

11. Pipe Upgrades – East Geelong

WHAT IS THE PROJECT?

This mitigation measure proposes upgrading the drainage system in two known flooding hotspots in the eastern part of Geelong, where the existing drainage is not able to cater for the volume of stormwater that impacts the area during intense rain events.

HOW WOULD THIS HELP?

These upgrades would provide extra drainage capacity, allowing more water to move through the system quickly during storms. This helps:

- > Reduce flood depth in these two hotspot areas.
- > Lower the likelihood of localised flooding, especially during smaller rain events.

FURTHER INFORMATION:

- > The benefits are localised to a small area of the catchment.
- > Impacts may be transferred or increased in areas downstream of the upgrade if further mitigation works are not implemented.
- > Further investigation is required to determine a full scope of works to ensure mitigation of impact from both upstream and downstream properties.
- > This project will involve significant underground works and will result in disruption to road traffic and local shops.

Hotspot one: A new 300 mm diameter pipe would be installed in Laneway No. 39, between Winter Street and Myers Street, to help drain a low point where water tends to collect.

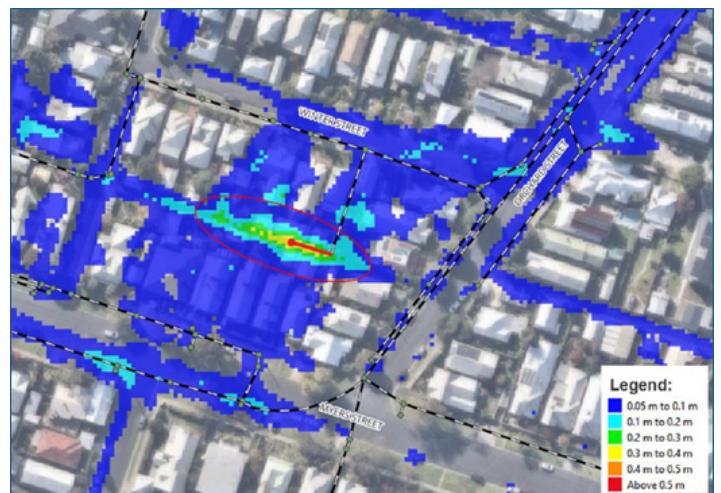


Figure 1: Location of flooding hotspot one.

Hotspot two: Existing drains between McKillop Street and Ormond Road would be upgraded. The main pipe size will increase from 600 mm to 750 mm between Henry Street and Heath Place to better manage larger volumes of stormwater.

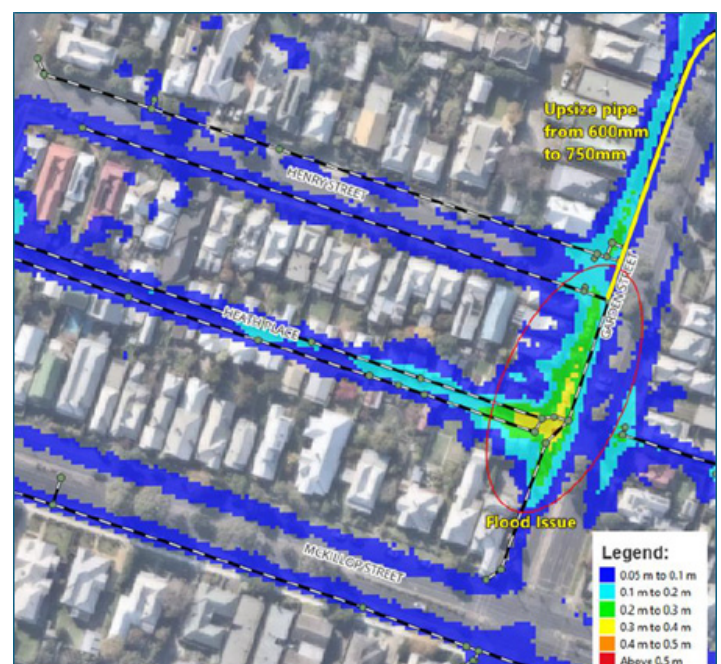


Figure 2: Location of flooding hotspot two.

MITIGATION OPTIONS

Central Geelong Stormwater Management Strategy

WHAT DOES FLOOD RISK LOOK LIKE IF THIS PROJECT IS BUILT?

Preliminary modelling shows areas of reduced flooding and some areas where flooding may increase due to the pressure this project puts on downstream systems.

The two diagrams showing the modelling results:

Green = Decreased flooding

Yellow = Increased flooding

Modelled flooding risk after project built (flooding – 20 per cent AEP).



Figure 3: 20 per cent Annual exceedance probability (AEP) modelling results

Before and after the project (flooding – 1 per cent AEP).



Figure 4: 1 per cent AEP modelling result

INDICATIVE PROJECT COST

Medium – between \$5 million and \$50 million

IMPLEMENTATION TIME

Long-term – more than 10 years

CAN THIS OPTION BE STAGED

Yes – the project can be applied in stages across different streets or areas