

CASE STUDY – Anglers Tavern



Project Name: Anglers Tavern,
Maribyrnong, Melbourne, VIC
Asset Type: Riverside pub built circa
1870
Flood Type: Riverine & flash
flooding
Delivery Period: 2034-25
Client / Asset Owner: Australian
Venue Company

The Background

Historical flood events since 1870, with a substantial flood in November 2022

- The pub's beer garden & entire ground floor flooded up to ceiling height, 2.35m
- Closed for 18 months, with a huge loss of income and refurbishment.
- Insurability in doubt with a repair as before.
- As well as riverine floods, the site also experienced localised flash flooding in heavy rainfall events.

Objectives & Design Criteria

Project Objectives:

To ensure the repaired venue was insurable, at economic levels, and suffered minimal downtime in future (inevitable) floods. Adherence to local planning and regulatory standards was a given for a public venue, so any planned flood mitigation measures to structural elements had to be ensured.

Managing both riverine and flash flooding was imperative!

Staff safety was a major criterion that demanded a plan for a safe evacuation route.

The riverine flood event was later assessed as a 2% AEP at a flood level of 4.216m AHD.

Mitigation Strategy

After initial surveys, it was decided that a full perimeter solution was both impractical and too costly.

iREACT Consulting advised on the use of manually deployed temporary and demountable flood barriers internally to protect the venue's critical infrastructure – the bar, kitchen and toilet facilities, with the areas outside this defence line protected by a “wet proofing” strategy.

Protecting this area to 2.2m - 2.4m required structural enhancements to several walls, the introduction of numerous sump and puddle pumps and the insertion of non return valves in sewer and stormwater drainage.

Four barriers were deployed to protect openings to the north of the site, and a barrier array in six sections protected the internal critical areas, linking up with structurally enhanced walls. Three of the barriers on the north side were also highlighted for flash flood protection measures.

One side of the venue abutted an earth embankment, so to complete the encirclement of the critical area, this wall was treated internally with a nano waterproof coating to its full height.

A Flood Emergency Response Plan (FERP) was developed to ensure operational capabilities were identified, storage was considered, evacuation routes identified, and training & maintenance included on an annual basis.

The trigger points for the riverine flooding were determined from a local river gauge and BOM weather warnings. Flash flood alerts were to be decided by the local staff, based on the BOM weather forecast, with the three barriers to the north of the venue deployed to a height of 400mm when closing the venue for the night.

Outcomes, Performance & Insurability

The property is protected and self insured for a 2% AEP event, with the 1% AEP event covered by a **parametric insurance policy**.

The ceiling height of the venue means that a 1% AEP will enter the protected area through the first floor, with a number of pumps deployed to minimise the overtopping event to a manageable level