Ongoing Public Engagement - Your Opportunity to Take Part

The Project will include opportunities to participate in public consultation. The Project Team, Limerick City and County Council (LCCC) in conjunction with the Office of Public Works (OPW) wishes to consider all viewpoints in relation to the Constraints Study Area being examined. This is your opportunity to take part at the early stages of the planning of the Adare Flood Relief Scheme. Time spent communicating your views with the Project Team is greatly appreciated.

The initial Public Consultation Event for the Adare FRS will take place on **24 March 2022** from **3.00pm – 7.00pm** in Adare Town Hall with the project team delivering, by post, all the information about the Scheme to all residents, business owners and Stakeholders within the Scheme Area in advance of this event.

Please examine the Study and Scheme Areas in conjunction with completing the questionnaire and let your views be known by providing this documentation and any other information on flood risk and environmental/ ecological information to the Project Team. Your opinion will be appreciated and given full consideration. Contact details for the Project Team are listed below.

A subsequent Public Consultation Day will be held to let Stakeholders and the public know how their observations, comments and submissions were used within the Environmental Constraints Study and the Scheme Development Process.

Further Information

All queries, questionnaires and comments in relation to this Project can be addressed to:

Contact Name: **Jonathan Reid**
Contact Title: Ryan Hanley Project Manager

Address: Ryan Hanley Ltd.
Engineering and Environmental Consultants
1 Galway Business Park, Dangan, Galway,
H91 A3EF

Phone: +353 (091) 587116
Email: adarefrs@ryanhanley.ie

Website: www.adarefrs.ie

Comhairle Cathrach & Contae Luimnigh
Limerick City & County Council

Adare Flood Relief Scheme

Information Brochure

MARCH 2022

Comhairle Cathrach & Contae Luimnigh Limerick City & County Council
OPW Oifig na nOibreacha Poiblí Office of Public Works
RYAN HANLEY

Background

The Office of Public Works (OPW), working in partnership with Limerick City and County Council (LCCC) and other Local Authorities, commissioned and have completed the Shannon Catchment Flood Risk Assessment and Management (CFRAM) Study. The objectives of the CFRAM Study were to:

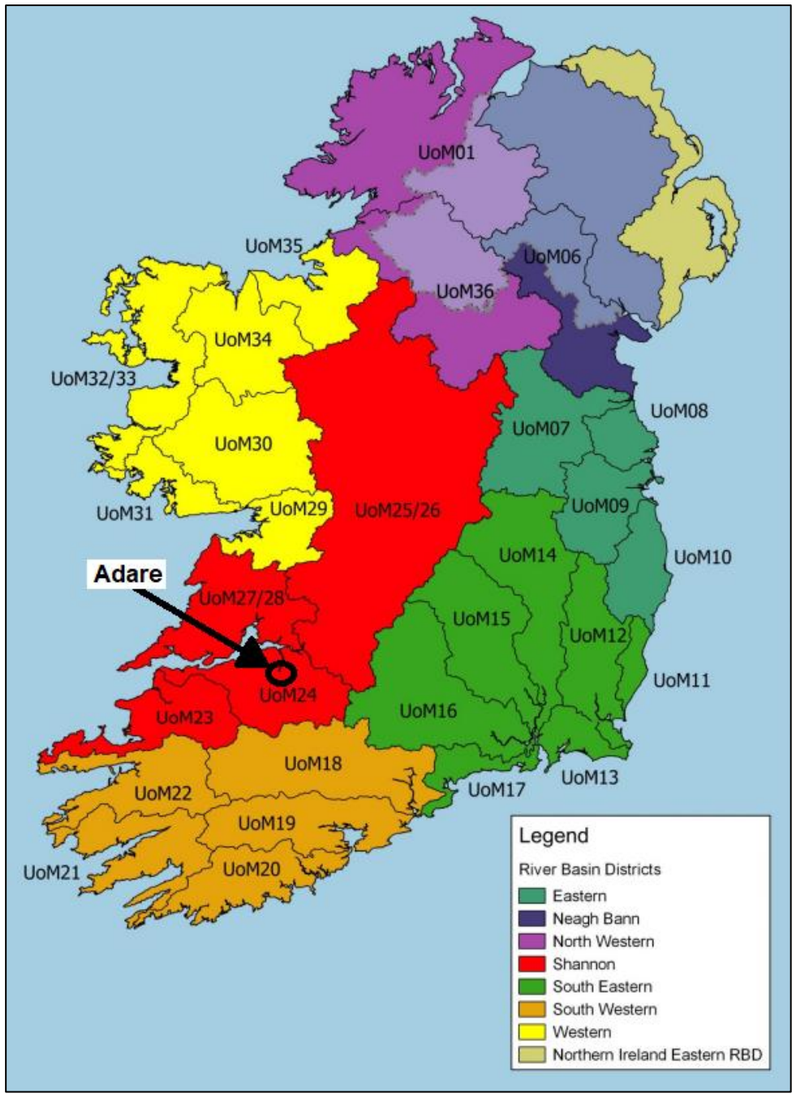
- Assess and map the existing and potential future flood risk within the CFRAM Study Area.
- Identify viable structural and non-structural options and measures for the effective and sustainable management of flood risk in the Areas for Further Assessment (AFAs) and within the CFRAM Study Area as a whole.
- Prepare a Flood Risk Management Plan (FRMP) and Strategic Environmental and Appropriate Assessment (as required) for the CFRAM Study Areas to set out the policies, strategies, measures and actions that should be pursued by the OPW, Local Authorities and other Stakeholders. This was done to achieve the most cost-effective and sustainable management of existing and potential future flood risk within the Study Area, taking account of environmental plans, objectives and legislative requirements and other statutory plans and requirements.

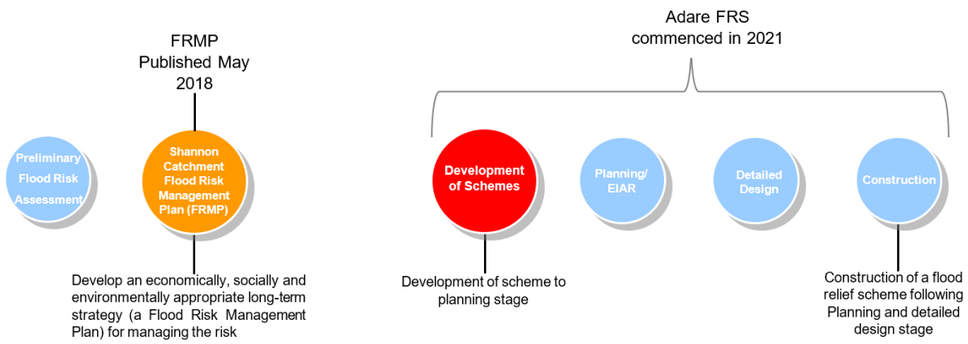
The Shannon CFRAM Study Area included Adare as an AFA and concluded that a Flood Relief Scheme would be viable and effective for the community.

Appointment of Engineering and Environmental Consultant

Ryan Hanley has been appointed as Engineering Design and Environmental Consultants by LCCC to assess, develop and design an appropriate, cost-effective and sustainable Flood Relief Scheme, which aims to minimise risk to the existing community, social amenity, environment and landscape.

The Project Team includes the Engineering and Environmental Consultant working in partnership with LCCC and OPW. An indicative flow chart showing the process from inception through to construction for the Adare Flood Relief Scheme is shown on the adjacent figure.





Flood Relief Study & Scheme Areas

The Flood Relief Study and Scheme Areas for this Project are shown on the adjacent maps.

The **Study Area** is the area that contains the:

- Lengths of river channels / watercourses that have an influence on the area intended to benefit from and be protected by any feasible Scheme;
- Catchment areas draining to those river channels / watercourses;
- Areas that require environmental assessments as part of the development of any such Scheme. (Note: For clarity, the entire ecological study area is not shown here.)

The **Scheme Area** is defined as:

- Areas within which physical works are proposed to be constructed, accessed and maintained as part of any feasible Scheme.
- Areas that are intended to benefit from, and be protected by, any feasible Scheme.
- Lengths of river channels upstream and downstream that are likely to be impacted hydraulically/ environmentally by any feasible Scheme.

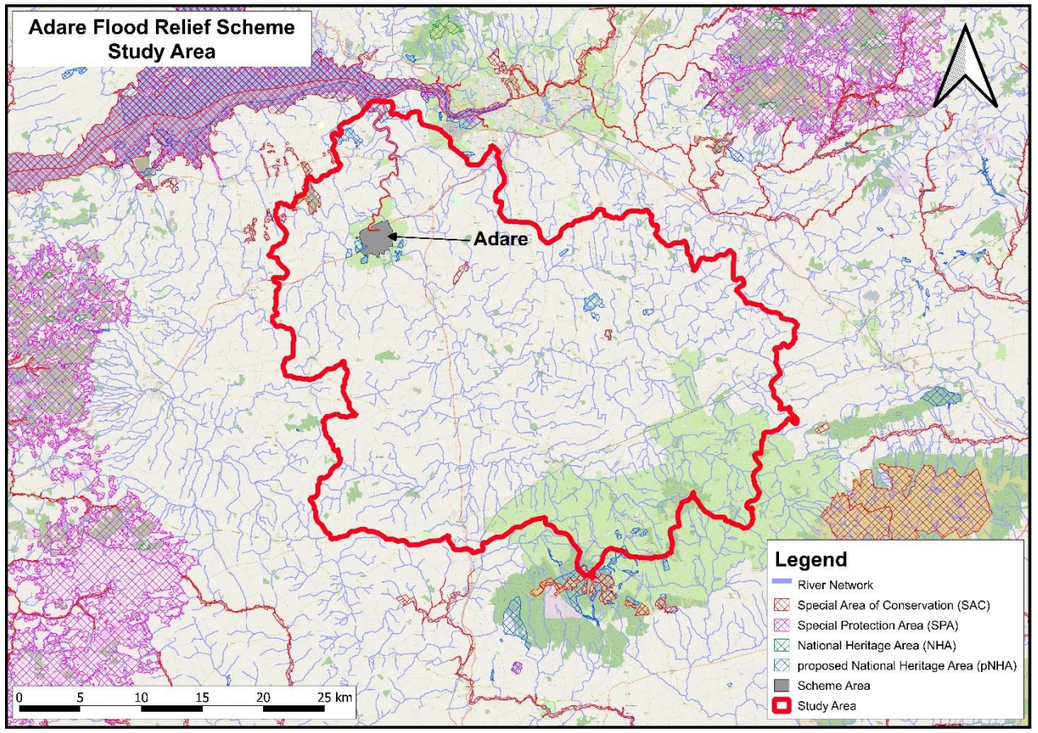
The Scheme Area encompasses Adare, which is located on the southern bank of the River Maigue approximately 15km Southwest of Limerick City. The town is served primarily by the N21 National Road. Adare has been long afflicted by flooding from the River Maigue and CFRAM estimates 120 properties are at flood risk (1% AEP fluvial and 0.5% tidal), with economic damages (capped) at €21M. The properties at risk of flooding include residential housing at Blackabbey, St. Nicholas National School and Adare Manor which is set to host the Ryder Cup in 2027. Recorded past flood events include 1946, 1995, 1996, 1999, 2002 and most recently 2014.

Project Steering Group Members

The Project is being carried out under the direction and guidance from the Steering Group, which comprises of:

OPW Oifig na nOibreacha Poiblí Office of Public Works

Comhairle Cathrach & Contae Luimnigh
Limerick City & County Council



Environmental Assessment

The Project Team will produce the necessary Environmental Assessments for the Scheme as outlined below:

- Conduct Environmental Impact Assessment and the preparation of an Environmental Impact Assessment Report (EIAR) for the preferred Scheme. The EIAR will be prepared to meet the requirements set out by Directive 2014/52/EU and the Environmental Protection Agency (EPA) in the '*Draft Guidelines on the Information to be contained in Environmental Impact Assessment Reports*' (EPA, 2017).

- The purpose of the EIAR will be to document the environment in the vicinity of the proposed Scheme in an effort to quantify the possible impacts, if any, that the Scheme may have on the environment.

- The Project Team shall also prepare a Screening Statement for a Natura Impact Statement (NIS). The NIS Screening shall consider the likely impacts of the preferred Scheme on relevant Natura Sites. Should significant effects be identified, an NIS will be produced.

Environmental Constraints

The adjacent map shows the Environmental Constraints within the Scheme Area. These constraints include:

SAC: Special Areas of Conservation are considered prime wildlife conservation areas of international importance. These are protected under the EU Habitats Directive and Planning & Development Acts. The Maigue River forms part of the Lower River Shannon SAC.

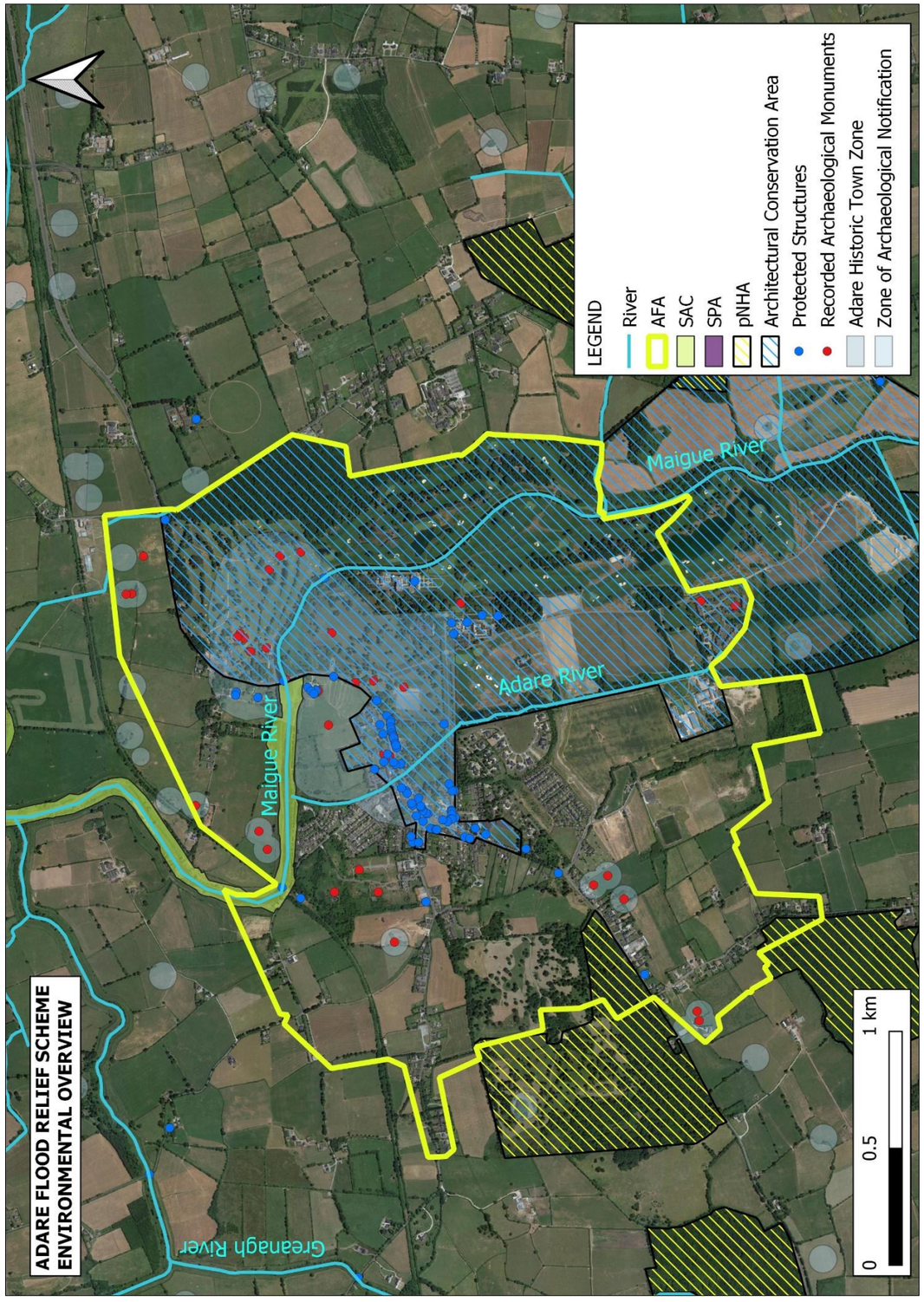
SPA: Special Protection Areas are designated high value breeding and foraging habitats for a range of wild birds. These are protected under the EU Birds Directive and Planning & Development Acts. The River Shannon and River Fergus Estuaries SPA is incorporated within the northern extent of the Study Area.

SACs and SPAs are collectively referred to as European Sites.

NHA & pNHA: Natural Heritage Areas and proposed NH Areas are designated areas considered important for the habitats present. They are protected under the Wildlife Amendment Act (2000).

RMP: Recorded Archaeological Sites or Monuments as listed on the Record of Monuments & Places (RMP). These are protected under the National Monuments Acts (1930-2014).

RPS/NIAH: Built Heritage as identified and listed on the Limerick County Record of Protected Structures (RPS) & National Inventory of Architectural Heritage (NIAH).



Project Stages

The Project comprises five stages, as set out below:

Stage I – Options Assessment, Scheme Development and Design

- Carry out the review and assessment of the technical analysis and preferred measures identified in the Shannon CFRAM Study Reports and the FRMP for Unit of Management 24.
- Complete Topographical and Ground Investigation Surveys. The existing embankments shall be assessed as part of this.
- Hydrological analysis and hydraulic modelling.
- Identification and undertaking of baseline environmental surveys.
- Carrying out a Constraints Study to identify the key environmental issues in the Study Area, which may be impacted upon by possible flood alleviation measures, and/or which may impose constraints on the viability and/or design of one or more measures.
- Assessment of potential flood risk management options to alleviate the risk of flooding to the community of Adare.
- Selection, development and design of a preferred option (the '*Scheme*').
- Preparation of a Habitats Directive Appropriate Assessment Screening, Natura Impact Statement (if applicable) and Environmental Impact Assessment Reports.

Stage II – Planning/Development Consent Processes

- Preparation of documentation required to progress the Scheme through the necessary planning and other statutory processes.

Stage III – Detailed Construction Design and Tender

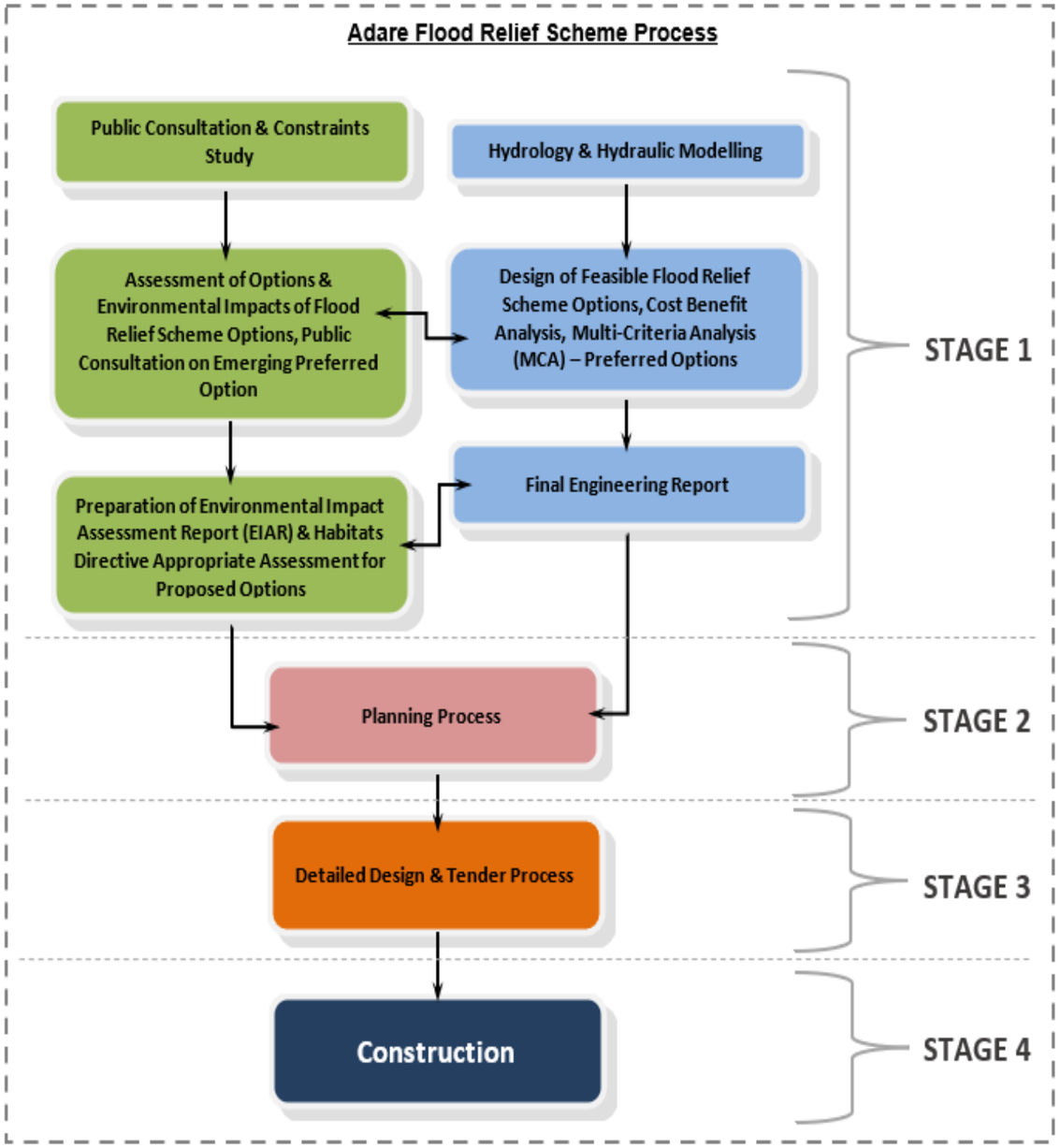
- Undertake and complete the detailed design of the Scheme.
- Preparation of contract documents and undertaking the procurement of the works contractor to construct the Scheme.

Stage IV – Construction Stage

- Construction of the Scheme by appointed Contractor over 24 months.

Stage V – Handover of Works

- Preparation of Operation and Maintenance documents
- Preparation of Scheme Completion Report (including as-built maps and hydraulic model).
- Handover of Safety File.
- Handover of project website.



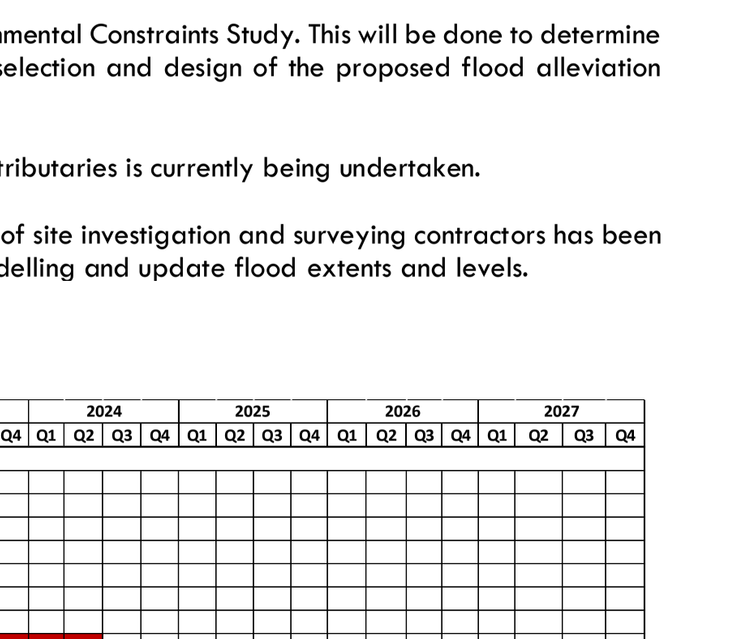
The chart above details the interaction between the Environmental (shown in green) and Engineering (shown in blue) Study for the Scheme.

Progress to Date

- Since commencing the Project in October 2021, the Project Team have commenced data collection and have started the environmental and ecological assessments.
- A number of tasks are ongoing, which include the Environmental Constraints Study. This will be done to determine and document potential constraints which will aid the selection and design of the proposed flood alleviation measures.
- A hydrological assessment of the River Maigue and its tributaries is currently being undertaken.
- Preparation of contract documents for the procurement of site investigation and surveying contractors has been completed. This will enable completion of hydraulic modelling and update flood extents and levels.

Outline Project Programme

Activity	2021	2022				2023				2024				2025				2026				2027			
	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Stage 1																									
Collate available data																									
Surveys and Other Contract Services																									
Hydrological Analysis & Modelling																									
Hydraulic Analysis and modelling																									
Scheme Analysis and Development																									
Environmental Assessment for Preferred Option																									
Stage II																									
Planning Process																									
Stage III																									
Detailed Design of Flood Relief Scheme																									
Tender Process for Flood Relief Scheme																									
Stage IV																									
Construction																									
Stage V																									
Handover of Works and Closeout																									



Upcoming Activities

- Hydrological analysis and hydraulic modelling to determine flood extents and levels.
- Environmental, ecological and topographical surveys.
- Geotechnical investigations.
- Public Consultation Process - All comments and information received from the initial Public Consultation will be considered by the Project Team in developing the scheme from an environmental and engineering perspective.

Engineering – Scheme Development and Design

The Engineering Development and Design is being advanced in parallel with the Environmental Assessment of the Flood Relief Scheme. The range of engineering measures typically considered include, but are not limited to, those listed in the box below. The Project Engineering Team will revisit the list to ensure the preferred option accounts for all existing and new information emerging since the CFRAM Study. It will be further informed by the Environmental Constraints Study and input from the public.

Potential Flood Alleviation Measures (non-exhaustive list)

a) Do Nothing (i.e, imlement no new flood alleveiation measures)
b) Non-Structural Measures (e.g. flood warming system or individual property protection)
c) Relocation of Properties and/or infrastructure
d) Reconstruction of Properties and/or infrastructure to a higher level
e) Flow Diversion (e.g. river diversion or flood flow bypass channel)
f) Flow Reduction (e.g. upstream catchemnt management or flood storage)
g) Flood Containment through Construction of Flood Defences
h) Increase Conveyance of Channel (upstream and/or through and/or downstream of the town)
i) Sediment Depostition and Possible Sediment Traps
j) Natural Flood Management Measures (e.g. creation of woodland, non-floodplain wetlands)

The viable Scheme option for Adare, as identified for the CFRAM assessment, is summarised as follows:

- Construction of new flood defence walls and new flood defence embankments.
- A demountable flood gate will be required across the old railway line and should be tied into the new flood defence wall and embankment.
- The parapet wall on the upstream face of Adare Bridge will need to be able to provide a flood defence function up to the required design standard.
- Existing arterial drainage maintenance scheme will need to be maintained as part of this option
- Installation of a simple flood forecasting system, including an addition of telemetry to an existing hydrometric gauge to send warning messages when water level reaches a specified trigger point.

As part of this Project, the Flood Relief Scheme options detailed above, along with other potentially viable options will be subject to further engineering assessment. The potentially viable options will also be fully appraised as part of the Environmental Impact Assessment process for the Scheme. The preferred flood defence must protect Adare against a flood event to the defined SoP(s) and taking into account the objectives of the Adare Public Realm Strategy, including walking and cycling greenway provision if possible.