

**pitt&sherry**

Specialist Knowledge.  
Practical Solutions.

**Pitt & Sherry  
(Operations) Pty Ltd**  
ABN 67 140 184 309

Phone 1300 748 874  
info@pittsh.com.au  
pittsh.com.au

**Located nationally —**  
Melbourne  
Sydney  
Brisbane  
Hobart  
Launceston  
Newcastle  
Devonport  
Wagga Wagga

5 September 2019

John Ayers  
Technical Director Planning  
GHD Pty Ltd  
Assessing Consultant for City of Launceston  
18-28 St John Street  
LAUNCESTON, TASMANIA 7250

**Re: Development Application – Further Information Request (2) –  
DA0312/2019 – Pedestrian Bridge 2-4 Invermay Road, Invermay**



Summary of RFI # 2 (dated 3<sup>rd</sup> September 2019)

A Construction Methodology is requested that focusses on the installation of Piers 1 & 2. The criteria identified in Section 2 of the planning report includes:

- *No load is allowed on the levee at any location during construction, including vehicle movements or storage of materials, and;*

- *No damage to existing vegetation on the levee is allowed.*

The response provided to RFI # 1 described the use of a low-height barge with materials lifted onto it by a crane set up on Boland Street. This is appropriate for the transfer of materials but does not describe how the piles will be installed for the two piers identified. While it may be possible to install the piles for Pier 2 with a specialised piling rig located on or near Boland Street, it is considered that Pier 1 may be beyond the reach of the machines available in Tasmania.

Therefore it is anticipated that it will be necessary to load a piling rig onto a barge in order to access the centre pier and the options for this appear to be limited.

The weight of the piling rig and the distance between the road and the barge make it unlikely that the rig can be lifted onto the barge with the building materials. The criterion preventing the movement of vehicles on the levee will require the loading operation to be clear of the levee.

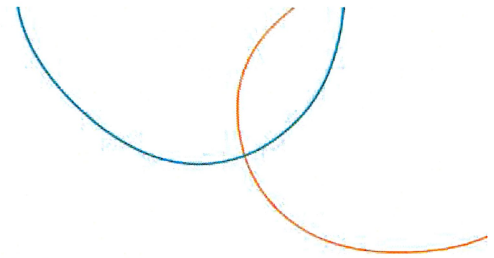
A suitable location for this has not been identified and the environmental impact has not been assessed. As such it does not appear possible to construct the bridge within the bridge footprint identified and the information currently provided.

Importantly the provision of this information will enable the construction to be completed without the need for additional planning approvals, and is required to enable full assessment of the current application.

**Response:**

Thank you for your query. Below is response to this query providing additional details on a feasible possible construction methodology for the installation of piles at Piers 1 and 2. For completeness, we have also re-stated some of our previous response to RFI # 1.

It is agreed that the most likely approach to the driving of piles at Pier 1, and possibly Pier 2, will be by driving piles using a pile driver off a barge in the river. Pitt & sherry has investigated whether there are feasible methods available to drive these piles, given the access constraints, and we believe the contractor would adopt one of the following approaches:



- It is feasible for equipment to be launched on a barge at the mouth of the North Esk River and pass below North Bank Pedestrian Bridge, Charles St Bridge and Tamar St (Victoria Bridge) to access the site. Measurements have been taken of the vertical clearance available at these bridges at low tide, and they are as follows:
  - North bank bridge – approx 5.5m clearance
  - Charles St Bridge approx. 3.0m clearance
  - Victoria Bridge – approx. 4.0m clearance

The measurements did not coincide with absolute low tide, and it is possible this clearance could increase by up to an additional 0.5m.

This clearance allows for a barge to access the site, however it is also possible some pile driving equipment would also be able to fit on the barge and pass beneath the bridges with this available clearance. This would likely require the pile driver to be substantially disassembled before being loaded onto the barge, however it is considered a feasible approach.

- Another approach is utilising the existing access to the Scotch Oakburn rowing sheds. While this access does not provide direct access to the bridge location, it is another option to enable a pile driver to reach the river side of the levee. Discussions with Scotch Oakburn have confirmed that construction works, including piling, have been undertaken at their rowing facility in recent years, suggesting construction equipment is able to access the area.

The approach for this project would be to construct a temporary ramp or similar structure from the existing piled wharf, which is adjacent to the rowing club building, and this temporary structure would extend across to the barge, which would be positioned close to the wharf at high tide. The pile driver would then drive from the wharf onto the barge.

There is no doubt that both the above approaches will add cost to the project, however both approaches described are considered to be feasible.

Based on the above, the criteria in section 2 of the Planning Report should be clarified as follows:

- No load is allowed on the levee during construction *outside the existing vehicle access routes*, including loading from vehicle movements or storage of materials.

As stated previously, the construction of this project will be procured as a design and construct contract, which is a common approach for infrastructure works such as bridges. As a result, the details of the final design of the bridge are not clear until tender submissions from the contractor are received. Because the final design is not clear, the construction methodology is also not yet clear, and tenderers will be required to provide full details of their methodology at tender time.

We trust this answers your query as best we are able at this time.

Kind Regards

Ben Hart  
**Principal Bridges Engineer**