



Appendix A State Assessment and Referral Agency Meeting Minutes



SARA reference: 2203-28143 SPL
Applicant reference: 1001099

27 April 2022

Townsville City Council
C/- CDM Smith
Level 4, 51 Alfred Street
FORTITUDE VALLEY QLD 4006
MAINEYSA@cdmsmith.com

Attention: Scott Mainey

Dear Mr Mainey

SARA Pre-lodgement advice—Lansdown Eco-Industrial Precinct (LEIP) Project

I refer to the pre-lodgement meeting held on 8 April 2022 in which you sought advice from the State Assessment and Referral Agency (SARA) regarding the proposed development at the above address. This notice provides advice on aspects of the proposal that are of relevance to SARA.

SARA's understanding of the project

It is understood that you are seeking a Development Permit(s) for Operational Work for Roadworks and Water Infrastructure associated with the delivery of the Lansdown Eco-Industrial Estate.

Water Infrastructure

The alignment will include a 20 metre construction corridor and laying of a water pipeline. Trenchless installation of the pipeline by pipe ramming or micro-tunnelling will be used underneath the state transport corridors and waterways. A raw water storage lagoon is proposed at the end of the pipeline alignment. The proposed pipeline begins at the Haughton Pipeline and extends west via road reserves until it reaches the Lansdown Eco-Industrial Estate site. It is understood that the final alignment of the pipeline is still to be determined.

Road Alignment

This work includes upgrades at the Flinders Highway and Jones Road crossings. It includes the redirection of Glenn Road and closure of Jones Road at this crossing. The work is also understood to include the closure of level crossings between Jones Road and Manton Quarry Road (such as Ghost Gum Road and Bidwilli Road).

Supporting information

The advice in this letter is based on the following documentation that was submitted with the pre-lodgement request or tabled at the pre-lodgement meeting.

Drawing/report title	Prepared by	Date
Memorandum – Lansdown Eco-Industrial Infrastructure Project – Approvals Confirmation	CDM Smith and Calibre	30 March 2022

Pre-lodgement meeting record

Meeting date	8 April 2022
Meeting location	Videoconference
Meeting chair	Javier Samanes
Meeting attendees	Refer to Attachment 1
Meeting record	
<p>Project overview:</p> <ul style="list-style-type: none"> • Two components to development – water and road infrastructure (as described above) • You are considering splitting approvals in different packages (i.e. road as two, pipeline as one, dam as one). • SARA is agreeable to this provided that any decision issued is incumbent on a separate approval process under the <i>Planning Act 2016</i> to facilitate the approval through the creation of piecemeal development. • All applications must clearly identify what works / infrastructure are proposed in relation to State interests. <p>Advice on matters of interest to SARA:</p> <p><i>Native vegetation</i></p> <ul style="list-style-type: none"> • SARA notes that the water infrastructure intersects through category B and category R vegetation as well as category X vegetation. All native vegetation on a road reserve is protected regardless of what it is mapped as on the regulated vegetation management map. • As the proposed development will result in the clearing of native vegetation on multiple road reserves it triggers approval. • SARA advises that clearing exemptions within road reserves generally apply only to roadworks being undertaken by a local government and does not extend to water infrastructure. • A section 22A relevant purpose determination must be acquired from the Department of Resources (DoR) prior to lodgement of a development application. • Clearing of category R must comply with the Accepted Development Vegetation Clearing Codes (ADVCC). <p><i>Waterway barrier works (WWBW)</i></p> <ul style="list-style-type: none"> • Multiple waterway crossings proposed, however, the crossings will involve trenching underneath waterways (avoiding bed and banks) and generally avoids triggering WWBW approval. • The Department of Agriculture and Fisheries (DAF) advises that there are potentially unmapped waterways on the site. This must be considered in relation to trenching as well. • DAF recommends undertaking a waterway determination on unmapped waterways. If the raw 	

water storage lagoon is located within a waterway, that will likely constitute assessable development.

- Temporary barriers within green and amber can be in place for 360 days and red waterways can be in place for 180 days under the Accepted Development Requirements for Constructing or Raising Waterway Barrier Works (ADR). If temporary barriers are likely to be in place for longer, it is recommended to include them in a development application.
- SARA advises that there is a difference between waterways / watercourses under fisheries and water legislation. What is considered to be a waterway providing for fish passage under the State's fisheries interests may not be considered to be a waterway administered under the State's water resource interests.
- Drainage features for example, are considered waterways for fish passage under the *Fisheries Act 1994*.

Taking or interfering with water:

- The water infrastructure intersects with Gilligan Creek in two places and the raw water storage lagoon is proposed within unmapped feature.
- The Department of Regional Development, Manufacturing and Water (DRDMW) advise that there is no trigger for works under *Water Act 2000* within drainage features. Where works are within a watercourse it is likely that the riverine protection permit exemption requirements could apply (eg. fill limits, veg clearing).
- The proposed raw water storage lagoon is understood to be a 306ML turkey nest arrangement, partially excavated due to sloping topography. Dam will have potential to capture overland flow water.
- DRDMW advise that as the development is within the Burdekin Basin Plan Area – overland flow works are limited to 250ML.
- If water is required to for construction purposes DRDMW advise that it is permitted given that council is the applicant, but notification must be provided to DRDMW.

Wetland Protection Area:

- Pipeline alignment crosses wetland and wetland buffer area. Proposal may constitute high impact earthworks (HIE), however it is unclear from material provided in support of the pre-lodgement request.
- HIE generally involves works that change the form of land in a way that diverts water to or from a wetland.
- If the development does meet the definition of high impact earthworks within the wetland itself, the Department of Environment and Science (DES) advise that it will be difficult to demonstrate compliance with State code 8: Coastal development and tidal works of the State Development Assessment Provisions (SDAP).
- You advised that after pipeline construction, ground levels will be restored to pre-development condition.
- DES advise that if the area within the wetland protection area is restored following construction, this will possibly avoid referral.
- DES also recommend avoid stockpiling material within wetland areas.

State-controlled road:

- The Department of Transport and Main Roads (DTMR) prefer that pipeline is located as far as possible from the state-controlled road to account for future upgrades.
- No future planning in place for Woodstock-Giru Road.
- DTMR advise that approvals are required under the *Transport Infrastructure Act 1994* (TIA), including a public utility works agreement and road corridor permit.
- Referral for state transport matters may be required for the proposed works but it is all dependant on excavation volumes.

Railway corridors:

- DTMR advise that its assessment in relation to railways will focus mainly on level crossing considerations – stormwater, earthworks, construction management, haul routes.
- Once pipeline alignment is finalised, Queensland Rail (QR) will also need to examine it further.
- If pipeline goes under railway corridor (underboring), there are requirements that apply under s255 of the TIA (ie. wayleave agreement, licence to enter).
- QR have scheduled maintenance / closures which the proponent will have to schedule works around.
- You have advised that Townsville City Council are working with QR already and advice has been sought.

Other matters:

- SARA advises to be aware that any material excavated from watercourses has an Environmentally Relevant Activity threshold of 1,000m³.

Pre-lodgement advice

The following advice is provided in addition to that given at the pre-lodgement meeting and summaries above. It further outlines the aspects of the proposal that are of relevance to SARA.

SARA's jurisdiction and fees

- | | |
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| 1. | <p>In the pre-lodgement meeting you advised that Townsville City Council has confirmed that approval under the Townsville City Plan 2014 is not required. If this is the case, then SARA will be the assessment manager for your proposed development. While there isn't a significant amount of detail regarding the proposal, SARA advises that the application will likely require lodgement under the following assessment manager jurisdictions within the Planning Regulation 2017 (Planning Regulation):</p> <ul style="list-style-type: none"> • Schedule 8, Table 4, Item 3(b) – Operational work that is the clearing native vegetation. • Schedule 8, Table 4, Item 3(f) – Operational work that is the construction of a dam (potentially but is dependent on final size and design of the raw water storage lagoon). • Schedule 8, Table 4, Item 3(k) – Operational work that is the taking or interfering with water. (potentially where non-compliant with the riverine protection permit exemptions and where raw water storage lagoon captures overland flow). • Schedule 8, Table 4, Item 3(m) – Operational work that is constructing or raising waterway barrier works. (potentially where works are non-compliant with the ADR) • Schedule 8, Table 4, Item 3(n) – Operational work that is high impact earthworks in a |
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	<p>wetland protection area (potentially where development is HIE).</p> <ul style="list-style-type: none"> • Schedule 10, Part 9, Division 4, Subdivision 2, Table 5, Item 1 – Operational work near a state transport corridor.
Key matters and action items	
Clearing native vegetation	
<i>Relevant purpose determination</i>	
2.	<p>Prior to submitting the development application to clear native vegetation, you must first obtain written confirmation from the DoR that the proposed development is for a relevant purpose under section 22A of the <i>Vegetation Management Act 1999</i> (VMA).</p> <p>Requests for a ‘relevant purpose determination’ must be lodged in writing directly to the DoR and can be sent to vegetation.support@resources.qld.gov.au. There is no prescribed fee for these requests and the application form can be obtained from: https://www.qld.gov.au/environment/land/management/vegetation/clearing-approvals/development.</p> <p>Please note that a relevant purpose determination needs to be undertaken on a specific development scenario. If there are a number of possible clearing proposals, you are recommended to provide all evidence for the worst case clearing scenario. When DoR is assessing a development application, avoid and minimise will also be reconsidered on the scenario presented. If there is significant difference between the proposal as submitted in s22A relevant purpose determination and the development application, a new relevant purpose determination may be required. You are recommended to have a clear proposal in mind before progressing a relevant purpose determination request.</p> <p>The written request must identify / provide / include all of the following:</p> <ul style="list-style-type: none"> • the relevant purpose for the proposed development • details of the extent of the proposed development • details on the location and extent of the development and clearing footprint by providing: <ul style="list-style-type: none"> - digital data in a format such as shapefile <p>OR</p> <ul style="list-style-type: none"> - a map showing the boundary of the area on an image base with 5 or more points visible in the image base that correspond to identifiable fixed features - the Map Grid of Australia 1994 coordinates and zone references for each point, acquired by GPS or similar system of satellites that receives and processes information - a description of the feature that each point represents <p>OR</p> <ul style="list-style-type: none"> - a description of the boundary of the area by reference to Map Grid of Australia 1994 coordinates and zone references for the area. <p>If the DoR determines that the clearing is for a relevant purpose under section 22A of the VMA, you may then lodge a development application. For further information or assistance applying for a section 22A determination, contact DoR on 13 58 34.</p>
<i>Development application requirements</i>	

3.	<p>The development application will need to address and meet the requirements of State code 16: Native vegetation clearing of the SDAP.</p> <p>Guidance on how to comply with this code is provided in the State Development Assessment Provisions Guidance material: State code 16: Native vegetation clearing, Department of Resources, 2020. This guideline is available online at: https://www.qld.gov.au/environment/land/management/vegetation/clearing-approvals/development. Appendix 2 of this guideline provides details on the standard application information for all development applications involving the clearing of native vegetation.</p>
Constructing or raising WWBW	
<i>Waterway determination</i>	
4.	<p>The proposed works are located on and/or across multiple mapped waterways according to the spatial data layer, <i>Queensland waterways for waterway barrier works</i>. The proposed works are located on and/or across multiple features that may also meet the definition of a waterway as per the What is a waterway? factsheet. Waterway determinations should be obtained for any infrastructure located on or across waterways that are not featured on the spatial data layer <i>Queensland waterways for waterway barrier works</i>.</p> <p>Guidance as to the likely location of waterways in Queensland is presented in the spatial data layer <i>Queensland waterways for waterway barrier works</i>. Please note not all waterways that are present on-ground may be captured by this data layer. Refer to the Guide to determining waterways, for more information on the interpretation of the Queensland waterways spatial data layer. The information to include in a waterway determination is provided as an attachment to this pre-lodgement advice.</p>
Raw water storage lagoon	
5.	<p>SARA advises that the raw water storage lagoon likely constitutes WWBW. Waterway determinations should be undertaken in the raw water storage lagoon's proposed location to determine if the dam is located within waterways providing for fish passage.</p> <p>If it is determined that the raw water storage lagoon is not located within a waterway, the works will not constitute WWBW. If the waterway determination finds that the raw water storage lagoon is located within a waterway, there are provisions for new dams to be constructed under work type 3.1 of the Accepted development requirements for operational work that is constructing or raising waterway barrier works (ADR). Work type 3.1 allows for dams to be constructed on green waterways only.</p> <p>If the waterway determination determines the waterway or waterways should be classified as amber, red or purple for the purposes of fish passage, a development approval will be required.</p>
Water infrastructure (pipeline)	
6.	<p>SARA advises that the pipeline is unlikely to constitute WWBW. During the pre-lodgement meeting, it was indicated that the construction methodologies proposed (tunnelling, horizontal directional drilling etc) will avoid impacting the bed and banks of all waterways. Any changes to the construction methodology, pipe location and finished levels may constitute waterway barrier works. Further pre-lodgement should be sought if the pipeline interacts with the bed and banks of any waterway (mapped or potential).</p>
	<p>SARA notes that the pipeline alignment crosses a mapped wetland near Serpentine Lagoon. Lateral movement across a wetland is a form of fish passage and should be maintained throughout the construction process where possible. The meeting indicated the potential for material to be stockpiled within the mapped wetland area. This aspect may trigger WWBW if the wetland forms part of a waterway, however more information is required to provide a</p>

	<p>definitive response.</p> <p>In any case, it is recommended material be placed outside a wetland given these areas facilitate lateral fish movement between waterways. Avoiding stockpiling material within waterways would avoid the need to obtain a development permit for this aspect of the works.</p>
Road infrastructure	
7.	<p>SARA notes that the road alignment crosses multiple mapped waterways, as well as multiple potential waterways (waterways that are not featured on <i>Queensland waterways for waterway barrier works</i> but may have on-ground features that meet the definition of a waterway).</p> <p>Bridges to facilitate the road crossing over waterways constructed as per the factsheet What is not a waterway barrier work? would not constitute WWBW. If a bridge is unviable, any other crossings would constitute waterway barrier works. You are recommended to consult with the ADR to determine if the proposed road crossing can comply. Waterway determinations should be obtained for all other features that are likely to meet the definition of a waterway. This would allow an impact level (i.e. a colour) to be assigned to the waterway. This would determine ADR work types for potential crossings if crossings are to be constructed as per the ADR.</p> <p>Where works cannot meet the overarching standards and requirements of the applicable work type under the ADR, a development approval is required.</p>
Temporary WWBW	
8.	<p>SARA advises that the placement of temporary waterway barriers to facilitate construction of the proposed works may be conducted under the ADR. If any proposed temporary WWBW cannot meet the ADR, this aspect of the works will need to be covered under the development approval.</p> <p>Note that time limitations apply to all temporary waterway barriers in place under the ADR. If there is any possibility (e.g. due to weather, funding, materials, and personnel) the barriers need to be in place for longer than the prescribed period under the ADR, the proposed temporary WWBW should be included in a development application.</p>
Wetland protection area	
9.	<p>SARA advises that the proposed works are unlikely to require technical assessment for HIE in a Wetland Protection Area so long as they are limited to excavating to establish underground infrastructure, where the excavated land is to be restored, as far as practicable, to its original contours after the infrastructure is established.</p> <p>For your information, HIE are defined as operational work that involves changing the form of land or placing a structure on land, in a way that diverts water to or from a wetland. The HIE definition also contains several exemptions to the requirement to obtain a development permit. The exemptions are listed in full in Schedule 24 of the Planning Regulation.</p>
State transport corridors	
<i>Impacts on the state transport network generally</i>	
10.	<p>Should the proposed development include operational works that requires approval from SARA your development application will need to provide information to demonstrate how it complies with SDAP State code 1: Development in a state-controlled road environment, State code 2: Development in a railway environment and State code 6: Protection of state transport networks.</p> <p>Namely, your application should provide scaled and sufficiently detailed plans and supporting documentation which clearly identify all aspects of the proposed development in relation to the</p>

	<p>state controlled transport network. In particular, the Applicant should demonstrate the following, at a minimum:</p> <ul style="list-style-type: none"> • confirmation of the extent of material being extracted in tonnes • confirmation as to whether the material will be entirely used on-site, or whether access to the state transport network is required to haul the material to or from the proposed development • confirmation of the state-controlled road access/works locations for the proposed development • the type and size of vehicles required to access the subject site via the state transport network should haulage of material off site be required • identify the proposed haulage routes (if required) to and from the subject site, including any state-controlled roads, or state-controlled railway crossings that may be located along the route • confirmation of the duration of operation of the proposed development, and the extent of material to be extracted per annum. <p>Should the state-controlled road be relied upon to haul material to or from the works site(s), you will need to demonstrate that the proposed development will not adversely impact upon the safety, infrastructure condition, or operating capacity of the surrounding State transport network to ensure compliance with the state codes listed above.</p>
<i>Stormwater and flooding</i>	
11.	<p>When lodging a formal development application, you should provide further information to demonstrate the development will not have an adverse impact to the railway and state-controlled road.</p> <p>In particular, flooding and stormwater information should be provided to demonstrate that the management of stormwater and flooding post development can achieve a no material worsening impact (on the pre-development condition) for all flood and stormwater events that exist prior to development and up to a 1% Annual Exceedance Probability (AEP). This should include at least the following flood and stormwater events: 63.2%, 50%, 20%, 10%, 5%, 2% and 1% AEP. Stormwater management for the proposed development must ensure no material worsening to the railway corridor, including rail transport infrastructure, caused by peak discharges, flow velocities, water quality, sedimentation and scour effects. The applicant should also demonstrate that flood storage capacity is maintained on the site with the development. Overland flow paths/ hydraulic conveyance should be maintained on the site as part of the proposed development.</p>
<i>Railway corridor – proposal plans</i>	
12.	<p>When lodging your development application, you are advised to provide scaled and sufficiently detailed plans and supporting documentation which clearly identify all aspects of the proposed development in relation to the railway corridor.</p> <p>In particular, this should include the following amongst other relevant information:</p> <ul style="list-style-type: none"> • The railway corridor boundary should be clearly shown. Works should be located outside the railway corridor, wherever possible. • The location of any existing and proposed infrastructure, utilities or services in relation to the railway corridor. The pipeline alignment and its intended form (above, underground or at grade) should be clearly indicated.

	<ul style="list-style-type: none"> • Vehicle access points, vehicle access tracks, vehicle manoeuvring areas, vehicle parking and construction zones in relation to the railway corridor. • The extent of any works in relation to the railway corridor such as for earthworks and stormwater management.
<i>Railway corridor – works in the railway corridor</i>	
13.	<p>Should the works extend into the railway corridor, the applicant is requested to provide written evidence that the works will be able to be achieved in the railway corridor. Advice is provided that this can be demonstrated through evidence such as a written in-principle approval from the railway manager (Queensland Rail) that the proposed works in the railway corridor are supported.</p> <p>Section 255 of TIA, provides that the railway manager's written approval is required to carry out works in or on a railway corridor or otherwise interfere with the railway or its operations. The State's referral agency assessment of the development application does not constitute an approval under section 255 of the <i>Transport Infrastructure Act 1994</i>. Any pipeline proposal traversing the railway corridor will require relevant approvals from the railway manager such as a wayleave agreement and licence to enter and construct, amongst other approvals.</p> <p>You should contact Queensland Rail at PropertyLeasing@qr.com.au in relation to this matter. You are also advised that any pipeline proposal in the railway corridor will need to comply with the railway manager's requirements, including MD-20-173 – <i>Civil – Non-Queensland Rail Underground Services in Queensland Rail Property</i>.</p>
<i>Railway corridor – railway level crossing safety</i>	
14.	<p>SARA advises that railway level crossings could be adversely impacted on by development generated traffic.</p> <p>The applicant is requested to provide traffic information demonstrating how the proposed development will comply with Performance outcomes (PO) PO35 – PO38, of State Code 2: Development in a railway environment. In particular, the traffic information will be required to address the following:</p> <ul style="list-style-type: none"> • The expected construction traffic distribution on the road network as a result of the proposed development. This should identify the roads or haul routes intended to be used by development generated traffic (including the likely origin and destination of vehicles accessing the development). • Identification of any railway level crossing/s likely to be impacted on by development generated traffic (including construction traffic and staff movements). The proportion of development generated traffic that is likely to use the identified railway level crossing/s should be identified. <p>Should the transportation routes likely to be used by development generated traffic involve existing railway level crossing/s, the following information should be provided:</p> <ul style="list-style-type: none"> • The expected timeframe for the delivery of the proposed development including the commencement of construction and the completion of the works. • Existing traffic flows (expressed as vehicles per day) over the impacted railway level crossing/s and number and percentage of heavy vehicles. • (The timing of the development and traffic data should take into account other development within the Landsdown Precinct such as the Jones Road/Glenn Road/Woodstock Giru Road realignment project, the relocation of the southern passing

	<p>loop on the Great Northern Line, DriveIT NQ, Edify, amongst other developments.).</p> <ul style="list-style-type: none"> The expected development generated traffic (expressed as vehicles per day) and percentage of heavy vehicles that will pass over the impacted railway level crossing/s from the commencement of construction. The maximum size and type of vehicle (including length, width, height and weight) anticipated over the impacted railway level crossings as a result of the development during construction. The following data table is required to be populated for each impacted railway level crossing: <table border="1" data-bbox="363 562 1225 1014"> <thead> <tr> <th colspan="4">AADT over railway level crossing (Prepare table for each impacted railway level crossing)</th> </tr> <tr> <th>Year</th> <th>Without development (background growth)</th> <th>With development</th> <th>No. and dimensions/type of heavy vehicles</th> </tr> </thead> <tbody> <tr> <td>2022 (current scenario)</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Commencement of Construction</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Commencement of the use</td> <td></td> <td></td> <td></td> </tr> </tbody> </table> <ul style="list-style-type: none"> Demonstrate how the development generated traffic will not worsen vehicular queuing (short stacking) issues over the impacted railway level crossing/s. In particular, demonstrate that there is sufficient clearance between the railway level crossing and the relevant intersection to allow the maximum size of vehicle used in the operation to queue. The minimum clearance should be 5m from the edge running rail (of the closest railway track) as per Section 5.4 – Short Stacking and Figure 3.2 – Yellow Box Marking of AS1742.7:2016 Manual of Uniform Traffic Control Devices, Part 7: Railway plus the length of the maximum design vehicle. Demonstrate that the road over the level crossing has adequate width (lanes and verges) for two-way movements of the maximum design vehicle. 	AADT over railway level crossing (Prepare table for each impacted railway level crossing)				Year	Without development (background growth)	With development	No. and dimensions/type of heavy vehicles	2022 (current scenario)				Commencement of Construction				Commencement of the use			
AADT over railway level crossing (Prepare table for each impacted railway level crossing)																					
Year	Without development (background growth)	With development	No. and dimensions/type of heavy vehicles																		
2022 (current scenario)																					
Commencement of Construction																					
Commencement of the use																					
Advice on other matters not regulated under the <i>Planning Act 2016</i>																					
<i>General environmental duty</i>																					
15.	<p>All works undertaken are to be consistent with the General Environmental Duty outlined in section 319 of the <i>Environmental Protection 1994</i> (EP Act), whereby all reasonable and practicable measures must be undertaken to prevent or minimise the environmental harm that may occur as a result of the work. Other provisions under the EP Act that must be complied with are:</p> <ul style="list-style-type: none"> duty to notify environmental harm (section 320-320G) offence of causing serious or material environmental harm (sections 437-439) offence of causing environmental nuisance (section 440) offence of depositing prescribed water contaminants in waters and related matters (section 440ZG) offence to place contaminant where environmental harm or nuisance may be caused (section 443) 																				

	The requirements under the EP Act should be considered when determining stockpiling requirements (i.e. location and duration) with reference to the mapped wetlands.
<i>Tampering with an Animal Breeding Place of a Protected Species</i>	
16.	<p>Under the Nature Conservation (Animals) Regulation 2020, in order to tamper with the breeding place of a protected species (identified in the <i>Nature Conservation Act 1992</i>) appropriate authorisation is required.</p> <p>For further guidance on this please see the Species Management Program information page at https://environment.des.qld.gov.au/licences-permits/plants-animals/species-management-program/index.html</p>
<i>Protected Plants</i>	
17.	<p>It has been noted that the proposed development site is within the high risk area for protected plants (https://environment.des.qld.gov.au/licences-permits/plants-animals/protected-plants/map-request.php).</p> <p>High risk areas are where endangered, vulnerable or near threatened plants are known to exist or are likely to exist. It is a requirement of development within the trigger area to conduct a flora survey in accordance with the Flora Survey Guidelines – Protected Plants (https://environment.des.qld.gov.au/licences-permits/plants-animals/documents/gl-wl-pp-flora-survey.pdf) to determine if there are any protected plants on site.</p> <p>If protected plants are found on site a clearing permit under the <i>Nature Conservation Act 1992</i> will be required. More information on the clearing of protected plants can be found on the following site: https://environment.des.qld.gov.au/licences-permits/plants-animals/protected-plants/index.html</p>

This advice outlines aspects of the proposed development that are relevant to SARA's jurisdiction. You are advised to seek further pre-lodgement advice from SARA once more is known about your proposal.

This advice is provided in good faith and is:

- based on the material and information provided to SARA
- current at the time of issue
- not applicable if the proposal is changed from that which formed the basis of this advice.

The advice in this letter does not constitute an approval or an endorsement that SARA supports the development proposal. Additional information may be required to allow SARA to properly assess the development proposal after a formal application has been lodged.

For further information please contact Javier Samanes, Principal Planning Officer, on 07 4037 3237 or via email NQSARA@dasilgp.qld.gov.au who will be pleased to assist.

Yours sincerely

*Signature
placeholder*

Catherine Hobbs
Acting Manager (Planning)

enc Attachment 1 – Pre-lodgement meeting attendance record
Attachment 2 – Waterway determination process

Development details	
Proposal:	Operational work for water and road infrastructure
Street address:	Various
Real property description:	Various
SARA role:	Assessment manager

Attachment 1 — Pre-lodgement meeting attendance record

Meeting attendees:

Name	Position	Organisation
Scott Mainey	Senior Environmental Planner	CDM Smith
Ricky Chan	-	Calibre
Holly Vermeer	-	Calibre
Joshua Gorman	-	Calibre
Oriel Webster		Townsville City Council
Kim Treers	Fisheries Biologist	DAF
Jacob Vanderzwan	Senior Environmental Officer	DES
Alison Bowen	Water Officer	DRDMW
Helena Xu	Planner	DTMR
Lisa Brooks	Senior Planner	DTMR
Rebecca Kalianiotis	Manager	DTMR
Catherine Hobbs	A/ Manager (Planning)	DSDILGP
Javier Samanes	Principal Planning Officer	DSDILGP

Attachment 2 — Waterway determination process

DAF undertakes waterway determinations for not yet mapped waterways via SARA pre-lodgement process. Through this processes, there is a formal record of the outcome for DAF, SARA and the applicant when a decision is made, rather than when the spatial data layer *Queensland waterways for waterway barrier works* is updated.

To facilitate a waterway determination, the following information will be required from the proponent:

Mandatory

- Determine whether, in accordance with the physical and hydrological attributes defined in the factsheet [What is a Waterway?](#), the waterway in question has at least one of the following features:
 - Defined bed and banks;
 - An extended, if non-permanent, period of flow;
 - Flow adequacy;
 - Fish habitat at, or upstream of the site.
- Provide photos of the waterway. If possible, photos after a substantial rainfall event (e.g. twice a year; or Q1 rainfall event). Photos should include aerial photos and on ground photos and should also be taken up to 200m upstream and downstream of the location of the proposed works (refer to Figure 1 below).
- Gradient of the waterway bed (rise/run) using georeferenced locations shown on a plan view.

Desirable

- Provide information regarding the topography of the site (e.g. topographic maps, gradient of the waterway, aerial view of the location of the calculated slope).
- Describe the waterway characteristics i.e. slope, length, width, bank height etc.
- Describe the waterway flow adequacy i.e. depth, frequency, duration during various flow events. Flood modelling and/or data from nearby gauging stations may assist with this information, although information should also be provided in events Q1 and less.
- Describe the existing habitat features and types i.e. substrate type and size, vegetation, pool size, riffles etc.
- Describe the catchment size and existing characteristics.
- Describe the level of upstream and downstream connectivity in various flow events.
- Discuss the existing structures or barriers on the waterway and their impacts to fish passage.
- Provide measurements of the low flow channel and main channel width of the waterway at selected photo points (refer to the glossary and Appendix 3 of the ADR for further guidance on low flow channel and main channel width).
- If information regarding the hydrology and physical attributes of the site demonstrates that the waterway does not provide for fish passage, there are no further requirements.

When assessing a waterway's aquatic habitat and fish passage connectivity within the landscape, observations should be made at the following locations as a minimum (Figure 1):

- At the proposed works, crossing and/or development;
- 20m upstream and downstream of the proposed works;
- 50m upstream and downstream of the proposed works; and
- 100m upstream and downstream of the proposed works.

If the information provided indicates that the site contains a waterway **and it is unclear whether the waterway provides for fish passage**, a survey of the local fish community by a person suitably qualified in fish passage biology is likely required to determine the fish passage requirements at the site. This will need to include a suitable methodology and be undertaken during a time during adequate flows within the waterway.



Figure 1. Standard locations along a waterway for fish habitat assessment. Where possible, a photo should be taken both upstream and downstream at each location. These distances are a starting point only and individual sites may require an assessment beyond these recommended distances