

SARA reference: 2103-21399 SPL Applicant reference: PR148361

24 March 2021

David Imgraben c/- RPS Australia East Pty Ltd 135 Abbott Street CAIRNS QLD 4870 Stacey.Devaney@rpsgroup.com.au

Attention: Stacey Devaney

Dear David Imgraben

SARA Pre-lodgement advice - 5640 Captain Cook Highway, Mowbray

I refer to your pre-lodgement request received on 4 March 2021 in which you sought pre-lodgement 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

A development application for:

- a Material Change of Use for (Outdoor Sport and Recreation, Short-term Accommodation, Dwelling House, Multiple Dwelling, Food and Drink Outlet, Shop and Tourist Park); and
- Material Change of Use for Environmentally Relevant Activity (ERA 63 Sewerage Treatment) is to be lodged with Douglas Shire Council.

The proposal is for a staged integrated development and includes:

- a wave park
- · ancillary facilities including a freshwater swimming lagoon
- hotel complex providing 150 room short-term accommodation units
- village precinct, comprising shops, food and drink outlets
- self-contained housing precinct (details not known at this stage)
- tourist park providing accommodation cabins (details not known at this stage); and
- a possible lookout and bank stabilisation works on the Mowbray River esplanade.

Supporting information

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

Drawing/report title	Prepared by	Date
Overview of proposal	Stacey Devaney	9 March 2021
Port Douglas Surf Park Master Plan drawings:	Hunt Design	4 March 2021
 DA-01.1 to DA-01.12 DA-02.01 DA-03.1 to DA-03.20 		

Pre-lodgement advice

The following advice outlines the aspects of the proposal that are of relevance to SARA.

SARA's jurisdiction and fees

1. SARA would be the referral agency for the proposed application.

Based on information provided, the proposed development also involves operational work. The applicant may wish to consider lodging a combined application for a material change of use and operational work for the critical works associated with the material change of use with the assessment manger.

The <u>material change of use application</u> will require referral to SARA under the following provisions of the Planning Regulation 2017:

- Schedule 10, Part 5, Division 4, Table 2, Item 1 Environmentally relevant activities
- Schedule 10, Part 6, Division 3, Subdivision 2, Table 2, Item 1 Removal, destruction or damage of marine plants
- Schedule 10, Part 9, Division 4, Subdivision 1, Table 1, Item 1 Development impacting on State transport infrastructure
- Schedule 10, Part 9, Division 4, Subdivision 2, Table 4, Item 1 State transport corridor
- Schedule 10, Part 17, Division 3, Table 6, Item 1 Coastal management district

This will require the payment of the following fees in accordance with:

- Schedule 10, Part 5, Division 4, Table 2, Item 8 the fee is subject to the applicable aggregate score for each environmentally relevant activity and ranges from \$1,685.00 to \$13,486.00
- Schedule 10, Part 6, Division 3, Subdivision 2, Table 2, Item 8 the applicable fee is determined by the area of marine plant disturbance and ranges from \$3,373.00 to \$13,486.00
- Schedule 10, Part 9, Division 4, Subdivision 1, Table 1, Item 8(a)(ii) \$1,685.00
- Schedule 10, Part 9, Division 4, Subdivision 2, Table 4, Item 8(d)(ii) \$3,373.00
- Schedule 10, Part 17, Division 3, Table 1, Item 8(a) \$6,744 and/or Item 8(e) -\$3,373.00

The operational work application will require referral to SARA under the following provisions

of the Planning Regulation 2017:

- Schedule 10, Part 6, Division 3, Subdivision 3, Table 1 Removal, destruction or damage of marine plants
- Schedule 10, Part 6, Division 4, Subdivision 3, Table 1 Constructing or raising waterway barrier works
- Schedule 10, Part 17, Division 3, Table 1, Item 1 Tidal works or work in a coastal management district
- Schedule 10, Part 17, Division 3, Table 2, Item 1 Tidal work in tidal waters

This will require the payment of the following fees in accordance with:

- Schedule 10, Part 6, Division 3, Subdivision 3, Item 8 the applicable fee is determined by the area of marine plant disturbance and ranges from \$3,373.00 to \$13,486.00
- Schedule 10, Part 6, Division .4, Subdivision 3, Item 8 a fee is applicable for each waterway barrier. The applicable fee(s) is determined by the design of each waterway barrier and risk category of the waterway. SARA is unable to provide advice on the applicable fee(s) at this stage.

NOTE: In accordance with Section 33 of the Planning Regulation 2017, the fee for waterway barrier works is capped at \$13,486.00.

- Schedule 10, Part 17, Division 3, Table 2, Item 8(c) \$13,486.00
- Schedule 10, Part 17, Division 3, Table 6, Item 8(b) \$3,373.00

Key matters and action items

2. Mowbray River Esplanade

Master Plan, drawing DA-01.6, prepared by Hunt Design, dated 4/03/21 (**Attachment 2**) identifies the proposal includes a lookout and esplanade bank rectification works.

As an esplanade is considered road under the *Land Act 1994*, the area is under the control and management of Douglas Shire Council. Prior to any development proposal over part of the esplanade adjoining Lot 123 on SR687 it is recommended you consult with the council.

It is also noted the esplanade provides dedicated access to Lot 14 on USL8610 and any proposed development over part of the esplanade would landlock the USL.

Prior to any development proposal, on the Mowbray River esplanade adjoining Lot 123 on SR687 it is recommended you arrange a pre-lodgement meeting with Department of Resources. Please contact the Land Administration and Acquisitions Team, Cairns office on telephone number 4222 5427.

If the proposal involves operational work below high water (i.e. tidal works), owner's consent from the Department of Resources will be required in order to lodge a properly made development application under the *Planning Act 2016*.

Further information, including the relevant application forms, is available on Queensland Government's website.

3. Waterway Determination – Fisheries Act 1994

The spatial data layer Queensland waterways for waterway barrier works displays one mapped waterway across the site and the applicant seeks a waterway determination for this feature.

Based on aerial imagery shown in **Attachment 1**, the Department of Agriculture and Fisheries (DAF) considers the mapping to be incorrect for the amber mapped waterway and this mapped feature is not considered a waterway providing for fish passage.

The downstream limit of the amber waterway as shown in **Attachment 1** becomes tidal and is considered to be a waterway providing for fish passage.

Queensland Globe shows the line of Highest Astronomical Tide (HAT) extends up into the site at two other locations north of the amber mapped waterway. As shown in **Attachment 1**, these non-mapped tidal waterways are considered to be waterways providing for fish passage.

Any operational work that is constructing or raising waterway barriers in any of these tidal waterways may require development approval.

4. Coastal management district

In accordance with Schedule 10, Part 17, Division 3, Table 6, Item 1, development approval is required where:

- the material change of use is likely to involve operational work that is:
 - o carried out completely or partly in an erosion prone area in a coastal management district; and
 - o is extracting, excavating or filling 1,000m³ or more, or clearing native vegetation from an area of 1,000m² or more; or
- building work is carried out completely or partly in an erosion prone area in a coastal management district, if:
 - o the building work involves increasing the gross floor area on the premises by 1,000m² or more.

Assessment benchmarks

The development application will be assessed against the current SDAP, State code 8: Coastal development and tidal works. DES has prepared <u>guidance material</u> to assist applicants in responding to State code 8.

Erosion prone area

Coastal erosion can have serious consequences for development and the community. The worst case is the complete loss of the development and the economic value it provides (such as tourism). What also must be considered is the consequences of protecting the development, with regards to both the direct cost of the works and the impact on the natural system such as the loss of the beach and its aesthetic, recreational and economic values.

Areas at highest risk from coastal erosion have been defined and declared as erosion prone areas under the *Coastal Protection and Management Act 1995*. Erosion prone areas are areas that are vulnerable to erosion or permanent inundation from tidal waters within a 100 year planning period.

From the information provided and upon review of DES's mapping, Lot 123 on SR687 is located partially within the erosion prone area component 1 – 40m buffer from highest

astronomical tide; component 2 – calculated erosion distance; and component 3 – sea level rise

Lot 123 on SR687 is mapped in the Erosion Prone Area for the Douglas Shire Local Government Area as comprising a calculated erosion prone area linear distance (width in metres) of 400 metres in part due to its proximity to the ocean and additionally containing the Mowbray River entrance which accounts for an increase in inflow volume at this location.

Lot 123 on SR687 is further mapped wholly within the high and medium storm tide hazard area. Notably inland areas including Mowbray River Road have previously been inundated during large storm events.

DES's <u>Coastal Hazard Technical Guide</u> provides information on coastal hazards as well as information on recalculating the erosion prone area using a standard, approved formula in the event that the currently mapped erosion prone area is believed not to be a true indicator of the potential hazard.

SARA has concerns the proposed development may not be able to demonstrate compliance with PO1 and PO4 and the associated Purpose Statement of State Code 8.

PO1 - Development does not occur in the erosion prone area unless the development:

- 1. is one of the following types of development:
 - a. coastal-dependent development; or
 - b. temporary, readily relocatable or able to be abandoned; or
 - c. essential community infrastructure; or
 - d. redevelopment of an existing permanent building or structure that cannot be relocated or abandoned: and
- 2. cannot feasibly be located elsewhere.

Development is generally not supported within the erosion prone area in the coastal management district, to ensure that this area is retained in its natural state to allow coastal processes to naturally occur and to avoid increasing the risk to people and infrastructure.

Compliance with PO1 requires the proponent to demonstrate why the development must be located in the erosion prone area and why it cannot be located on a more landward part of the lot or in another location. The application should demonstrate why the proposed development cannot feasibly be located elsewhere outside of the erosion prone area.

PO4 – Development does not significantly increase the risk or impacts to people and property from coastal erosion.

Locating the proposed development within the erosion prone area is regarded as increasing the risk to people and property from coastal erosion. The proposal is likely increasing the exposure of the community to the risks associated by the proposed development in the erosion prone area.

The development application is required to demonstrate why it is not possible to locate the development further landward.

It should further be demonstrated how the risk of erosion is mitigated through design, maintenance or the installation of coastal protection structures, to minimise the risk

associated with the proposed development to people and property.

Water quality

As defined in section 8 of the *Coastal Protection and Management Act 1995*, the proposed development may involve constructing an artificial waterway.

The proposed development will potentially adversely impact upon water quality in and surrounding the site by disturbing sediments and potentially releasing contaminants upon construction.

An Erosion and Sediment Control Plan will be required to ensure that the construction phase will be in compliance with the Earthworks - AS3798 (Guidelines on Earthworks) and Erosion & Sediment Control – Best Practice documents as specified by the International Erosion Control Association (Australasia).

A site-based storm water management plan may also be required in accordance with Section 2.3 of the Queensland Urban Drainage Manual 2013.

Matters of State environmental significance (MSES)

The following MSES is mapped either on the site and/or surrounds:

- regulated vegetation (defined watercourse)
- high ecological value waters (wetland)
- high ecological significance wetlands
- regulated vegetation (category B endangered or of concern)
- regulated vegetation (category R GBR riverine)
- regulated vegetation (essential habitat)
- wildlife habitat (endangered or vulnerable); and
- wildlife habitat (special least concern animal).

To address PO16 it will be required to determine if there are any MSES on or adjacent to the proposed development site. A definition of MSES is available in Schedule 2 of the Environmental Offsets Regulation 2014.

Refer to **Attachment 5** for the full advice on State code 8 performance outcomes that require particular attention when preparing the development application.

5. Tidal works or works in coastal management district

In accordance with Schedule 10, Part 17, Division 3, Table 1, Item 1, development approval is required for any assessable operational work that is:

- (a) tidal works; or
- (b) any of the following carried out completely or partly in a coastal management district
 - (i) interfering with quarry material, as defined under the Coastal Act, on State coastal land above high-water mark;
 - (ii) disposing of dredge spoil, or other solid waste material, in tidal water;
 - (iii) constructing an artificial waterway;
 - (iv) removing or interfering with coastal dunes on land, other than State coastal land, that is in an erosion prone area.

Tidal work is defined in the <u>Coastal Protection and Management Act 1995</u> as any of the following:

- (a) works in, on or above-
 - (i) land under tidal water; or
 - (ii) land that will or may be under tidal water because of development on or near the land;
- (b) works that are—
 - (i) an integral part of works mentioned in paragraph (a) (the principal works): and
 - (ii) carried out in, on or above land directly adjacent to the land in, on or above which the principal works are carried out:
- (c) works designed to be exposed to tidal water because of shoreline fluctuations;
- (d) works designed to prevent the erosion of land by the sea (whether or not within the ebb and flow of the tide at spring tides);
- (e) works within the boundaries of a canal, whether above or below high-water mark.

SARA notes the proposed development proposes Mowbray River esplanade bank rectification works and works to protect the existing tidal work, and any filing of the tidal drains above HAT is considered reclamation works.

The Coastal Protection and Management Act 1995 defines reclamation as meaning:

"of land under tidal water, means raising the land above high-water mark, whether gradually and imperceptibly or otherwise, by carrying out works, including dredging and the depositing of solid material".

Assessment benchmarks

Any operational work that is tidal works and work in a coastal management district will be assessed against the current SDAP State code 8: Coastal development and tidal works.

It is noted that the development may involve reclamation of a tidal waterway. PO22 is relevant to reclamation and states: development does not involve reclamation of land below tidal water, other than for the purposes of:

- coastal-dependent development, public marine development or community infrastructure: or
- 2. strategic ports, priority ports, boat harbours or strategic airports and aviation facilities, in accordance with a statutory land use plan or master plan, where there is a demonstrated net benefit for the state or region and no feasible alternative exists; or
- 3. coastal protection work or work necessary to protect coastal resources or coastal processes.

6. Tidal works – maritime safety

In accordance with Schedule 10, Part 17, Division 3, Table 2, Item 1, development approval is required for any tidal works in tidal waters.

Assessment benchmarks

The development application will be assessed against the current SDAP, State code 7: Maritime safety. DTMR (Maritime Safety Queensland) has prepared <u>guideline</u> to assist applicants in responding to State code 7.

7. Environmentally relevant activities – general information

To undertake an environmentally relevant activity (ERA) in Queensland you must be a registered suitable operator (RSO).

If you are not an RSO, you may apply to become one before or at the same time as applying for your environmental authority (EA) – this is a free application.

The Department of Environment and Science (DES) keeps an online <u>register</u> of all suitable operators. For further information including the application form to become an RSO, please see the Queensland Business website.

DES's <u>Information sheet - Environmentally relevant activities</u> also provides information on all ERA thresholds, and whether an ERA is a concurrence ERA. Where an ERA is a concurrence ERA, development approval is required, and the development application is also taken to be an application for an Environmental Authority (EA).

8. Environmentally relevant activity – Sewage treatment

The proposal includes the installation of onsite sewage treatment. Occupancy for the proposed development is expected to be variable.

In accordance with Schedule 10, Part 5, Division 4, Table 2, Item 1, development approval is required for any concurrence environmentally relevant activity(s) (ERA).

Effluent release

The pre-lodgement request material does not specify the class of effluent that will be generated or specified how the effluent will be released (e.g. irrigate it by spray and subsurface irrigation over an area of the site).

Refer to the Queensland Health <u>guideline</u> for low exposure recycled water schemes for details on what uses are appropriate for each class of effluent.

Please note:

- If you determine that you require more irrigation area than anticipated and are limited by space, you may like to consider reuse of effluent for landscape maintenance on the site, in accordance with the guideline. You might also consider providing effluent to a third party under a written agreement.
- The use of MEDLI modelling may be used to also support the irrigation scheme proposed on site.
- Different classes of effluent will also require different monitoring frequencies and maximum contaminant loadings – for example, Class A effluent would require a more frequent monitoring regime with stricter limits than a Class B effluent.

For details on irrigation variables and modelling requirements, refer to the DES's <u>technical</u> guideline for further information.

DES advises it is imperative that you accurately determine your sewage inflow volumes when considering the design capacity of your treatment system, especially if you are looking to stage the development, in particular:

- Consider all other potential sources of sewage on site, e.g. laundry facilities, and make sure that they are included in the calculations.
- Note that undersizing a treatment system may result in the system being unable to cope with the volume of effluent passing through it; oversizing a system can cause problems in the treatment process leading to poor effluent quality.
- Make sure sufficient effluent storage is available for peak periods, and consider whether balance tanks may be required to manage inflow for peak periods.
 Consider if the local climate is likely to influence storage requirements, i.e. whether you are likely to have long rainy periods where you are unable to

irrigate to land.

Also be aware of health considerations in effluent disposal, and their potential impact on water in and around the site. There is a registered bore RN 10900032 located on the southwest border of the site. You will need to ensure that the proposed effluent disposal scheme will not cause adverse impacts on environmental values of groundwater.

There is also a potential that visitors to the park will be exposed to effluent during activities.

Refer to the Queensland Health <u>guideline</u> for low exposure recycled water schemes for further information on required controls for effluent disposal.

ERA63

Treatment of sewage in works with a total daily peak design capacity of 21 equivalent persons (EP) is considered to be an ERA 63, Sewage treatment – where there are releases to the environment as a part of the treatment process.

There are a number of thresholds under ERA 63. As you are proposing to stage the development, you may meet different thresholds of ERA 63 at different times. The definition of ERA 63 is provided in the Environmental Protection Regulation 2019.

The ERA is defined by the design capacity of the sewage treatment system, and not the flow rate at any one time; i.e. if you establish a system on site that is designed at a capacity capable of treating 100% of the park design, you will be licensed for that design, even if the system is not being fully utilised.

Note that ERA63 thresholds (a)(i) – treatment with irrigation, 21-100EP; and (b)(i) treatment with irrigation, 100-1500 EP are not concurrence ERAs and only require approval for an Environmental Authority.

An application for Environmental Authority is made directly to DES. If the proposal only requires an approval for an EA, pre-lodgement advice can be sought directly from DES by emailing palm@des.qld.gov.au or phone 13 74 68. To assist DES, complete the *Application for a pre-design/pre-lodgement application form—ESR/2015/1664*.

ERA63 *threshold(c), 1500-4000EP*, is a concurrence ERA and requires development a development permit and an EA. A development application for this threshold is also taken to be an application for an Environmental Authority.

Concurrence ERA63 requirements

If the proposed development involves a concurrence ERA63, the development application will be assessed against the current SDAP, State code 22: Environmentally relevant activities.

Assessment benchmarks

The development application will need to include information addressing all the information listed under s125 of the *Environmental Protection Act 1994*, including relevant technical information, encompassing:

- a description of the proposed activity (e.g. ERA 63)
- a description of the land on which the activities will be carried out
- an assessment of the likely impact of each relevant activity on the environmental values, including
 - o a description of the environmental values likely to be affected by each

relevant activity

- details of any emissions or releases likely to be generated by each relevant activity
- a description of the risk and likely magnitude of impacts on the environmental values
- o details of the management practices proposed to be implemented to prevent or minimise adverse impacts
- o details of how the land the subject of the application will be rehabilitated after each relevant activity ceases
- o a description of the proposed measures for minimising and managing waste generated by each relevant activity; and
- o details of any site management plan that relates to the land the subject of the application.

Guidance on the type of technical information to provide in the application may be found on Business Queensland's website.

The development application must also address the performance outcomes for the environmental objectives of the operational assessment prescribed in Schedule 8, Part 3, Table 1 of the Environmental Protection Regulation 2019.

Of particular relevance to sewage treatment with land disposal, will be an operational assessment of land, air, water, and groundwater. The application should detail mitigation/control measures that address the performance outcomes.

The development application should also address the environmental protection policies. Under s51(c) of the Environmental Protection Regulation 2019, DES will need to consider each of the following under any relevant environmental protection policies:

- i. the management hierarchy
- ii. environmental values
- iii. quality objectives; and
- iv. the management intent (where applicable).

The Environmental Protection (Water and Wetland Biodiversity) Policy 2019 (EPP - Water) and the Environmental Protection (Air) Policy 2019 are of particular relevance.

The management hierarchy prioritises how emissions to the environment are to be managed. For example, under the EPP - Water, irrigation of treated effluent to land is more preferable to releases to waters.

The policies also detail environmental values and quality objectives which will inform the s125 of the EP Act requirements. Specifically, the description of environmental values, and the risk and likely magnitude of impacts on those values. The policies will also inform what are considered acceptable residual impacts.

If any matters of state environmental significance (MSES) will be impacted by the proposed development, you will need to provide information on how these impacts have been avoided, and where they have not been avoided how any impacts to MSES have been minimised. If, following this and MSES will still be impacted from the development, you must determine if the impact results in a significant residual impact to MSES. An environmental offset may be required.

9. Environmentally relevant activity - Extractive and screening activities

In accordance with Schedule 10, Part 5, Division 4, Table 2, Item 1, development approval will be required if the proposed development involves concurrence ERA16 for extractive and screening activities.

ERA16 includes extraction or dredging, being the mechanical removal of material from the bed of any waterway, with a total threshold of 1,000 tonnes of material or more. It is unclear whether dredging will occur within tidal waterways as part of the proposed development.

Schedule 2, Part 4, Section 16 of the <u>Environmental Protection Regulation 2019</u> (EP Regulation) specifies extractive activities as follows:

- (a) Extractive and screening activities (the relevant activity) consists of any of the following—
- (b) dredging a total of 1,000t or more of material from the bed of naturally occurring surface waters, in a year;
- (c) extracting, other than by dredging, a total of 5,000t or more of material, in a year, from an area;

Examples—

- extracting material for excavating a bund between existing waters and an artificial waterway being constructed on dry land
- extracting virgin rock from a quarry
- extracting rock, that has been previously broken, from a stockpile on the site from which the rock was originally extracted
- (d) screening 5,000t or more of material, in a year.

Bed is defined in the EP Regulation as, of any waters—

- (a) includes an area covered, permanently or intermittently, by tidal or non-tidal waters; but
- (b) does not include land adjoining or adjacent to the bed that is from time to time covered by floodwater.

Further information is available in DES's Guideline - Dredging.

Assessment benchmarks

Should the proposed development involve ERA16, the development application will be assessed against the current State Development Assessment Provisions (SDAP), State code 22: Environmentally relevant activities.

If you require additional information relating to whether an ERA/EA for extraction or dredging applies, SARA can provide further pre-lodgement advice. Additional information SARA requires includes:

- verifying the total quantity of material to be excavated (in cubic metres)
- provide a survey plan to determine the relevant tidal planes (e.g. Highest Astronomical Tide, Mean High Water Springs) within the development site
- methodology regarding whether the material for cutting and filling will be removed from the site, and whether blasting will occur.

10. Removal, destruction or damage of marine plants

In accordance with Schedule 10, Part 6, Division 3, Subdivision 2, Table 2, Item 1 and Schedule 10, Part 6, Division 3, Subdivision 3, Table 1, development approval is required

for any marine plant disturbance.

Marine plants are protected under the *Fisheries Act 1994* and are a matter of State environmental significance under the Environmental Offsets Regulation 2014.

Any material change of use of the land may include inherent impacts which constitute the removal, destruction or damage of marine plants. For example, changing the use of the land for tourism facilities adjacent to tidal areas is likely to require filling in of tidal land, storm water infrastructure and flood retention basins.

The footprint of the facility necessary for the functioning of the development, should be designed and located to avoid impacts on marine plants.

Under the Planning Regulation 2017, if marine plants are proposed to be impacted through the material change of use of the land, they must be identified and applied for at this stage of the development application.

Avoiding marine plants would remove the risk of impact to marine plants and the need for any approvals associated with these works.

Marine plants include:

- any plant (a tidal plant, including marine algae) that usually grows on or adjacent to tidal lands whether it is living, dead, standing or fallen; or
- any plant material on tidal land (up to the level of Highest Astronomical Tide (HAT)).

Plants such as mangroves, mangrove fern, saltcouch or samphire species are considered marine plants regardless of whether or not they are above or below the level of HAT.

Marine plants do not include:

- a plant that is prohibited matter or restricted matter under the *Biosecurity Act* 2014; or
- a plant that is controlled biosecurity matter or regulated biosecurity matter under the *Biosecurity Act 2014*.

Marine plant protection applies irrespective of the tenure (e.g. unallocated state land and all state tenured lands, including private freehold and leasehold lands) of the land on which the plant occurs, the time the plant has been growing at the location, or the degree of or purpose of the disturbance.

Marine plants are likely to present in all onsite tidal waterways. As discussed in item 9 of this pre-lodgement advice, the proposal involves the clearing and filling of two of the tidal waterways which would result in the removal, destruction, and damage to marine plants.

It is unclear if marine plants will be impacted by the proposed pedestrian crossings on the most northern waterway.

Master Plan, drawing DA-01.6, prepared by Hunt Design, dated 4/03/21 (**Attachment 2**) also identifies a possible lookout and esplanade bank rectification works on the Mowbray Reiver Esplanade. If marine plant disturbance is required for this component of the works, it will also constitute assessable development.

It is also noted the proposal may involve extraction of water from either the Mowbray River or from the onsite waterway proposed to remain. All intake structures should be adequately screened to avoid injuring or killing fish and suitably located to avoid any marine plant disturbance.

There are no work types under DAF's <u>accepted development requirements for operational</u> <u>work that removal, destruction and damage to marine plants (ADR)</u> that allow for marine plant disturbance associated with filling in tidal waterways for a material change of use. This aspect of the works is assessable development.

Assessment benchmarks

The development application will be assessed against the current SDAP, State code 11: Removal, destruction or damage of marine plants.

SARA has concerns the proposed development may not be able to demonstrate compliance PO1 and PO2, and State code 11 purpose statements.

The purpose of State code 11 is to ensure that development which involves the removal, destruction or damage of marine plants:

- 1. maintains the extent, distribution, diversity and condition of marine plant communities and protects the ecological functions to which they contribute
- 2. maintains the health and productivity of fisheries resources and fish habitat
- minimises impacts on the management, use, development and protection of fisheries resources and fish habitat
- avoids impacts on marine plants that are matters of state environmental significance, and where avoidance is not reasonably possible, minimises and mitigates impacts, and provides an offset for significant residual impacts where appropriate.

PO1: There is a demonstrated need for the development, and alternatives (locations and designs) which do not involve removal, destruction or damage of marine plants and impacts to fisheries resources and fish habitats are not viable.

The development application must provide adequate justification for the removal, destruction and damage to marine plants. This includes outlining other options considered to meet the need for the development, as well as a comparison of the short and long-term impacts to marine plants.

Suitable evidence must also be provided demonstrating that other reasonable options that have lesser impacts on marine plants have been considered and are unviable.

PO2: Only those aspects of a development that have a functional requirement to be located on tidal land create the requirement to remove, destroy or damage marine plants. Ancillary elements (for example: car and trailer parks, rest rooms, offices) occur outside of tidal land.

The proposed development and its ancillary elements do not have a functional requirement to be located on tidal land.

Refer to **Attachment 3** for the full advice on State code 11 performance outcomes that require particular attention when preparing the development application.

11. Constructing or raising waterway barrier work

In accordance with Schedule 10, Part 6, Division 4, Subdivision 3, Table 1, development approval is required for any waterway barrier works in the tidal waterways.

SARA has undertaken a review of the tidal waterways shown in **Attachment 1** and the Master Plan, drawing DA-01.6, prepared by Hunt Design, dated 4/03/21 (**Attachment 2**). It is understood:

 The middle tidal waterway is proposed to be cleared and filled to facilitate the proposed development. This component of the proposal constitutes waterway barrier works. The northern most tidal waterway is to remain in place. The master plan also shows the proposed pedestrian pathway crossing this waterway. It is not clear what the pathway design is at this stage, however, this aspect of the works has the potential to constitute waterway barrier works.

Please refer to the following DAF factsheets for more information on waterway barrier works:

What is a waterway?;

What is a waterway barrier work?;

What is not a waterway barrier work?

Culvert crossings and bed level crossings across tidal waterways cannot be constructed under DAF's Accepted development requirements for operational work that is constructing or raising waterway barrier works.

A bridge that meets the requirements of the DAF factsheet "What is not a waterway barrier work?" for tidal waterways may not constitute a waterway barrier and therefore is not assessable development. All other designs are likely to be assessable development, including any works that will result in a reduced cross-sectional area or raise the natural bed level of this waterway.

It is also noted the proposal may involve extraction of water from either the Mowbray River or from the onsite waterway proposed to remain. All intake structures should be adequately screened to prevent fish from being pulled into the intake structures.

Under the Planning Regulation 2017, constructing or raising waterway barrier works is an operational works development trigger. Impacts to waterways providing for fish passage, is a MSES under the *Environmental Offsets Regulation 2014* and should be identified and avoided where possible, in early stages of planning.

To avoid significant project management risks, you may wish to consider lodging a combined development application with the assessment manager, for a material change of use and operational works for any critical works associated with the development, such as the filling of any tidal waterways.

Assessment benchmarks

The development application will be assessed against the current SDAP, State code 18: Constructing or raising waterway barrier works in the fish habitats.

SARA has concerns the some of the proposed operational works may not be able to demonstrate compliance with PO1 and PO2, and the purpose statement of State Code 18.

The purpose of State code 18 is to ensure that development involving the constructing or raising of waterway barrier works in a fish habitat:

- 1. maintains fish movement and connectivity throughout waterways and within and between fish habitats
- 2. maintains the health and productivity of fisheries resources and fish habitat
- 3. maintains the community and fishing sectors' use of the area and access to fisheries resources
- 4. only occurs only where there is a need for the development and no other reasonable alternative exists
- 5. provides adequate fish passage including a fish way, if necessary
- 6. avoids impacts on marine plants, waterways that provide for fish passage and declared fish habitat areas that are matters of state environmental significance, and

where avoidance is not reasonably possible, minimises and mitigates impacts, and provides an offset for significant residual impacts where appropriate.

PO1:There is a demonstrated need for the development and alternatives (locations and designs) which have a lesser impact on fish passage or do not involve constructing or raising waterway barrier works are not viable.

The development application must demonstrate the need for the development and justify why alternatives which avoid impacts on fish passage or do not involve the constructing or raising waterway barrier works are not viable. This includes justifying the need for all waterway barriers.

Justification must include an options analysis that clearly demonstrates other all options considered to meet the required need for the development along with the short and long-term impacts to fish passage.

The filling of tidal waterways does not avoid impacts on fish passage and alternative designs or reconfigurations should be considered to avoid the need for filling waterways.

PO2: Development has a functional requirement to be located within a waterway. Ancillary elements of development occur outside the waterway.

The filling of tidal waterways to facilitate the construction of the proposed development do not have a functional requirement to be located within the tidal waterway.

The filling of any waterway providing for fish passage will not:

- maintain fish movement and connectivity throughout waterways and within and between fish habitats
- maintain the health and productivity of fisheries resources and fish habitat
- only occur where there is a need for the development and no other reasonable alternative exists
- provide adequate fish passage
- avoid impacts on waterways that provide for fish passage that are matters of state environmental significance.

Any rehabilitation of tidal waters to provide a positive fish outcome may help to reduce the scale of any significant residual impact (SRI) on fish passage. Options to mitigate any unavoidable SRI to fish passage must be pursued before an offset can be considered.

You may also wish to consider a redesign of the proposed works to avoid the onsite tidal waterways. Aerial imagery indicates there is space outside of the waterways that can likely facilitate all elements of the proposed works.

Refer to **Attachment 4** for full advice on State code 18 performance outcomes that require particular attention when preparing the development application.

12. State transport infrastructure

In accordance with Schedule 10, Part 9, Division 4, Subdivision 1, Table 1, Item 1, development approval is required as the proposed development involves an aspect of development stated in Schedule 20, Local Government Area 2 of the Planning Regulation 2017.

SARA notes the short-term accommodation component is designed to accommodate more than 75 people and understands the finer detail of the self-contained housing precinct (residential – dwelling houses) and the Tourist park (cabin park) is not yet known.

Assessment benchmarks

The development application will be assessed against the current SDAP, State code 6: Protection of state transport networks, Table 6.2.2. Of particular relevance to the proposed development is PO1 to PO6, PO10 to PO12, PO13, PO15 to PO22.

The Department of Transport and Main Roads (DTMR) has prepared guidance material to assist applicants in responding to SDAP.

Refer to item 11 in this pre-lodgement advice for further discussion on the requirement for a Stormwater Management Plan and filling and excavation.

The development application will also need to address the following:

Private Bus Setdown and Lay-by Facilities

- Provide a bus setdown facility at the entry to the development to accommodate the
 maximum design vehicle for a private coach/bus which would be a single unit rigid
 bus of 14.5m in length. The bus setdown facility should be parallel to the kerb.
- Demonstrate that the bus setdown facility will have adequate capacity (number of bus parking bays) to cater for the demand generated by the development.
- Provision for bus lay-by parking may also be required on the development site commensurate with demand.
- All bus parking zones should be separate from passenger loading zones for taxis, rideshare and private vehicles to avoid vehicle conflict and maximise safety and efficiency.
- Bus parking should be connected to the entrance of the development by direct, safe and convenient pedestrian pathways that minimise vehicular/pedestrian conflict.
- Demonstrate through a swept path analysis that the maximum design vehicle will be able to manoeuvre into and out of the bus setdown facility and layby areas including independent operation, for the parking of multiple buses, and into and out of the site. Guidance on suitable dimensions can be obtained from Chapter 5 – Bus Stop Infrastructure of the Public Transport Infrastructure Manual 2015.
- Provide a waiting area of adequate dimensions for the anticipated dwell time of passengers at the bus setdown and a boarding point. The bus waiting area should include shelter and seats.

Taxis

- Demonstrate how taxi facilities with sufficient capacity (number of parking bays) will be provided to cater for the demand generated by the development. This should consider likely passenger volumes and the demand for taxi services. Please refer to Chapter 7 – Taxi Facilities of the Public Transport Infrastructure Manual 2015.
- Demonstrate how taxi facilities will be appropriately positioned to maximise
 coverage and decrease the distance that potential passengers have to walk.
 Importantly, taxi services provide an essential form of transport for those who
 cannot access other forms of transport or drive independently and are completely
 reliant on taxi services. Taxi ranks should be sited parallel to the kerb at the main
 entry to the development. Taxi ranks should have their own dedicated parking bays
 and not be used for other pick-up and drop-off purposes or buses.
- Demonstrate that taxi facilities will be in accordance with relevant Australian Standards to ensure their safety and operational integrity as well as accessibility to people with a disability. Please refer to AO22.1 and AO22.2 of PO2.

Rideshare

- Demonstrate how the development will provide passenger loading zones for dropoff/ pick-up by rideshare with sufficient capacity to cater for the demand generated by the development.
- Demonstrate how passenger loading zones will be suitably positioned, in convenient location(s) to cater for this demand.

Pedestrian access to public passenger transport

- Provide an Active Transport Plan demonstrating how safe, direct and convenient access to public passenger transport, including on-site taxi, private bus and rideshare setdown facilities, will be achieved. This should show:
 - o the internal pedestrian pathway network, including pedestrian priority treatments across internal roadways, and how these link to on-site waiting areas for public passenger transport
 - that any internal pedestrian crossings have adequate separation from vehicle setdown facilities. Guidance can be found in the Transport Operations (Road Use Management – Road Rules) Regulation 2009, in particular, non-signalised pedestrian crossings.
 - o pedestrian walkways have suitable width to accommodate waiting areas and through movements where adjacent to public passenger transport.

Guidance for the dimensions of bus parking can be found in Chapter 5 – Bus Stop Infrastructure and Chapter 7 – Taxi Facilities of the Public Transport Infrastructure Manual 2015.

13. State controlled road

In accordance with Schedule 10, Part 9, Division 4, Subdivision 2, Table 4, Item 1 – development approval is required as the premises is located within 25 metres of a state-controlled road.

As shown by Master Plan, drawing DA-01.6, prepared by Hunt Design, dated 4/03/21 (**Attachment 2**), the proposed development will involve a new relevant vehicular access via the Captain Cook Highway, a state-controlled road. As shown on the Master Plan, the new and changed access be will be upgraded to include an auxiliary high angle entry and exit, a separate right-turn exit and a channelized right turn.

Assessment benchmarks

The development application will be assessed against the current SDAP, State code 1: Development with a state-controlled road environment. DTMR has prepared <u>guidance material</u> to assist applicants in responding to SDAP.

Stormwater and drainage

The development application will need to include a Stormwater Management Plan to demonstrate how the proposed development is able to achieve compliance with stormwater, drainage and flooding relating to PO12 – PO14.

Consideration should be given to the <u>Queensland Urban Drainage Manual</u> Fourth Edition, prepared by the Institute of Public Works Engineering Australasia.

Stormwater and floodwater flow from the proposed development must not damage or interfere with the state-controlled road. Existing stormwater drainage infrastructure on the state-controlled road corridor should not be interfered with or damaged by the proposed development such as through concentrated flows, surcharging, scour or deposition.

The stormwater information should also include details of the mitigation measures proposed

to address any potential stormwater impacts (including flooding impacts) from the proposed development. The design flood peak discharges should be shown for the mitigated case to demonstrate there is a no worsening impact on the Captain Cook Highway.

Filling and excavation

The development application will need to address PO4 to PO11 with respect to any proposed operational work onsite and demonstrate the works do not impact on the state-controlled road.

Access to the state-controlled road

DTMR has undertaken a review of the proposed road access as shown by Master Plan, drawing DA-01.6, prepared by Hunt Design, dated 4/03/21 (**Attachment 2**), which has been designed generally in accordance with Austroads Figure 8.5: Rural channelized left-turn treatment (CHL) with high entry angle and includes an auxiliary high angle entry and exit, a separate right-turn exit and a channelized right-turn (CHR)

DTMR is satisfied the proposed access has appropriate sight visibility in both directions from the access location along the Captain Cook Highway and the proposed road access can adequately accommodate increased traffic generation within a 100km speed zone from the proposed development.

The proposed road access works shown on Master Plan at **Attachment 2** demonstrates compliance with PO20 – PO22 of State code 1: Development in a state-controlled road environment and PO1 – PO3 of State code 6: Protection of Transport Networks.

It is recommended you seek further pre-lodgement advice on any proposed changes to the development that would generate traffic volumes to require the access/intersection to be signalized.

Please note the development application will also be taken to be an application for a decision under Section 62 of the *Transport Infrastructure Act 1994*.

Road lighting

The proposed development is located in a rural area. The applicant should undertake a lighting assessment to indicate if a flag light is required for the changed access.

The lighting assessment should be undertaken based on vehicle movements via the Captain Cook Highway utilising 'Figure 7.1.1 warrants for consideration of road lighting' of the Road Planning and Design Manual (2nd Edition), Transport and Main Roads, July 2016, Volume 6 - Lighting.

Lodgement material

- 14. It is recommended that the following information is submitted when referring the application to SARA:
 - Completed copy of <u>DA Form 1</u>
 - <u>Template 4</u> is also required for any operational work application involving waterway barrier works
 - Application form for an Environmental Authority (if applicable).
 - A full response to the relevant sections of SDAP for the material change of use application:
 - o Code 1: Development in a state-controlled road environment.
 - Code 6: Protection of state transport networks
 - o Code 8: Coastal development and tidal works
 - o Code 11: Removal, destruction or damage of marine plants

- o Code 18: Constructing or raising waterway barrier works in fish habits
- Code 22: Environmentally relevant activities
- A full response to the relevant sections of SDAP for the operational work application:
 - o Code 7: Maritime safety
 - o Code 8: Coastal development and tidal works
 - o Code 11: Removal, destruction or damage of marine plants
 - o Code 18: Constructing or raising waterway barrier works in fish habits
- Owner's consent from the Department of Resources (if applicable)
- Relevant plans as per the DA Forms guide, including the following:

o for tidal works and coastal management district

- detailed and appropriately scaled drawings and/or plans which clearly identify the location of proposed development, including:
 - adjacent real property boundaries
 - adjacent riverbanks, walls, sandbanks, structures, the limit of vegetation, and/or other principal features of the immediate area
 - relevant tidal planes (e.g. HAT, Mean High Water Springs)
 - the location and setting out details for cross-sections; and
 - any other information required to accurately define the area and to allow the site to be readily identified from the plan.

All plans/drawings should include title, date and numbering suitable to identify the plan and should be mapped to GDA94 projection.

- description of the land intended to be developed, including the property address, tenure and real property description of the land; and
- description of the development, including:
 - location of all built structures as a result of the proposed development
 - description of any operational works occurring on site including expected timeframes
 - any machinery to be used or stored on the site
 - staging of the development, if applicable.

o for removal, destruction or damage of marine plants

- □ detailed plans showing:
 - the total amount of marine plants that will be disturbed, identifying portion of permanent and/or temporary disturbance (in square meters or hectares)
 - detailed plans showing the location of the marine plants to be disturbed in relation to the development works
 - the level of HAT, mean high water spring tide, and low water spring tide
 - location and extent of fish habitat within the development area, including creeks, sand and/or yabby banks, drainage

lines, lagoons and marshes. Note: All plans should be able to be read to scale at A3 size. for constructing or raising waterway barrier works ☐ detailed plans clearly showing the location of the proposed works in relation to existing waterways detailed plans clearly showing a cross section of the proposed waterway barrier works in relation to the existing bed and banks of each impacted waterway □ a longitudinal section of the proposed waterway barrier works in relation to the bed of the waterway upstream and downstream of the works. Note – all plans should be able to be read to scale at A3 size written documentation discussing the following: details of the purpose of the proposed works (tourist facility) a description of the waterway proposed to be impacted (e.g. condition, size, connectivity, general hydrology) and nature of the impact a description of the work method (e.g. timing, equipment to be used) a detailed description of the alternatives considered to reduce impacts on the waterway, as applicable (e.g. alternative designs, locations, setbacks/buffer distances) details of on-site mitigation actions, during and after the development the extent of any future maintenance works required for the continued safe operation of the proposed structure or facility; and impacts to fish passage. It must firstly be demonstrated that impacts to waterways providing for fish passage have been avoided. Where avoidance is not reasonably possible, impacts to waterways providing for fish passage must be mitigated. An environmental offset pursuant to the Environmental Offsets Act 2014 may need to be provided for any significant residual impact. for protection public passenger transport provide scaled and sufficiently detailed plans and supporting documentation which clearly identify all aspects of the proposed development and its layout this should include the following amongst other relevant considerations: the layout, design and extent of all proposed buildings, structures and facilities, clearly depicting the nature of the proposed use and its attractions vehicle access points the design of the internal car park including vehicle

manoeuvring areas/driveways, passenger loading areas port cochere, on-site taxi ranks, private bus parking facilities (setdown facilities and layover) and access to the state-controlled road.

15. Native vegetation

The Regulated Vegetation Management Map indicates the premises and the Mowbray Reiver esplanade is mapped as containing:

- Category B Least concern, regional ecosystem 7.1.1 Mangrove closed shrub to open forest of areas subject to regular tidal inundation.
- Category R Of concern; and
- · Category X Non-remnant.

Marine plants are not regulated under the Vegetation Management Act 1999.

The proposed development within Lot 123 on SR687 does not trigger referral agency assessment for native vegetation clearing. The proposal involves clearing that is exempt clearing work under Schedule 21, Planning Regulation 2017 - for freehold land, clearing vegetation in a Category X area.

Any vegetation clearing may be undertaken under an <u>Accepted Development Vegetation</u> <u>Clearing Code</u> - Clearing for infrastructure. Clearing must be undertaken in accordance with the code currently in effect and record-keeping requirements apply.

Prior to undertaking any clearing, a notification must first be lodged with Resources. You can notify online for free and the notification is valid for two years. The details for lodging a notification for this code are available on the Department of Resources <u>website</u>.

Any clearing vegetation to the extent the clearing is in any category R areas within Lot 123 on SR687 and/or within the Mowbray River esplanade is not a relevant purpose under the *Vegetation Management Act 1999*. Accordingly, clearing of vegetation in these areas cannot be approved under a development approval.

If the proposed development includes clearing vegetation in any category R areas, you should ensure the clearing can be undertaken as exempt clearing work under Schedule 21 of the Planning Regulation 2017 or in accordance with an Accepted Development Vegetation Clearing Code.

Clearing vegetation in any category R areas that is not exempt or in accordance with an Accepted Development Vegetation Clearing Code is prohibited development.

Request further pre-lodgement advice or meeting

Please contact SARA's case officer on the telephone number below to arrange a meeting to discuss this pre-lodgement advice.

To request more pre-lodgement advice please use the 'related actions' tab in the 2103-21399 SPL MyDAS2 record and select 'Request more pre-lodgement advice from SARA'. You will be given an option to select either a meeting or written advice.

Other advice - outside of SARA's jurisdiction

17. Overland flow water

The Department of Regional Development, Manufacturing and Water (DRDMW) advises that the proposed development is located within the area covered by the Water Plan (Wet Tropics) 2013 (Wet Tropics Water Plan). The Wet Tropics Water Plan legislates how surface water and groundwater resources must be managed within specified management areas.

Overland flow water is not regulated in the Wet Tropics Water Plan. Overland flow water can be interfered with or taken without an authorisation under the *Water Act 2000*.

Taking or interfering with groundwater

Lot 123 on SR687 is located within the Mossman Catchment (surface water) and the Mossman Groundwater Management Area (GMA) Zone 1D. The taking or interfering with groundwater will require an authorisation under the *Water Act 2000*.

It is noted Bore RN126712 is located in the south-east corner of Lot 123 on SR687. DRDMW has determined that no water licences to take or interfere with groundwater are attached to Lot 123 on SR687.

The trading of groundwater can be undertaken in Mossman Zone 1D. Applications for groundwater trading will be assessed against the requirements of the Wet Tropics Resource Operations Plan 2016 and will include assessment against the risk of salt water intrusion.

For further information, please contact DRDMW via waterinfonorth@dnrme.qld.gov.au.

Taking or interfering with water in a watercourse, lake or spring

A downstream limit has been defined for the Mowbray River. The downstream limit identifies the limit to which a watercourse is managed under the *Water Act 2000*.

Lot 123 on SR687 is downstream of the Mowbray River downstream limit. Water contained in the river adjacent to Lot 123 on SR687 is outside of the jurisdiction of the *Water Act* 2000.

DRDMW has been determined that no water licences to take or interfere with water in a watercourse, lake or spring are attached to Lot 123 on SR687.

As the proposed project crosses features that are yet to be mapped on DRDMW's watercourse identification map, it is recommended you request for a watercourse determination. Any request can be emailed to waterinfonorth@dnrme.qld.gov.au.

DRDMW may seek additional information or undertake a site inspection to determine whether such features are a drainage feature or a watercourse for the purposes of the *Water Act 2000*. DRDMW advises that a request for a watercourse determination may take up to three months to process.

If the feature is determined to be a watercourse, approval may be required under the *Water Act 2000* and/or *Planning Act 2016* to undertake the following activities:

- taking or interfering with water
- placement of fill, excavation of material or removal of riparian vegetation; and/or,
- excavation of riverine guarry materials.

Information relating to the watercourse identification map is available online at Business Queensland.

This advice outlines aspects of the proposed development that are relevant from the jurisdiction of SARA. This advice is provided in good faith and is:

- based on the material and information provided to SARA
- valid for a period of 9 months unless a change in legislation or policy occurs that affects the advice
- not applicable if the proposal is changed from that which formed the basis of this advice.

This advice 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 when a formal application has been lodged.

If you require further information please contact Joanne Manson, Principal Planning Officer, SARA Far North QLD on 4037 3228 or via email CairnsSARA@dsdmip.qld.gov.au who will be pleased to assist.

Yours sincerely

Brett Nancarrow Manager (Planning)

Kuhuma

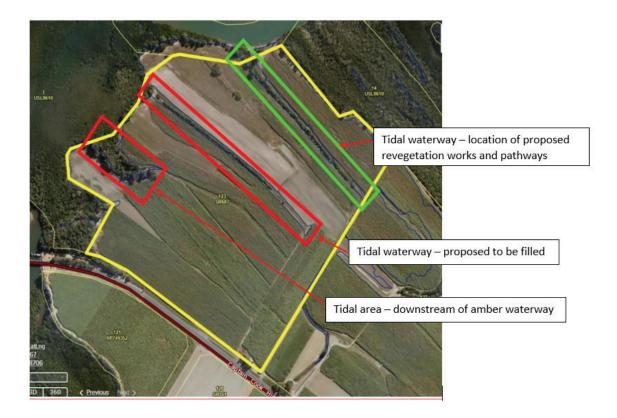
Enc: Attachment 1 – Tidal waterways

Attachment 2 - Master Plan (page 6)

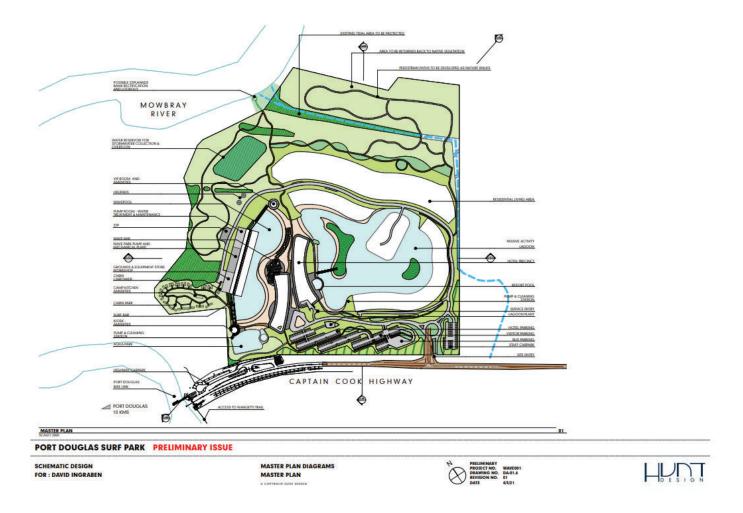
Attachment 3 – State code 11 performance outcomes
Attachment 4 - State code 18 performance outcomes
Attachment 5 – State code 8 performance outcomes

Development details		
Proposal:	Material Change of Use for (Outdoor Sport and Recreation, Short-term Accommodation, Dwelling House, Multiple Dwelling, Food and Drink Outlet, Shop and Tourist Park); and Material Change of Use for Environmentally Relevant Activity (ERA 63 – Sewerage Treatment).	
Street address:	5640 Captain Cook Highway, Mowbray	
Real property description:	Lot 123 on SR687	
SARA role:	Referral agency	
Assessment Manager:	Douglas Shire Council	
Assessment criteria:	State Development Assessment Provisions (SDAP): State code 1: Development in a state-controlled environment State code 6: Protection of state transport networks State code 7: Maritime safety State code 8: Coastal development and tidal works State code 11: Removal, destruction or damage of marine plants State code 18: Constructing or raising waterway barrier works in fish habitats State code 22: Environmentally relevant activities	
Existing use:	Agriculture – Sugar cane farming	

Attachment 1 – Tidal waterways



Attachment 2 - Master Plan (page 6)



Attachment 3 – State code 11 performance outcomes

In preparing a response to State code11, particular attention should be paid to the following performance outcomes (PO). PO1 to PO15 address critical issues relating to coastal development proposals which create the need to remove, destroy or damage marine plants.

• **PO1**: demonstrate the need for the development and justify why alternatives which avoid impacts to marine plants are not viable.

The proposed development is unlikely to adequately demonstrate compliance with PO1.

The development application must provide adequate justification for the removal, destruction and damage to marine plants. This includes outlining other options considered to meet the need for the development, as well as a comparison of the short and long-term impacts to marine plants.

Suitable evidence must also be provided demonstrating that other reasonable options that have lesser impacts on marine plants have been considered and are unviable.

• **PO2**: the use of tidal lands is restricted to marine-dependent infrastructure.

The proposed development will not meet PO2 and will not meet the purpose statement of State code

The proposed development and its ancillary elements do not have a functional requirement to be located on tidal lands. Any development application should provide plans detailing the true extent of HAT line and detail all aspects of the development in relation to HAT. The plans should detail all non-marine dependent elements located above HAT.

 PO3: development impacting marine plants directly abuts land that has full riparian access rights or provides a public facility.

The application material indicates infrastructure related to the proposed development is to extend onto State land. Owner's consent may be required from the Department of Resources.

PO4: the spatial extent of disturbance to marine plants is minimised.

Where impacts to marine plants cannot be avoided, a response to PO4 is required to outline the spatial extent of marine plant disturbance, both permanent and temporary, in area (m2) and provide discussions detailing how the disturbance footprint is minimised to the greatest extent possible.

The development application should outline construction methods and demonstrate how they will mitigate impacts to marine plants.

Concerns are raised as to any discharge of stormwater into the tidal waterways which has the ability to indirectly impact marine plant composition / ecology via altering water chemistry. A discussion should be provided as to any treatment and discharge of water into fish habitats and its potential to impact upon the adjacent marine plant communities.

It is advised to consult with person(s) suitably qualified in the field of marine plants, fish habitats and coastal processes to assist with determining all impacts to marine plants associated with the development, both direct and indirect.

 PO6: development avoids the unnecessary loss, degradation of fish habitats, their values and the loss of fish movement.

Marine plants are known contributors to fisheries resources including but not limited to providing food, habitat, shelter and shade to marine life.

Demonstrate the proposed works will not result in the unnecessary loss, fragmentation, or degradation of fish habitat or fisheries values.

A response to this PO should detail all efforts made to avoid or minimise impacts to marine plants and the ecological processes these plants support.

- PO7: development does not increase the risk of mortality, disease or injury, or compromise the
 health, productivity, marketability or suitability for human consumption of fisheries resources having
 regard to, but not limited to:
 - o biotic and abiotic conditions
 - o water quality
 - o substances that are toxic to plants, toxic to fish or cumulative within fish
 - design of structures
 - o impact upon reproductive stress
 - o effect on fish energy reserves
 - whether fish may be physically damaged, injured, killed, trapped or stranded
 - fish passage and access to habitat generally
 - o impact of pest fish.

A response to this PO is required to demonstrate that the methods and materials used for the construction and ongoing operation of the proposed works will not directly or indirectly impact upon marine life, water quality or the marine life community being able to undertake their natural life cycles / behaviours.

 PO8: works are undertaken to encourage fish habitats and fisheries resource values to naturally regenerate.

The development application is required to demonstrate that the proposed works will allow natural regeneration to occur to areas outside the permanent development footprint as well as demonstrate any temporary areas or previously disturbed areas containing marine plants will be restored either through natural or assisted regeneration.

- **PO9**: development likely to cause drainage of disturbance to acid sulphate soils prevents the release of contaminants and impacts on fisheries resources and fish habitats.
 - Acid sulphate soils may be present within the works footprint. A response to this PO will need to demonstrate that there are sufficient controls in place to manage acid sulphate soil disturbance. An acceptable outcome to demonstrate compliance with PO9 would be to manage soils in accordance with the current Queensland acid sulphate soil technical manual: Soil Management Guidelines.
- **PO10**: tidal and freshwater inundation and drainage patterns are maintained or restored such that ecological processes continue, and the associated fish habitat values are maintained.
 - Modifying drainage patterns can have direct and indirect impacts on the quality and condition of fish habitat (marine plants).
 - A response to this PO should discuss the location and design of the proposed works in terms of its potential to impact on tidal and overland drainage patterns and where impacts cannot be avoided, provide performance solutions that will ensure fish habitat values are maintained.
- PO26 to PO28:Temporary disturbance or temporary structures involving the removal, destruction or damage of marine plants can have both direct and indirect impacts and cause the loss of fisheries productivity.

If temporary works involving marine plant disturbance are proposed, the applicant must demonstrate compliance with PO26 to PO28.

 PO29 to PO30. If the proposal includes restoration works, their primary purpose must be the reinstatement of tidal fish habitats.

Substituting one fish habitat for another is not supported, including the construction or modification of wetlands or waterbodies for alternative purposes is also not considered restoration.

Refer to DAF's fish habitat guidelines for Restoration of Fish Habitats (FHG 002) and Mangrove Nurseries: Construction, Propagation and Planting (FHG 004) and must demonstrate compliance with PO29 to PO30.

PO31: the department maintains an 'avoid, mitigate, offset' requirement that applies to MSES.

The application will need to provide details on how impacts to marine plants will be avoided, and where avoidance is not reasonably possible, how impacts to marine plants have been minimised and mitigated.

Notwithstanding any measures to avoid or mitigate impacts to marine plants, the works may still result in a significant residual impact (SRI), in which case an offset will be required.

In accordance with the <u>Significant Residual Impact Guideline</u>, removal, destruction or damage to marine plants may result in a SRI if the marine plants will not return to their pre-disturbed extent and condition within 5 years of the impact. This includes impacts to marine plants that are permanent and those that may be temporary and meet this criterion.

An environmental offset will not be considered until it has been demonstrated that all reasonable measures have been taken to firstly avoid and/or mitigate impacts to waterways providing for fish passage.

Any rehabilitation of marine plants on site may help to reduce the scale of the SRI. Options to mitigate any unavoidable SRI to marine plants must be pursued before an offset can be considered.

Attachment 4 - State code 18 performance outcomes

In preparing a response to State code18, particular attention should be paid to the following performance outcomes (PO):

- All development PO1 to PO18 and PO36.
- Temporary waterway barrier works PO32 to PO35.

PO1: the application must demonstrate the need for the development and justify why alternatives which avoid impacts on fish passage or do not involve the constructing or raising waterway barrier works are not viable.

The proposed development is unlikely to adequately demonstrate compliance with PO1.

The development application must demonstrate the need for the development and justify why alternatives which avoid impacts on fish passage or do not involve the constructing or raising waterway barrier works are not viable. This includes justifying the need for all waterway barriers.

Justification must include an options analysis that clearly demonstrates other all options considered to meet the required need for the development along with the short and long-term impacts to fish passage.

The filling of tidal waterways does not avoid impacts on fish passage and alternative designs or reconfigurations should be considered to avoid the need for filling waterways.

PO2: the development has a functional requirement to be located within a waterway.

The proposed development does not PO2 and the purpose statement of State Code 18.

The filling of tidal waterways to facilitate the construction of the proposed development do not have a functional requirement to be located within the tidal waterway.

You may wish to consider a redesign of the proposed works to avoid the onsite waterways providing for fish passage. Aerial imagery indicates there is space outside of the waterways that can likely facilitate all elements of the proposed works.

 PO4: for the life of the barrier, adequate fish passage must be provided and maintained at all waterway barrier works.

If the proposed waterway barriers can be adequately justified, a response to PO4 is required to demonstrate that the barriers will provide safe and adequate fish passage past the structure up until the point of drown out. Permanently filling in a tidal waterway removes all potential fish passage and permanently reduces the area of fish habitat. Filling in of tidal waterways does not comply with PO4.

It is advised that you consult with a suitably qualified person in the field of fish passage biology to assist in providing structures across waterways that will allow safe fish passage and/or designs which do not impact upon waterways providing for fish passage.

 PO5: waterway barrier works are designed, constructed and maintained to provide fish passage for all members of the fish community, regardless of size, species, life-stage or swimming ability.

A response to PO5 is required to outline the known and expected fish community that any waterway barriers are required to cater for. Fish surveys conducted by suitably qualified person(s) are recommended. Water intake structures are required to operate in such a way that fish are not injured or killed.

PO6: the development is designed and operated so that all components of the waterway barrier
works (for example, scour protection, intake and outlet structures, spillways, stilling basins, apron and
dissipation structures) are required to provide safe fish passage.

- PO8: the development does not increase the risk of mortality, disease or injury, or compromise the
 health, productivity, marketability or suitability for human consumption of fisheries resources having
 regard to, but not limited to:
 - biotic and abiotic conditions
 - water quality
 - substances that are toxic to plants, toxic to fish or cumulative within fish
 - o design of structures
 - o impact upon reproductive stress
 - o effect on fish energy reserves
 - o whether fish may be physically damaged, injured, killed, trapped or stranded
 - fish passage and access to habitat generally
 - o impact of pest fish.
- PO8: demonstrate that the methods and materials used for the construction and ongoing operation of
 all aspects of the tourism park will not directly or indirectly impact upon aquatic life and water quality,
 or cause direct impacts to the fish community being able to undertake their natural life cycles.
 - A discussion of the potential for the entrapment or injury of fish resulting from the taking of water from the Mowbray River is required.
- PO12: development likely to cause drainage of disturbance to acid sulphate soils prevents the release of contaminants and impacts on fisheries resources and fish habitats.
 - Acid sulphate soils may be present within the works footprint. A response to this PO will need to demonstrate that there are sufficient controls in place to manage acid sulphate soil disturbance. An acceptable outcome to demonstrate compliance with PO9 would be to manage soils in accordance with the current Queensland acid sulphate soil technical manual: Soil Management Guidelines.
- PO36: the department maintains an 'avoid, mitigate, offset' requirement that applies to MSES.

The application will need to provide details on how impacts to waterways providing for fish passage will be avoided, and where avoidance is not reasonably possible, how impacts to waterways providing for fish passage have been minimised and mitigated.

Notwithstanding measures to avoid and mitigate impacts to waterways providing for fish passage, the works may result in a <u>Significant Residual Impact</u> and require an environmental offset. An environmental offset will not be considered until it has been demonstrated that all reasonable measures have been taken to firstly avoid and/or mitigate impacts to waterways providing for fish passage.

 The placement of temporary waterway barriers to facilitate construction of the tourist facility may be conducted under DAF's <u>Accepted development requirements for operational work that is constructing</u> or raising waterway barrier works.

If any proposed temporary waterway barrier works cannot meet the accepted development requirements, this aspect of the works will need to be covered under the development approval.

The applicant should 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) the barriers need to be in place for longer than the prescribed period under the accepted development requirements, the proposed temporary waterway barrier works are to be included in a development application.

Attachment 5 – State code 8 performance outcomes

In preparing a response to State code 8, particular attention should be paid PO1 – PO5 (development in the erosion prone area), PO7 (artificial waterway), PO11 (water quality), PO12 (category C or R areas) and PO16 (MSES).

 PO1 - The proposed development does not satisfy the requirements of PO1 as it is not a type of development as specified in PO1(1)(a)-(d).

Development is generally not supported within the erosion prone area in the coastal management district, to ensure that this area is retained in its natural state to allow coastal processes to naturally occur and to avoid increasing the risk to people and infrastructure.

Compliance with PO1 requires the development application to demonstrate why the development must be located in the erosion prone area and why it cannot be located on a more landward part of the lot; further to this, development is obliged to also demonstrate why the proposed development cannot feasibly be located elsewhere outside of the erosion prone area.

 PO2 - The proposal is required to identify all coastal processes occurring on site and how development avoids impacting on these local resources.

This performance outcome also requires the development application to demonstrate how the protective functions of the proposal site that is the landforms and vegetation will be maintained.

Further requirements of this performance outcome include demonstrating how the proposal avoids intensifying the use of area, as the proposed development is considered to be expanding seaward within the erosion prone area and coastal management district.

PO3 – the development application is required to demonstrate why the proposed development is
located in the erosion prone area and whether it has adequate setback for potential coastal protection
work in the near future.

This is an important consideration as the proposed development is located in an area adjacent to the Mowbray River.

To demonstrate compliance with this performance outcome, the proposal should consider in the design the inclusion of a buffer zone to the eastern boundary, accounting for any future erosion protection that might be necessary.

PO4 – Locating the proposed development within the erosion prone area is regarded as increasing
the risk to people and property from coastal erosion. The proposal is likely increasing the exposure of
the community to the risks associated by the proposed development in the erosion prone area.

The development application is required to demonstrate why it is not possible to locate the development further landward. It should further be demonstrated how the risk of erosion is mitigated through design, maintenance or the installation of coastal protection structures, to minimise the risk associated with the proposed development to people and property.

PO5 – The development application is required to demonstrate how it avoids directly or indirectly
increasing the severity of coastal erosion on or off the site.

The proposed development is located adjacent the Mowbray River. It should be noted that part of the natural coastal processes of a river include erosion and accretion.

The proposed development works should consider this and account for how development may impact on coastal processes that naturally occur in this area by demonstrating the likely impacts of accelerated erosion and measures that will compensate to disrupting the sand transport along the coast.

• **PO7** – You will need to determine if the proposed development meets the definition of an *artificial* waterway as defined in section 8 of the Coastal Protection and Management Act 1995.

If the proposed development work is considered to meet the definition, the development application will need to demonstrate compliance with PO7. If you are of the view the proposed development is not relevant PO7, please provide thorough justification of this.

PO11 - demonstrate that the proposed development:

For PO11(1):

 is located, designed and managed to avoid impacting the environmental values of the receiving waters as determined by the Environmental Protection (Water and Wetland Biodiversity) Policy 2019.

For PO11 (2):

- o identifies the water quality objectives of the receiving waters as determined by the Environmental Protection (Water and Wetland Biodiversity) Policy 2019; and
- o incorporates measures as part of the siting and design of the development to maintain or enhance water quality released to tidal waters to achieve the water quality objectives outlined in the Environmental Protection (Water and Wetland Biodiversity) Policy 2019.

For PO11 (3):

- o does not release a prescribed water contaminant to tidal waters by:
 - ensuring all prescribed water contaminants are contained on the site or filtered from the water released from the site through adequate storage or water treatment methods (e.g. stormwater treatment, erosion and sediment controls); and
 - monitor all intended releases to ensure they do not contain a prescribed water contaminant and provide operational responses to incidents where the water quality does not meet the required standard as defined by the Environmental Protection (Water and Wetland Biodiversity) Policy 2019.

An Erosion and Sediment Control Plan will be required to ensure that the construction phase will be in compliance with the Earthworks - AS3798 (Guidelines on Earthworks) and Erosion & Sediment Control – Best Practice documents as specified by the International Erosion Control Association (Australasia).

A site-based storm water management plan may also be required in accordance with Section 2.3 of the Queensland Urban Drainage Manual 2013.

 PO12 –The development site contains Category R areas of vegetation in the northern distribution of the site, adjacent the Mowbray River.

The proposal is likely to include rectification works in this area. Compliance with PO12 requires development to avoid any detrimental impacts on this regulated vegetation. Offset requirements

do not apply to this vegetation, as such demonstrating avoidance then mitigation is necessary to demonstrate compliance.

PO13 –Private use of state coastal land is generally not supported.

The proposed development includes private works within the Mowbray River esplanade, including bank rectification and a lookout.

The land is designated as an esplanade, and a private structure crossing that land precludes its intent. As such, the proposed development would not meet the requirements set out to comply with PO13 unless tenure has been granted.

 PO16: To address PO16 it will be required to determine if there are any MSES on or adjacent to the proposed development site. A definition of MSES is available in Schedule 2 of the <u>Environmental Offsets Regulation 2014.</u>

<u>Environmental Reports Online</u> can be used to conduct a desktop analysis to identify any mapped MSES that exists on (using the lot on plan option to search) and near the proposed site(s) (using the central coordinates option to search).

Where MSES are identified:

- o provide a targeted assessment to ground truth any MSES identified
- demonstrate how the development avoids adverse impacts on each MSES to the greatest extent practicable
- where the above is not reasonably possible, demonstrate how impacts on MSES have or will be minimised and/or mitigated to the greatest extent practicable
- o demonstrate whether the development will have a Significant Residual Impact on any identified MSES using SARA's Significant Residual Impact Guideline.

An assessment will need to be undertaken for each MSES to determine whether the proposed development will result in a significant residual impact and identify any potential offset obligation as per PO16(3).

The following tools may be helpful for a desktop analysis and assessment:

- o DES Environmental Reports Online
- Resources Regulated Vegetation Mapping
- DES Map of Referable Wetlands
- o DES Wetland Info
- o DES Protected Plants Flora Survey Trigger Map
- o DES Species List
- State Planning Policy interactive mapping