

Community Information Bulletin

Melbourne Main Sewer Replacement

Melbourne Water will be replacing the Melbourne Main Sewer. The project is a planned and essential infrastructure project that will have health and environmental benefits into the future.

The construction program, running over three years, is timed to begin in early 2008 and be completed in 2011. Work will extend from north of the Yarra at Docklands to Beacon Cove in Port Melbourne, crossing under the Yarra River at Southbank.

The Melbourne Main Sewer collects waste water from central Melbourne, Docklands, Port Melbourne and South Melbourne. At Beacon Cove it connects with the Hobsons Bay Main which then carries the waste water to Werribee for treatment.

The original sewer was constructed between 1894 and 1897 and was constructed from a variety of materials, ranging from bluestone, brick, cast iron, Portland cement and concrete sourced from local suppliers.

The Project

The project will see the construction of a new 2.4 kilometre underground sewer.

The new sewer will run from Docklands - near the Charles Grimes Bridge where it will connect into the existing Melbourne Main Sewer, through to Swallow Street in Port Melbourne where it will connect to the Hobsons Bay Main Sewer.

To build the sewer, seven shaft sites, between 10 and 15 metres deep, will be dug along the corridor. The shaft sites will allow for the use of latest in tunnel boring machine technology and a pipe jacking methods.

Connecting into the new main sewer along its route there will also be a number of new local sewers to service existing customers in the Port Melbourne area. This work will be done once the main sewer works are complete.

What are the benefits?

As Melbourne continues to grow, there is a need for the timely and planned replacement of major infrastructure to support that growth. With the construction of the new Melbourne Main Sewer, this is precisely what Melbourne Water is doing.

While the existing Melbourne Main Sewer continues to manage current demand, it is now more than one hundred years old. Its timely replacement will ensure Melbourne Water continues to meet the increasing demand of people living and working in the City, Docklands and within Port Melbourne for another one hundred years.

Melbourne Water is owned by the Victorian Government. We manage Melbourne's water supply catchments, remove and treat most of Melbourne's sewage, and manage rivers and creeks and major drainage systems throughout the Port Phillip and Westernport region. Telephone 131 722 or visit melbournewater.com.au

Once the new sewer is in operation it will allow the removal of the North Wharf Pumping Station near the Charles Grimes Bridge at Docklands. This will offer significant social and aesthetic benefits to the area.

The installation of new local sewers in the Port Melbourne area will also deliver further improvements for the local community and South East Water, the retailer servicing the region.

How will the new sewer be built?

Most of the sewer construction will take place between 10m and 15m below the ground. State-of-the-art tunnel boring machine (TBM) technology will be used south of the Yarra River to construct a tunnel which is then lined with concrete and glass fibre reinforced plastic to create a new sewer pipe.

The northern section of the project, around Docklands and the Charles Grimes Bridge, will use pipe jacking technology. The seven shaft sites along the project corridor will provide access for the tunnelling equipment.

Another interesting aspect of the project is how the new sewer will cross the Yarra River. The crossing will be constructed under a staged process using sheet piling to ensure that the river remains open to marine traffic at all times.

Using floating barges, sheet piling will be installed in the river for each stage to allow the safe removal of river silt within the sheet piling.

Once the silt has been removed, a concrete slab will be poured within the sheet piling as a base upon which a pipe will be laid and fitted together by divers. The pipe will then be encased in concrete. The sheet piling arrangement will then be moved further across the river to allow the next stage to be laid.

Where will the shaft sites be established?

Key shafts will be dug at the following locations:

- Swallow Street Shaft, Port Melbourne
- Fennell Reserve Shaft, Port Melbourne
- Johnson Street Shaft, South Melbourne
- South Wharf Shaft, South Bank
- North Wharf Shaft, near Wurundjeri Way
- Batman Hill Drive Shaft, Docklands
- Docklands Shaft, near Charles Grimes Bridge

A key construction site will be established at Fennell Reserve. This is the site where most of the work will occur. The TBM will be inserted into the ground at this point. It will first head South to the Swallow Street Shaft where it will be removed and then re-inserted at Fennell Reserve Shaft to then tunnel north to the South Wharf Shaft on the bank of the Yarra River. Earth spoil from the tunnelling operations will be removed at the Fennell Reserve Shaft.

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Minimising the impact on the community

Melbourne Water acknowledges that the works at times may be disruptive to the local community.

As this is a major infrastructure project there will be some unavoidable impacts and Melbourne Water is working closely with our construction partner and the community to attempt to minimise these impacts.

Local residents will be given advance notification of any temporary closures of portions of reserves, roads or paths by means of community information bulletins (such as this one), and notices placed in local newspapers. Temporary signage will be installed so alternate routes can be planned.

Work hours

Work above ground will occur from Monday to Saturday between the hours of 7:00am and 6:00pm. Some maintenance work on the TBM will need to take place between 6:00pm and 11:00 pm on Saturdays; however, this should be inaudible because works will take place underground. No work is planned on public holidays.

If there is a need for work outside these hours, residents and businesses will be notified in advance where possible.

Removal and replacement of trees and other vegetation

At some of the sites it will be necessary to remove some of the trees and other vegetation to allow the work to be done. A plan for tree removal has been developed in consultation with local councils. Once the project is completed, landscaping works will be done at each of the sites to restore the sites.

For more information please contact:

Melbourne Main Sewer Replacement Project Team

Peter Clark – Project Manager
Telephone - 9235 2560
Email - peter.clark@melbournewater.com.au

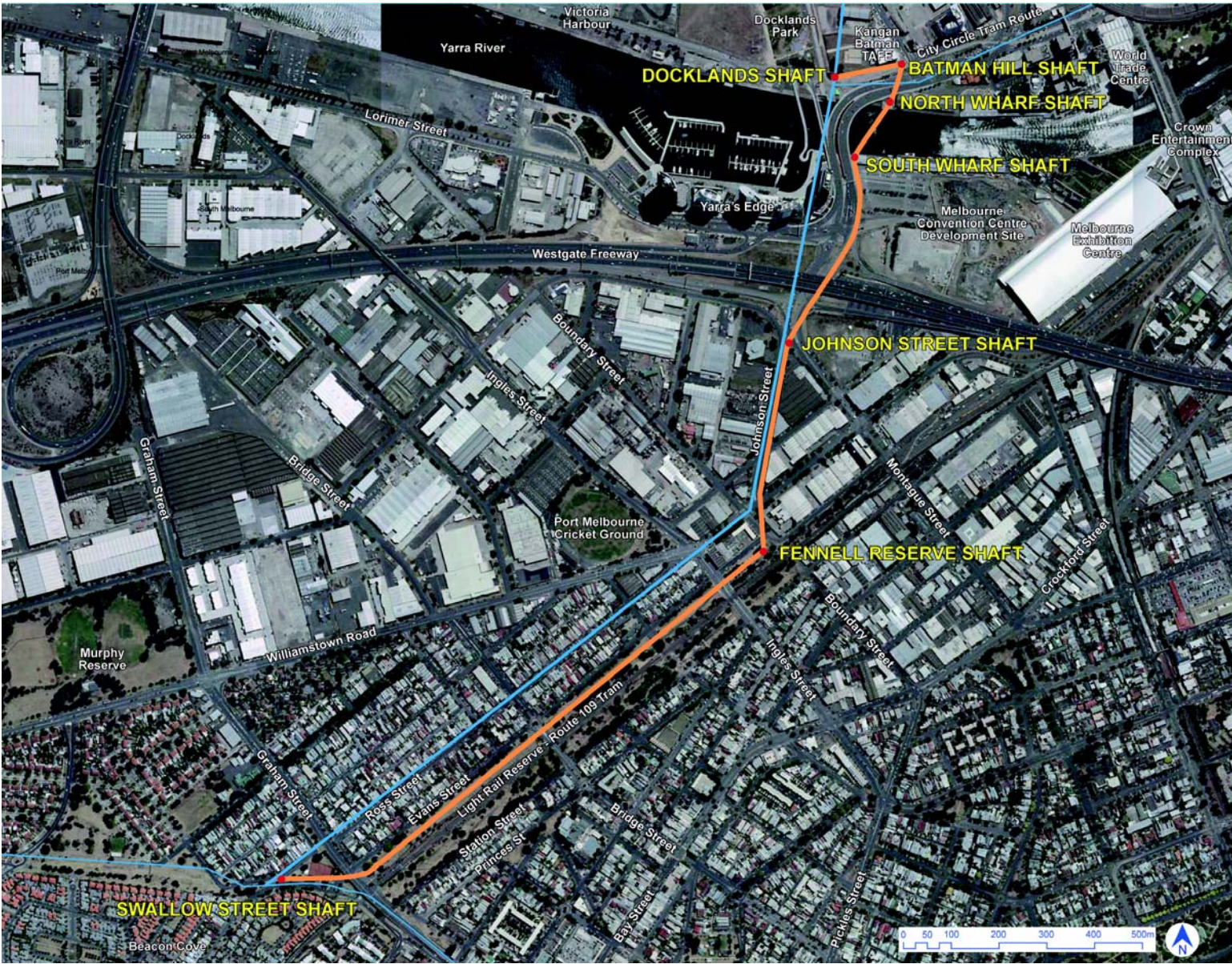
Melbourne Main Sewer Replacement Communications & Community Relations

David Hill – Manager, Communications & Community
Telephone – 9235 1514
Email – david.hill@melbournewater.com.au

For more information about Melbourne Water please call 131 722 or visit www.melbournewater.com.au

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Proposed Location of the Melbourne Main Sewer Replacement:



Legend

— Existing Sewer

— Proposed new sewer

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