

Methodology for the Enabling Works to the existing South Bank Wharf

Introduction

Enabling works, comprising temporary improvements to the 1950's section of South Bank Wharf and installation of temporary bridges, are required to facilitate the offload of barges involved in the dredging of material not suitable for disposal at sea. The enabling works will consist of the following:

- 2no. bank seats/abutments (as these are constructed on land and above MHWS these fall outside of the jurisdiction of the MMO and are not discussed any further in this document)
- A concrete slab constructed on top of the existing 1950's section of South Bank Wharf.
- 2no. temporary modular bridges which will span from the bank seats/abutments onto the existing structure.

Construction of the concrete slab on South Bank Wharf

The methodology for the construction of the concrete slab on South Bank Wharf will be as follows:

1. A separation membrane will be laid down on the existing South Bank Wharf across the footprint of the concrete slab.
2. Reinforcing steel and edge formwork for the concrete slab will then be lifted from land by crane onto the structure and tied in situ.
3. The main body of the slab will then be poured in-situ using a concrete pump from the land and allowed to harden.
4. Formwork for the upstands (raised sides to prevent objects falling off the slab) will be lifted onto the structure using a land-based crane and erected on the inside face of the upstands.
5. Once the upstand formwork is in place the upstands will be poured in-situ using a concrete pump from the land and allowed to harden. All formwork will then be removed and lifted back to land using a land based crane.

Installation & removal of temporary modular bridges

Each bridge is delivered to site in 2no. 20m long sections so there will be a total of 4no. lifts involved in the installation of the 2no. bridges. As each section arrives on site it will be lifted directly off its transport and into position using a land based crane. Once the 2 sections of each bridge are in position they will be bolted together and holding down bolts drilled and installed at both the abutment and South Bank Wharf ends. It is anticipated that both bridges will be installed in 1 day.

Once dredging of material not suitable for disposal at sea is complete the process outlined above will be carried out in reverse in order to remove both bridges.