# OP001 - Granite Island Causeway -**Operational Control Procedure**

## PURPOSE

This Operating Procedure is in support of Departmental Policy regarding the safe operation of the Granite Island Causeway.

Owing to the condition of the infrastructure and the potential risk to the public and operators, a series of operational constraints shall be applied to ensure safety.

The constraints will allow the continued use of the asset, in particular those businesses that rely solely on the access for supplies, for community use and tourists.

#### METHOD

The controls will be achieved using an engineering based risk approach, applying an asset monitoring regime combined with restrictions on the type of access, loads, frequency of use and external influences like weather.

#### Risk Threshold

Items that are at a high risk of failure IAW ISO:31000 will be managed and mitigated. using the "So Far As Is Reasonably Practicable" (SFAIRP) principle. Any identified risks high or above, will be managed through additional inspection and monitoring regimes.

## **END-STATE**

The safe operation of the causeway to ensure the structural integrity and functionality of the asset is maintained until a replacement can be constructed.

#### SCOPE

The following stakeholder's are bound to these conditions:

- The Department for Planning, Transport and Infrastructure;
- Department for Environment and Water:
- Oceanic Victor:
- Victor Harbor Council;
- Big Duck Boat Tours:
- Horse Tram:

ISSUE DATE: REVIEW DATE:

:11/09/19 :11/09/20 RESPONSIBLE OFFICER Graeme Brown David Poli

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- Emergency Service Organisations (SAAS, MFS, CFS and SES);
- Any contractor engaged by any of the nominated stakeholders; and
- Members of the public.

# **ROLES AND RESPONSIBILITIES**

- Director Asset Management Control Approver;
- Manager Road and Marine Assets Asset Owner;
- Unit Manager Road and Marine Assets, Weather monitoring advisor;
- Manager Field Services Coordinate inspection of assets; and
- Asset Management Officer Vehicle access special permit conditions.

Nominated members are to ensure they are available during adverse weather events and that a secondary contact is available.

## KEY SAFETY CONSTRAINTS

After engineering advice, DPTI has imposed the following limitations on the asset:

- 1. Vehicles must take reasonable precautions to ensure the uninterrupted operation of the "horse tram".
- 2. Vehicles accessing the Causeway from the mainland, vehicles are not permitted if the "horse tram" is headed to the mainland and has reached the orange marker pole on the Island.
- 3. Vehicles accessing the Causeway from Granite Island are not permitted if the amber light on the "horse tram" building is flashing indicating the "horse tram" has departed and is headed to the Island.
- 4. When the "horse tram" is operating, vehicles must only traverse the Causeway immediately in advance of or immediately following the "horse tram".
- 5. Vehicles are to be driven slowly (existing restriction limiting to no more than 10 km/h continues to apply) and also with care to avoid excessive dynamic effects (i.e. avoid movement that lean/roll vehicle body)
- 6. Vehicles must have "on" both their headlights and their hazard lights whilst travelling on the Causeway.
- 7. Vehicles must be driven with due regard to other vehicular traffic and pedestrian traffic.
- 8. A load limit of 3.2 tonnes from the 26th June 2019.
- 9. Vehicles are to be driven in isolation keeping at least 10 metres apart from other vehicles (including the "horse tram") when travelling in convoy.
- 10. Fully laden horse-drawn operations are able to operate with a maximum capacity of 40 persons, on condition that it and all other vehicles are not to be permitted to use the Causeway in wind gust speeds exceeding 50 km/h.
- 11. The Causeway is to be closed to pedestrians when winds are exceeding 100 km/h.

12. Asset assessments (visual/structural) to be conducted following any closure of the jetty due to adverse weather event (when wind gusts exceed 50 km/h) and are in addition to the fortnightly visual inspection by Field Services.

# **PROCEDURE**

# 1. Asset monitoring

From August 2019, quarterly structural inspections of the asset for the duration of the temporary works in line with the engineer's recommendations.

Field Services will undertake the fortnightly visual walkover of the structure and report back to RAMA.

# 2. Vehicle access

Access for vehicles that are at or exceed the 3.2 tonne limit will be managed by exception based on the specific vehicle type, load arrangements and axle configuration.

In some cases, 'special access permits' can be provided to vehicles larger than the Gross Vehicle Mass Limit, due to a more specific / detailed vehicle and load review.

An operator will need to contact the DPTI vehicle special permits Asset Management Officer. The operator will need to provide DPTI with specific details of the vehicle type/load/axle spacing etc for a determination to be made.

# 3. Emergency Vehicle access

The primacy of life will always prevail over the protection of assets. Emergency services will need to assess the vehicle access on a risk based approach taking into account the asset limitations.

- SA Ambulance service use a Mercedes Benz Sprinter of 4050kg GVM which exceeds the load limit of 3200 kg GVM. This vehicle configuration has been assessed by an Engineering Consultant and granted a special permit.
- DEW operate a Toyota Landcruiser fire response vehicle with 400 litres of water storage and which falls below the 3200 kg GVM.

#### 4. Weather conditions

Due to the lateral vulnerability of the existing Causeway Structure, the following controls have been implemented to mitigate environmental risks:

Limit or restrict access during the following wind conditions:

- Between 8am and noon every workday, DPTI (Unit Manager RAMA) to check for the wind forecast (for that day and the following two days), and forward to those stakeholders who have declared an interest.
- when greater than 50km/h, Field Services (Manager FS), will act as follows:
  - >=50 km/h and <100 km/h stakeholders are advised by Field Services to be prepared for possible closure to vehicular traffic and subject to on-site confirmation of conditions.
  - >=100 km/h stakeholders and internal communications are to be advised that personnel will be attending site to close the Causeway to both vehicles and pedestrians.
- Following a closure (for a wind speed of less than 100 km/h), and only when the
  wind speed has returned to less than 50km/h, DPTI will visually assess the
  structure checking for damage, and either advise stakeholders of the re-opening
  of the Causeway, or if damage is located advise stakeholders that the Causeway
  will remain closed, pending a structural inspection by an appropriately qualified
  advisor.
- Following a closure (for a wind speed of greater than or equal to 100 km/h), a structural inspection by an appropriately qualified advisor shall be undertaken, and stakeholders notified accordingly.
- Post closure, and where a structural assessment was deemed necessary, stakeholders will be notified of the re-opening of the Causeway, once the structure is considered safe for use.

Access may also be limited or restricted during observation of strong wave and current actions.

# 5. Public Enquiry

Any enquiry by a member of the public or Council advising of a potential issue /defect with the Causeway will be investigated according to the level of risk to public safety and actioned in accordance with the requirements set out in this procedure.

**APPROVAL** 

APPROVAL Director Asset Management

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