

6. Dare Street Pipe Upgrade

WHAT IS THE PROJECT?

This project involves upgrades to parts of the drainage system near Dare Street to the west of Hodgson Street.

This option would involve upgrading some existing drainage infrastructure and installing additional stormwater pipes and pits to increase the capacity of the local drainage system.

The area is affected by overland flow, which occurs when stormwater travels across the ground surface during heavy rainfall because the drainage system is full or unable to capture all flows. This option may help reduce flooding impacts by improving how stormwater is captured and conveyed through the drainage network.



Figure 16: Dare Street Pipe Upgrade.

HOW WOULD THIS HELP?

- > The study suggests this option could reduce flood risk for approximately 27-33 properties during an intense rain event (1 per cent AEP).

FURTHER INFORMATION:

- > Final costs for this option would be highly dependent on detailed design outcomes, particularly whether the proposed works conflict with existing underground services.
- > Early technical review also indicates that the original drainage alignment may involve significant cost and constructability challenges, particularly where works would rely on access through privately owned properties.
- > An alternative alignment has also been explored as part of this option. This alternative would shorten the pipe within Field Street South, divert it north, and then continue south along Dare Street to reconnect with the existing drainage network
- > The alternative alignment is considered more feasible from a construction, access and maintenance perspective. It may also reduce the estimated project cost by approximately \$1.4 million, subject to further investigation and design.

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

The diagrams below show the modelled change in flooding if this option was delivered.

■ Green = Decreased flooding ■ Pink = No longer occur for the event shown.

Different shades of green show different levels of flood reduction. In some areas, even a small reduction in flood depth may help reduce the potential impact of flooding during a major storm event.

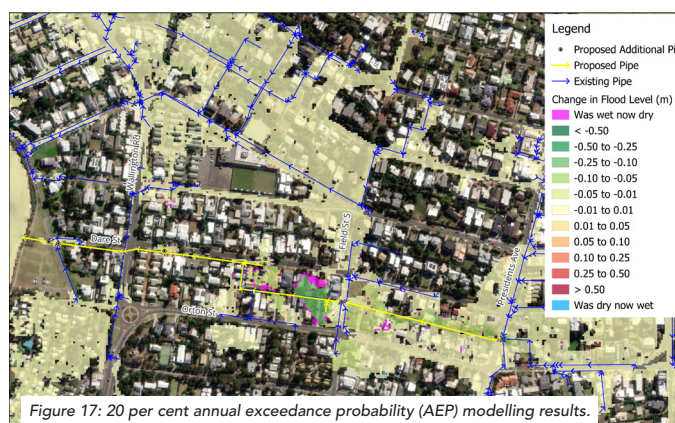


Figure 17: 20 per cent annual exceedance probability (AEP) modelling results.

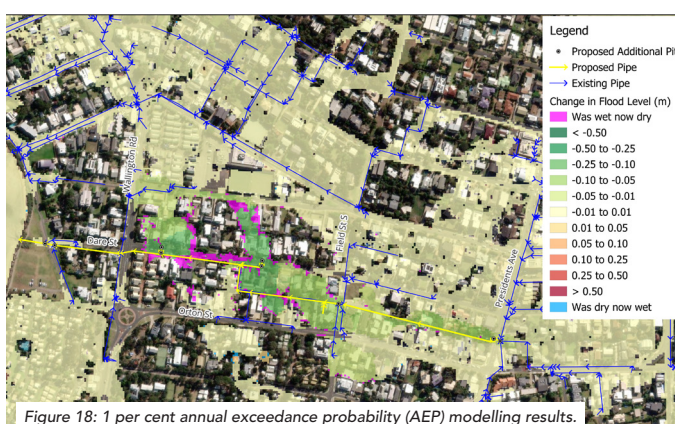


Figure 18: 1 per cent annual exceedance probability (AEP) modelling results.

INDICATIVE PROJECT COST

High – more than \$5 million.

IMPLEMENTATION TIME

Long-term – more than 10 years.

CAN THIS OPTION BE STAGED

No - the full project would need to be completed at one-time.