
Heritage Alteration Permit Application for 700 Government Street (Lower Causeway)



Location | Lower Causeway

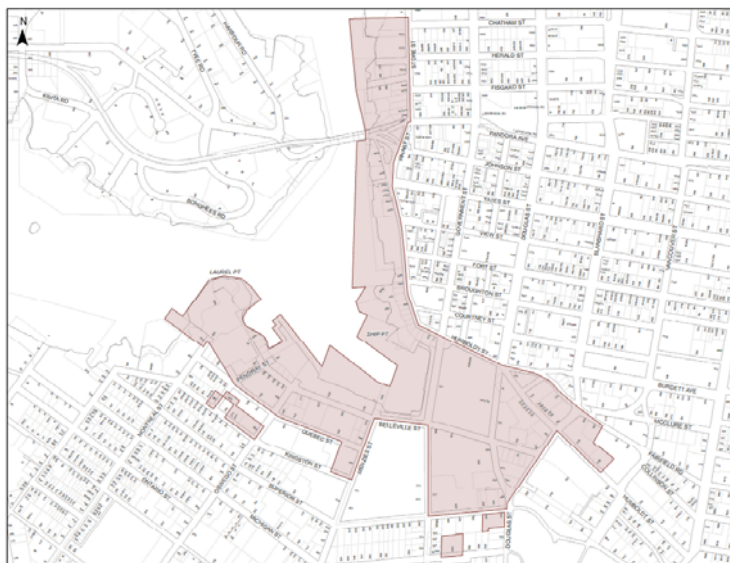
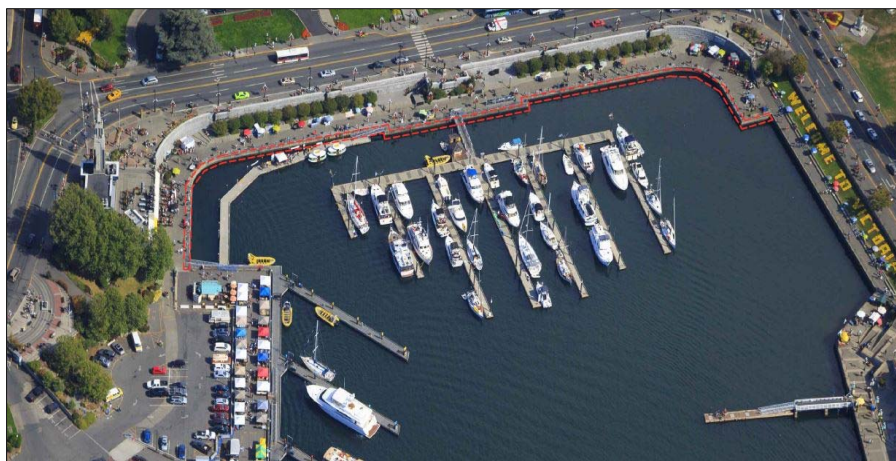


Location | Between Wharf and Belleville Street

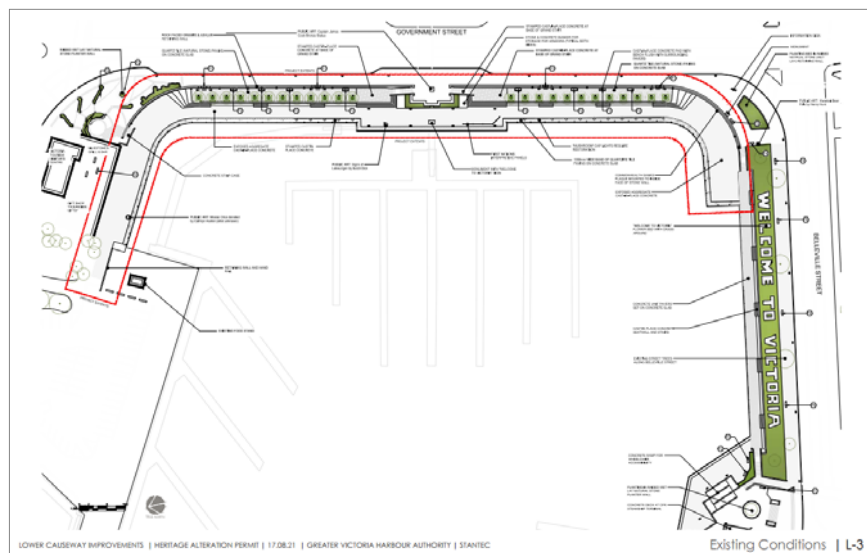


Design | 1973 Inner Harbour Study – Arthur Erickson Architects

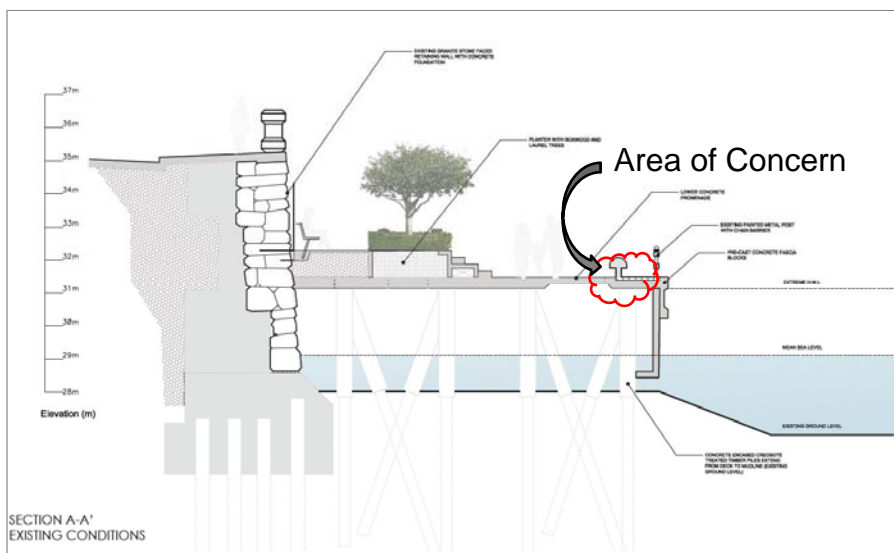


DPA 9 (HC) | Inner Harbour Heritage Conservation Area**Proposal | Repair and replace existing paving material along apron**

Plan | Existing conditions of the Lower Causeway



Existing Conditions | Lower level edge paving and lights



Repairs Required | Lower level edge paving and mushroom lights



Unbonded quartz tile



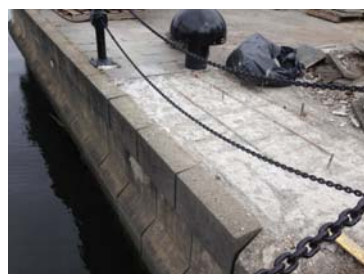
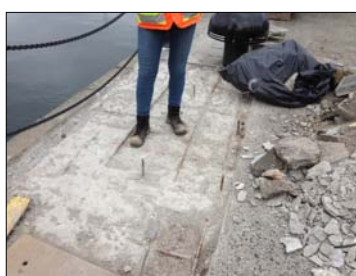
Previous repairs



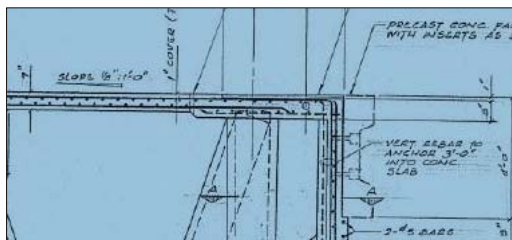
Damaged lights



Repairs Required | Lower-level edge paving and mushroom lights



Section Detail | 1973 Causeway construction



The 1" slab depression does not allow for installation of a 3/4" paver, which would fare better in this high traffic area than the 1/2" pavers that have been used. The top reinforcing in the concrete slab does not have adequate protection from chlorides and freeze thaw, and may be contributing to these tiles becoming un-bonded.



Engineer Summary | Paving and light bases

Stantec Engineering Summary

The issues with the pavers at the lower causeway are most likely attributed to the original construction detail that was used in 1973. The 1" slab depression does not allow for installation of a 3/4" paver, which would fare better in this high traffic area than the 1/2" pavers that have been used. The top reinforcing in the concrete slab does not have adequate protection from chlorides and freeze thaw, and may be contributing to these tiles becoming un-bonded.

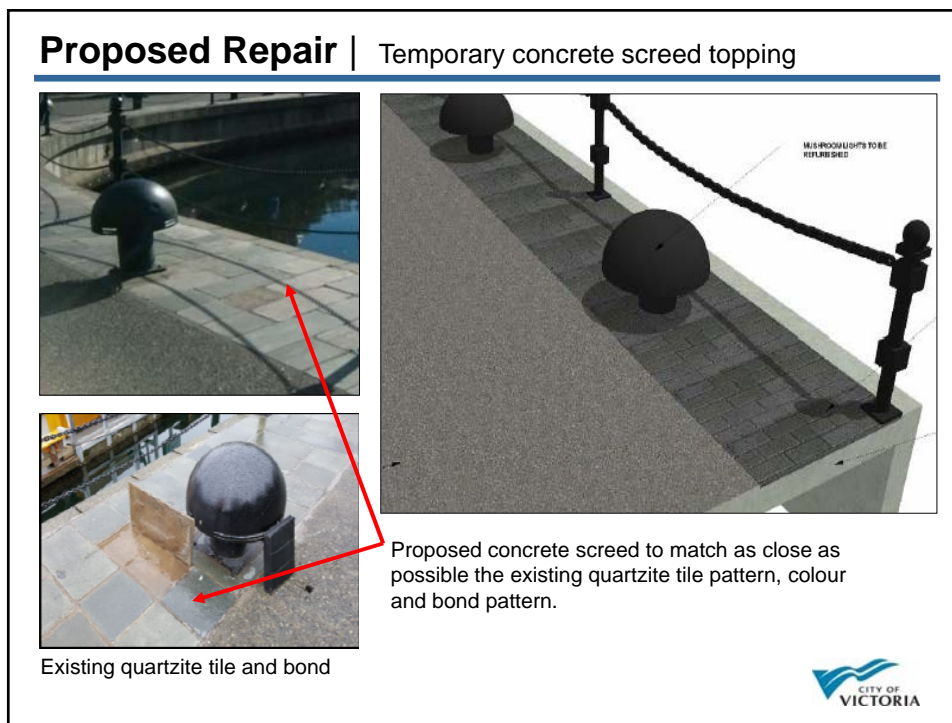
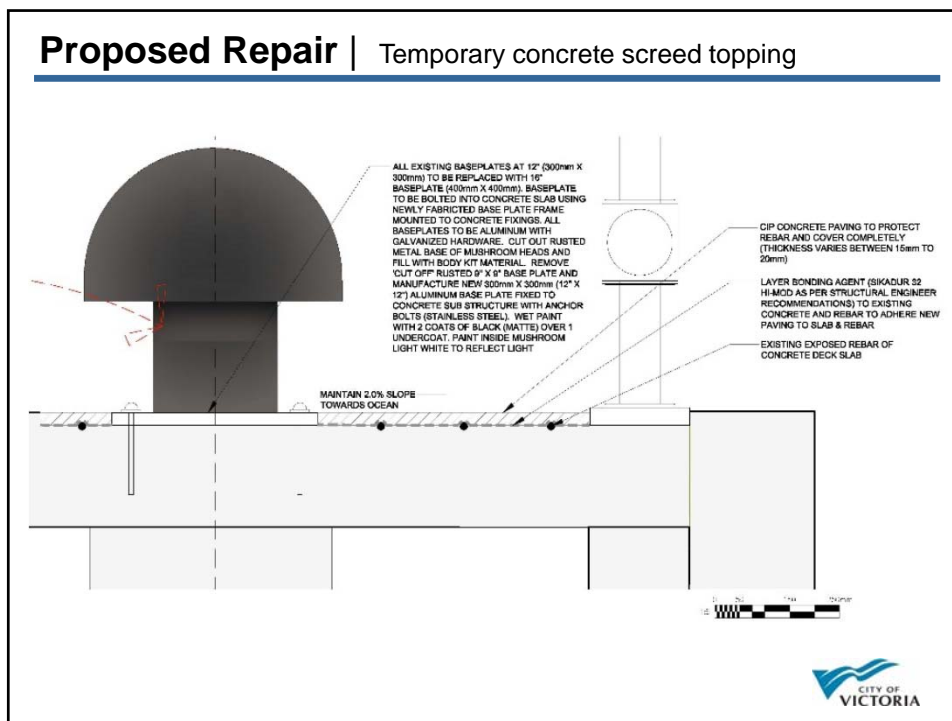
Paving

It is recommended that these pavers are removed and replaced with a concrete screed topping. A bonding agent such as Sikadur 32 Hi-Mod can be used to protect the existing reinforcing and to ensure a proper bond between the existing concrete and the new topping.

Lights

As part of this replacement the "mushroom" light bases can be replaced with aluminum bases, as per details previously used by GVHA. Crack control details can be utilized at each side of the existing "mushroom" lights, to reduce concrete cracking.





Recommendation

