

# Case Study

Flood Protection: **Flood Gates**

Client: **Aberdeen City Council**

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**Located adjacent to the River Dee, the underpass in Aberdeen gives access to local businesses and residential properties in the city and after previous flooding the council were looking to for a way to prevent future flooding.**

Given the nature of the environment it was decided that the best solution would be a bespoke One Man Operational Floodgate. The gate is controlled manually, with an option for hydraulic or electronic control.

When designing the gate (4m x 5m) the design and build team had to consider that the gate needed to be held open at 120 degrees, so the space between the gate leaf and the wing of the bridge needed to be wide enough to not cause entrapment of a person. Bespoke posts were designed to secure the gates open at the angle.

A drainage channel was installed and connected to multiple sump & pump units to discharge any water back onto the river side of the gate. To house a power supply connector for the pumps generator, a bespoke connection cabinet was manufactured and installed above flood level.

Upon completion of installation, the gates were water tested up to 600mm using the councils water bowsers. Pumps were also tested to ensure that the pipe work pumped water efficiently.



*OMO Flood & Storm closed showing bespoke posts*



*Underpass before OMO Flood & Storm Gate installation*



**Watch the time lapse video of installation here:**  
[https://www.youtube.com/watch?v=d7ArXF\\_rjE&t=3s](https://www.youtube.com/watch?v=d7ArXF_rjE&t=3s)