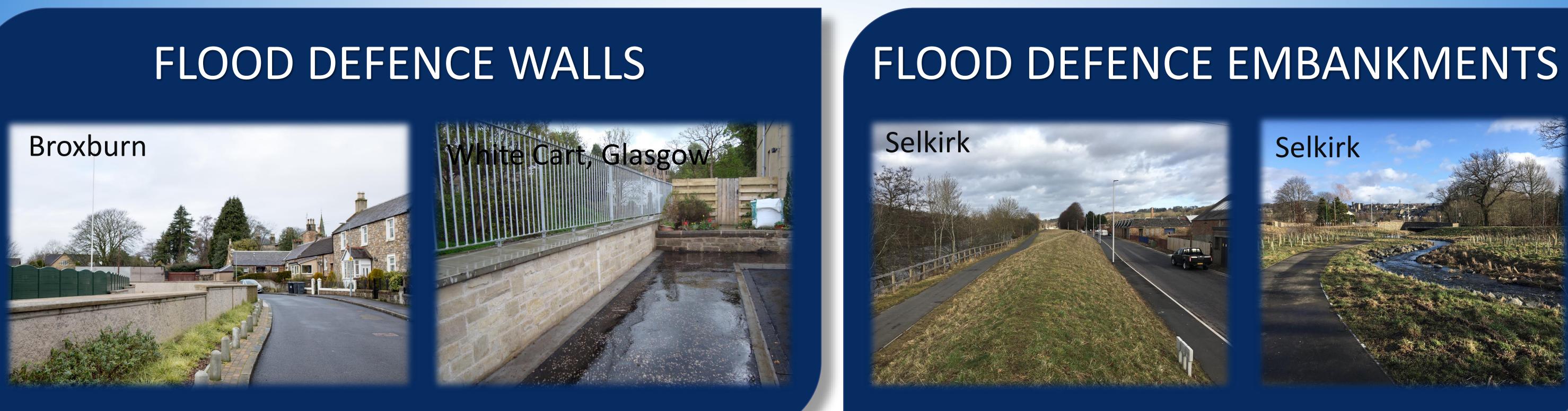
# Ways of protecting against the effects flooding



# SUSTAINABLE FLOOD RISK MANAGEMENT

Long Philip Burn, Selkirk









# UPSTREAM FLOOD STORAGE

St Mary's Loch

**MUSSELBURGH FLOOD PROTECTION SCHEME** Turner & Townsend

## FLOOD GATES



# **Consenting Bodies & Consultation Groups**

### **Historic Environment Scotland (HES)**

Ensure impacts on historic environment, especially the listed structures, are adequately mitigated



### **Scottish Natural Heritage (SNH)**

Assess impacts on the River Esk SAC/SSSI and protected habitats and species. Grant associated licences/consents



### **Stakeholder Groups and the Public**

Provide input to the option appraisal process through views and feedback to be addressed by design team









### **East Lothian Council**

Make sure Scheme accords with planning policy and regulations. Approve or reject the Scheme under flood risk management legislation

East Lothian

Juncil

### **River Forth Fisheries Trust** (RFFT)

Ensure the options are appraised with adequate consideration for migratory fish and their habitat

Who is involved in consenting the Flood **Protection** Scheme?

SEPA otection Agency

#### **Scottish Government**

Provide advice during Scheme development, confirm Deemed Planning Consent and if required, provide direction on Scheme approval

### **Service Providers**

Provide input and assistance to the probable requirement to divert or protect a number of pipes and cables

## **MUSSELBURGH FLOOD PROTECTION SCHEME**

#### **Scottish Environment Protection Agency (SEPA)**

Assess the river environment impacts and grant CAR Licence for the Scheme

# Types of Flooding which could affect Musselburgh

# RIVER ESK FLOODING





# FLASH FLOODING











# COASTAL FLOODING



## SURFACE WATER FLOODING



East End Glasgow, 2002

**MUSSELBURGH FLOOD PROTECTION SCHEME** Turner & Townsend



# GROUND WATER FLOODING

**Pinkie** area

# The Processes required to take forward the MFPS

## Flood Modelling

2019

Information Gathering

2018

**Option Appraisal** and preferred Scheme

Approvals under **Flood Risk** Management Act **Potential Objection** Resolution

**Detailed Design** 

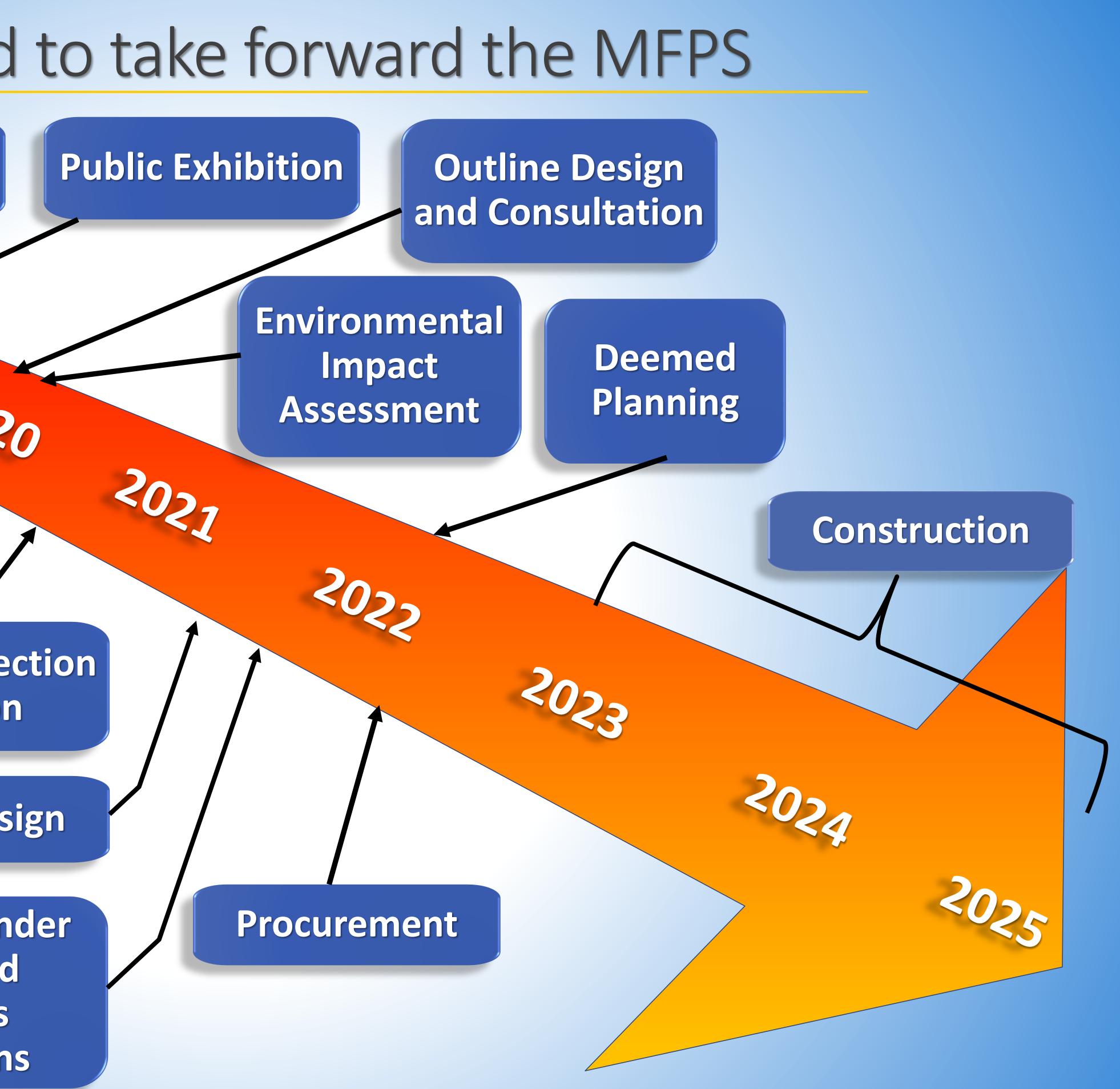
**Approvals under** Controlled Activities Regulations











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## **MUSSELBURGH FLOOD PROTECTION SCHEME**