

Southern Seawater Desalination Project



MARCH 2010 NEWSLETTER

Marine Works



Van Oord's Volvox Anglia Hopper Dredge



View over the marine construction zone

With the imminent arrival of winter and the rough seas, Dempsey, the Southern SeaWater Alliance's (SSWA) marine contractors, have been heavily focused on critical marine activities.

Prior to the onset of rough ocean conditions, it is essential certain marine activities are finalised including the excavation of the retrieval pit for Zublin's Tunnel Boring Machine (TBM), and the installation of the 400 metre long brine diffuser pipe and seawater intake tower.

The first TBM that arrived onsite in late February is currently being commissioned for use at the end of April, and will be used to tunnel the 900 metre intake pipe.

Tunnelling Manager, Mr Robert Van Rijnsoever, said he expects it will take between eight and nine weeks to complete the first tunnel.

Robert said "the TBM to be used for the outlet was successfully used at the Water Corporation's Alkimos Waste Water Treatment Plant project north of Perth before being refurbished and brought back to our project.

"It is expected the second TBM of smaller diameter will arrive onsite from a project in Singapore in May. This machine will be used to tunnel the outlet pipe."

Robert said the riskiest component of the tunnelling operation will be the retrieval of the TBM from a pit in the ocean, particularly in a couple of month's time when the marine environment is more severe.

As the TBM's expert operators continue the commissioning of the TBM, Dempsey have mobilised two large barges fitted with various specialised equipment to undertake blasting and dredging.

These machines, along with the Van Oord "Volvox Anglia" dredge which was hired from the Bunbury Port expansion project and utilised for three days in a three week period, have been working to excavate the critical TBM retrieval pit and intake seawater tower depression.

To date, two blasts have been detonated to assist breaking the rock material found on the ocean floor during excavation and at this stage it appears significantly less blasting will be required than first anticipated.

Following the recent second blast, the first retrieval pit has been excavated to 17.5 metres of the total required 18.5 metres. The grouting and installation of rail guards will follow.

Although marine activities are critical to the project timeline, our commitments to the safety of the team and the marine fauna remain paramount.

To date, ten fauna sightings have resulted in temporary shut-downs of the marine construction activities and the sighting of a pod of dolphins resulted in a delay in our first rock blast. This is inline with the Marine Mammal Management Plan.

Temporary Marine Public Exclusion Area

With marine activity increasing, please don't forget about the temporary marine public exclusion area in place directly in front of the construction site (1km north-south and 1.3km east-west).

This area is cordoned off to ensure the safety of the community and our workers so please obey the marine marker buoys.



Contractors preparing to install the marine marker buoys

Rescue

Marine fauna are not the only objects on the radar of our marine observers!

Recently three young boys found themselves in a spot of trouble without fuel and without a radio (and without the parents' knowledge) in a boat some 200 metres offshore.

Luckily our marine observers spotted the stranded vessel on dusk and were able to return the boys safety to shore before altering the Police who retrieved their vessel.



Harvey Summit Tank site



SSDP Trunk Main river crossing

Associated Infrastructure

Work on the connecting pipeline and water storage tank north-east of Harvey is progressing well.

Georgiou Group, the contractors for both projects, reported 15.5km's - just over half the total pipe route - has been laid to date.

Over the coming weeks Georgiou will continue pipe works along Government Road with the outlook of fishing that section in the second week of April; Rodgers Road; and will look to start along Boonilup Road and Yambellup Road in mid-late April.

Georgiou are aware of the impacts the traffic diversions have on the community and are working to resurface the roads as quickly as possible.

The drill and blast activities at the tank site have been going very well and now over 80% of the 'hill' is blasted and removed from site in preparation for the tank foundation.



Plant site taking shape

Main Building

With foundations now complete on the Microfiltration Pre-treatment (MF) and Reverse Osmosis (RO) buildings, structural works are due to commence over the coming weeks.

Initial structural works will focus on the MF building following the completion by Cimeco of the internal pipe trenches and building slab.

Sabre, our major structural steel contractor, is currently fabricating the MF structure in Busselton in time for erection in mid April, while the detailed drawings of the precast wall panels undergo final review with an expectation to commence manufacturing after Easter.

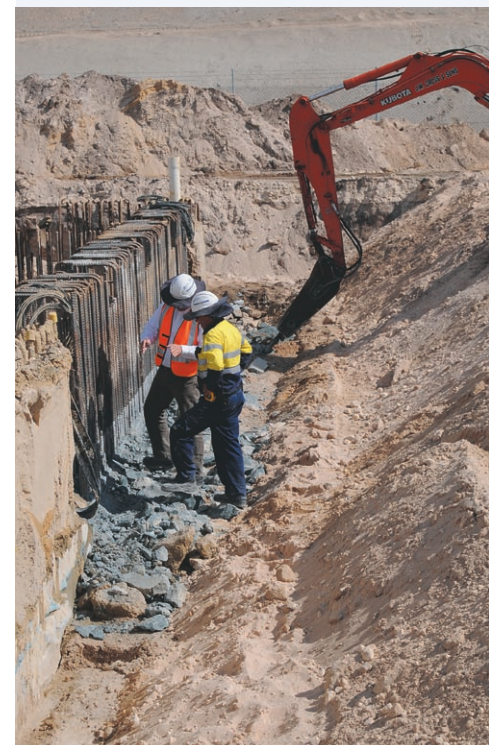
Following Sabre's fabrication of the MF structure, their focus will turn the RO building.

Other site works underway include the construction of the base slab for the Chlorine Building and Drinking Water Tank; the foundation works for the Lime Clarifier; and the dewatering and excavation of the main switch room.

Seawater Pump Station

GWFA have now completed the diaphragm walls on all five chambers and are preparing to de-mobilised from site, JW Cross will focus on the excavation and preparation of the first intake chamber to be used to launch the TBM.

With the launch scheduled for the end of April, the finalisation of the intake chamber remains a critical component of the project.



JW Cross at work on the diaphragm walls