

# Grangemouth Flood Protection Scheme

## Your Questions Answered

### Flood Defences



#### What kind of flood defences will GFPS have?

Following the appraisal of different options, a preferred flood scheme was identified. The scheme consists of flood defences comprising of walls, embankments, flood gates, flow control structures, improvements to the drainage system, and the replacement of the lock gates in the port. There will be around 28km of flood defences built, which will vary in height along sections of the riverbank and estuary frontage. Improvements to the drainage system will feature new underground pumping stations. In addition to constructing the flood defences, the diversion and protection of many public utility services such as gas, water, electric and telephone cables/duct/pipes will be carried out to allow the construction of these flood defences and ensure continuity of services.



#### Flood Walls and Embankments

A flood wall is a wall which is built along coastline or riverbank to prevent flooding of properties and the risk to life from flood water. A flood embankment works in the same way as a flood wall. A flood wall could be finished using sandstone, brickwork, patterned concrete, and exposed sheet piles.



*Example of a flood gate*



*Example of a grass embankment*



#### Flood Gates and Demountable Barriers

A flood gate is a gate which can be opened or closed to allow access through the flood defence. Some flood gates will only be closed if a flood event is forecast whilst others can be left in the closed position and opened when access is required.

Demountable defences function in a similar way to flood gates, unlike gates they are fully removable and can be stored nearby, only being put in place when flooding is expected. These can be used across roads.



## Flow Control Structures

A flow control structure is a structure that is positioned in water channel and controls the flow of water passed it. These structures can limit the amount of water that can flow pass the structure lowering water levels downstream. These structures can also redirect water to other areas/channels.



*Example of flow control structures*



## Drainage Improvement Works

Drainage improvement works will be carried out throughout the scheme area, these may include construction of pumping stations. A pumping station would pump excess water over/through the flood defences. The pumping station would only function during extreme rainfall events.



*Example of a pumping station*



## Will the flood defences reduce the visual amenities of the area?

How the finished flood defence will look will vary depending on location. This may vary from a bare sheet pile or plain concrete wall in industrial areas, where they won't be generally visible; to patterned concrete walls or walls with stone or brick cladding in highly visible areas where the landscape is important to local communities. Flood defences can also take the form of grass or wildflower covered embankments, although, the footprint of these is considerably larger than walls.

Feedback is always welcome on the scheme and you can get in touch with the project team at

 [grangemouthfps@falkirk.gov.uk](mailto:grangemouthfps@falkirk.gov.uk)

 01324 506070

[grangemouthfloodscheme.com](http://grangemouthfloodscheme.com)

 [@grangemouthfps](https://twitter.com/grangemouthfps)

 [@grangemouthfps](https://www.facebook.com/grangemouthfps)

 [@grangemouthfps](https://www.youtube.com/grangemouthfps)

