

VIVA - DEVONPORT TERMINAL New Fuel Tank

Date: Jun 2022 to Oct 2022

Principal: Haywards/Viva

Project Value: \$800k

TASK

Viva's Devonport fuel terminal underwent significant capacity upgrades including the construction of a new fuel tank. Shaw completed the following works under Hayward's Head Contract to:

- Cut operations to level
- Preparation of an engineered base pad for the installation of 146 supporting piles
- Finalisation of subgrade for concrete slab
- Installation of the concrete slab to support the new tank

CHALLENGES

As a major subcontractor, Shaw did not have control of the programme and had to work cooperatively with Haywards to achieve overall programme. This interacted with overall site management – like inductions and general safety – but also works on site. Multiple mobilisations to site were required to work around other subcontractors.

While the design indicated that the piles were to be completed through the subgrade for the concrete slab, Shaw recognized that there would be significant damage to this subgrade during piling install. Accordingly, Shaw worked with Haywards to provide an engineering certified pad which was of sufficient capacity to take the piling rig loads without placing excess material leading to abortive works. This approach saw improvements in the programme, in that the drill rigs could attend to site earlier, but also reduced wastage of materials.

The design considered the application of bituminous sand just below the concrete slab. The specifications from the client for this material were not fully detailed. Shaw worked with its supplier, Hardings Hotmix, to develop a specification and installation methodology which met the client's functional specification and allowed the installation of the concrete pad.

OUTCOMES

Ultimately, Shaw delivered the works meeting our Head Contractor's requirements notwithstanding the difficulties of working with other contractors not in our control. The specification required the installation of the concrete slab base and the bituminous layer within extremely tight construction tolerances, Shaw was able to deliver a product which met our Head Contractor's and Viva's requirements.

