

Fact Sheet

September 2009

Emergency Relief Structure – Frequently Asked Questions

The North Western Sewer Emergency Relief Structure (ERS) is scheduled to be constructed in Afton Reserve in Aberfeldie (also known as the Afton Street Conservation Park) in October 2009. This information sheet is designed to answer many of the common questions about this project.

What is an ERS?

An ERS is an essential service which helps prevent sewage spills and protects the sewer system from serious damage, particularly during major storm events. It is an overflow or relief structure designed to act as a pressure valve when the system becomes overloaded.

Why is it needed?

Following an extreme wet weather event large amounts of rainwater can seep into the ground and enter the sewer system. A rapid and substantial increase in volume could cause the system to reach capacity as pressure builds. In order to maintain safe operation a relief mechanism is required.

What would happen if we didn't have it?

Without a relief mechanism, the system could 'back up' resulting in an uncontrolled sewage spill, particularly in low lying areas, but potentially in people's homes. A build up of pressure would also risk damaging the sewer network, which would be likely to require long term shutdown of the system and cause major disruption to surrounding communities.

Why does the ERS need to go here?

In 2005 an extreme wet weather event resulted in an overload of the North Western Sewer. The pressure from this overload lifted the covers of sewer pits in Afton Reserve, resulting in an uncontrolled sewage spill. This spill was not detected for a number of days, posing a potential risk to the public. This project is designed to prevent such uncontrolled spills reoccurring.

Investigations and hydraulic modelling have shown that the ERS needs to be placed in this location for the efficient operation of the system. These works will not change or impact on the floodplain of the river and will not impact on existing flood levels.

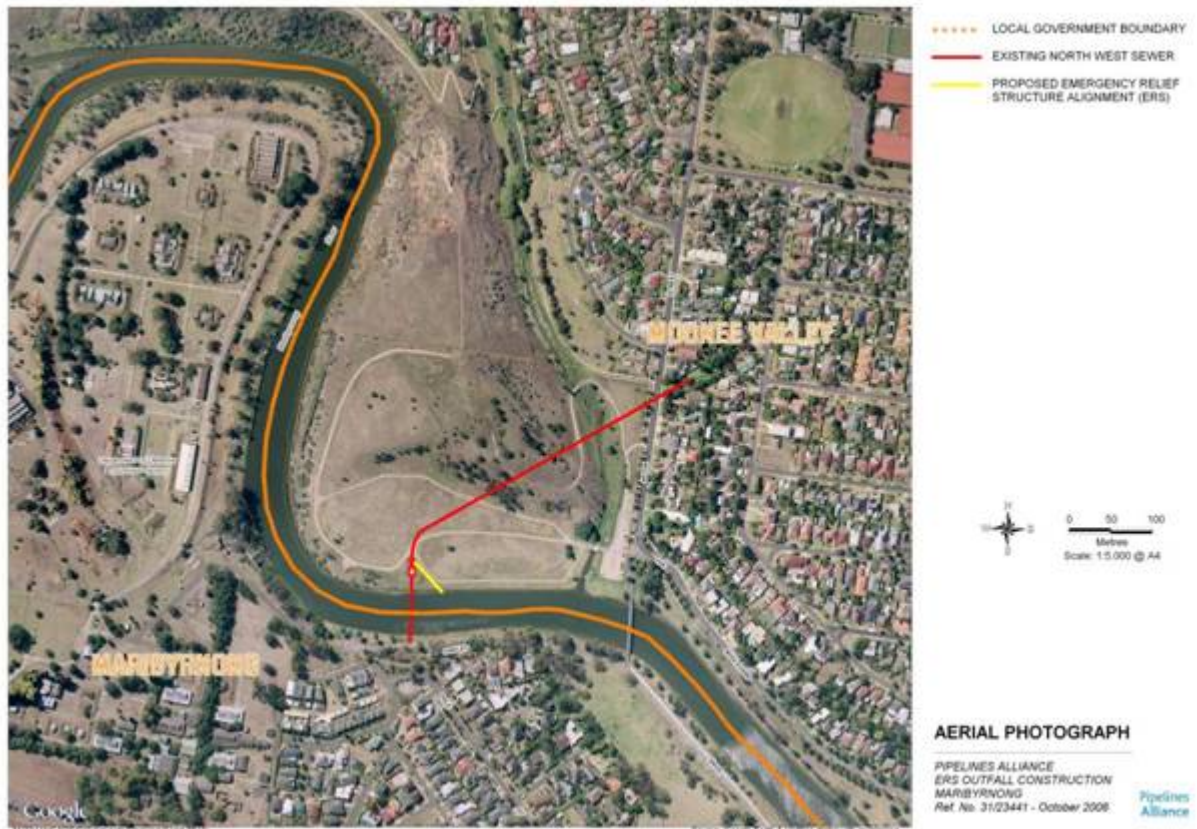


Figure 1: Location of proposed works

Do other ERSs exist?

Yes, there are dozens of ERSs within the Melbourne sewer network. They are connected to a central monitoring system which allows spill procedures to be activated when one of them operates.

When would an ERS operate and what happens when it does?

An ERS may operate during an extreme wet weather event or in the event of a major interruption within the system. The types of events that may cause this are rare. Weather events of this severity may only occur on average once in 20 years. During such events system flows are further diluted from the rain water entering the system and are typically made up of 99% water.

The ERS in the Afton Street Reserve is designed to release a sufficient volume of flow from the system into the Maribyrnong River to relieve pressure and thereby prevent major damage to the system and/or an uncontrolled spill occurring.

If the ERS operates, Melbourne Water will be alerted by electronic sensors. When this occurs emergency spill procedures will be implemented.

Does the ERS meet appropriate guidelines?

Yes, the ERS meets the strict design and operational standards and guidelines set by the Environment Protection Authority (EPA), Melbourne Water and the local council.

The sewer system operates according to State Environment Protection Policies (SEPP) which are set by the EPA. These policies require that the system must be able to cope with flows from a 1 in 5 year rainfall event, as determined by the Bureau of Meteorology. The North Western Sewer, which the ERS will be built on, is relatively new and has more than this capacity. This means that the ERS is only likely to operate on average once every 20 years.

When will the ERS be constructed?

Construction of the ERS is expected to commence in October 2009 and take four to five months to complete. Works will take place during regular construction times, 7am to 6pm Monday to Friday.

Who is building the ERS?

The ERS is being designed and constructed by the Pipelines Alliance on behalf of Melbourne Water. The Pipelines Alliance is a partnership between Fulton Hogan, Jaydo, GHD and Melbourne Water, and is part of a five-year program to improve sewerage and drainage systems across the Port Phillip and Westernport regions.

What will it look like when finished?

The ERS will be mainly underground. The only part of the structure that will be visible when finished will be the pipes on the north bank of the river. It will look like a typical drain outlet, with rocks placed around the end of the pipes and shrubs planted to enhance the area. A fence will be constructed around the top of the outlet for safety. Fencing and landscaping will be in keeping with council's master plan for the Afton Street Conservation Park.

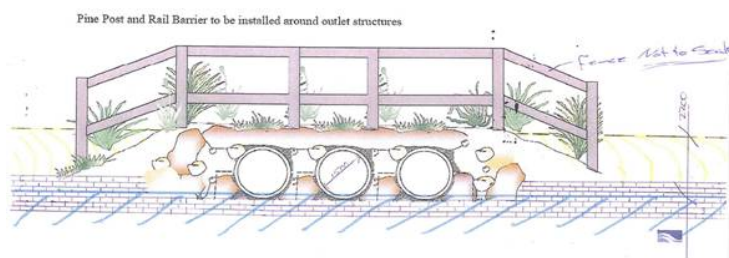


Figure 2: Standard Melbourne Water drainage outlet

For further information about this project call Wes Turnbull on 8417 7662 or email pipelinesalliance@melbournewater.com.au

You can also call Melbourne Water on 131 722 or visit melbournewater.com.au for general information about other projects to secure a sustainable water future.