="text"/>
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<b>4) What is the purpose of the proposed work?</b> <small>(tick all applicable boxes)</small>	<input checked="" type="checkbox"/> Taking water for new stock or domestic purposes <input type="checkbox"/> Alterations of existing works <input type="checkbox"/> Taking water under a water entitlement under the <i>Water Act 2000</i> <input type="checkbox"/> Capturing agriculture or industrial effluent <input type="checkbox"/> Rehabilitating degraded areas – applicable to Warrego, Paroo, Bulloo and Nebine Water Resource Plan areas only. The following documentation may be required as supporting information for the development application: <ul style="list-style-type: none"> <li>A certificate from a professional, qualified in soil science, stating the area concerned is degraded and the works will be an appropriate method for rehabilitating the area</li> <li>Evidence the works are required under the <i>Land Act 1994</i></li> <li>Evidence the works have been approved for funding under the Primary Industries Productivity Enhancement Landcare Loans Scheme.</li> </ul> <input type="checkbox"/> Taking water required by an environmental authority under the <i>Environmental Protection Act 1994</i> or a development permit under the <i>Planning Act 2016</i> or the repealed <i>Sustainable Planning Act 2009</i> . A copy of the relevant environmental authority or development permit may be required as supporting information for the development application.
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<b>5) Provide dimensions for the proposed works</b> <i>(e.g. height, length, rate of take, storage capacity)</i>	Length: 200m Width: 100m Max Depth: 5m Potential Maximum Impoundment Volume: ~4.5ML
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<b>6) What is the location for the proposed works?</b>	<input checked="" type="checkbox"/> Street address or lot on plan <i>(e.g. Lot 3 SP1234)</i>	397 Speewah Road, Speewah Qld. 4881 2RP718600		
	<input type="checkbox"/> Coordinates <i>Note: If more than one set, place each set of coordinates in a separate row</i>	<input type="checkbox"/> Coordinates by longitude and latitude		
		Longitudes(s)	Latitude(s)	Datum <input type="checkbox"/> WGS84 <input type="checkbox"/> GDA94 <input type="checkbox"/> Other: <input style="width: 50px;" type="text"/>
		<input type="checkbox"/> Coordinates by easting and northing		
		Easting(s)	Northing(s)	Zone Ref. Datum <input type="checkbox"/> 54 <input type="checkbox"/> WGS84 <input type="checkbox"/> 55 <input type="checkbox"/> GDA94 <input type="checkbox"/> 56 <input type="checkbox"/> Other: <input style="width: 50px;" type="text"/>
<input checked="" type="checkbox"/> Drawing plan number or identification number:	ELD_001_A3 ELD_002_A3			

<b>7) If the development application is supported by an authorisation to take overland flow water (other than a resource allocation of entitlement), what is the nature of the authorisation?</b> <i>(tick all applicable boxes)</i>	<input checked="" type="checkbox"/> Development application is not supported by an authorisation to take overflow water.
	<input type="checkbox"/> For stock purposes or domestic purposes under section 20(4) of the <i>Water Act 2000</i> .
	<input type="checkbox"/> For limited capacity works under a water-resource plan.
	<input type="checkbox"/> To take water that is contaminated agricultural runoff water or tail water.
	<input type="checkbox"/> To take water required by an environmental authority under the <i>Environmental Protection Act 1994</i> or a development permit under the <i>Planning Act 2016</i> or the repealed <i>Sustainable Planning Act 2009</i> .
<input type="checkbox"/> To take water using existing notified works or reconfiguration of existing works under a water resource plan.	