

CAVAN TOWN FLOOD RELIEF SCHEME



OPW Óifig na hOibreacha Poiblí
Office of Public Works



Rialtas na hÉireann
Government of Ireland

Tionscadal Éireann
Project Ireland
2040

BYRNE LOOBY
AN **avesa** COMPANY

Cavan Town Flood Relief Scheme



Newsletter 04 August 2023

IN THIS ISSUE

This Newsletter covers the preceding three months since April 2023. Previous Newsletters are accessible on the Project Website.

Stakeholder Engagement

Outlines engagement with stakeholder in the scheme.
Page 2

Surveys

Outlines the technical surveys in progress.
Page 2

Environmental Work

Outlines the environmental surveys in progress.
Page 3

Hydrology

Outlines progress on the project.
Page 5

Stakeholder Engagement

A Collaborative Workshop is planned for quarter 3 of 2023. Invited stakeholders will be encouraged to collaborate, do brainstorming, and exchange ideas on how to achieve the project objective while also incorporating other outcomes at the same time into this project.

Surveys

Murphy Geospatial was appointed for the Technical Surveys earlier in 2023. These surveys were intended to be completed by May 2023 but were delayed due to high water levels restricting access and ability to survey pipes, culverts, and river channels. Expected completion date is now August 2023.



Murphy Geospatial have completed topographical, threshold, underground utilities, and flood wrack mark surveys. The design team will use this survey data in the optioneering and design of feasible defence options. Channel, riverbank, and culvert surveys are in the final stages before completion.

The project team are currently correlating all the survey data received to date to input into the hydraulic model to determine flood risk areas and allow future identification of mitigation measures within the scheme area.



Environmental Work

Envirico were appointed in March 2023 to conduct IAS survey and treatment for a 3-year period. Survey started in April 2023 on site and the first round of treatment for 2023 was completed in the first week of June 2023.



Invasive Species – Japanese Knotweed surveyed in Cavan Town

Tobar Archaeology have conducted and submitted a baseline constraints desktop report for archaeology, architecture, and historic character/intangible heritage in Cavan FRS Scheme Area.

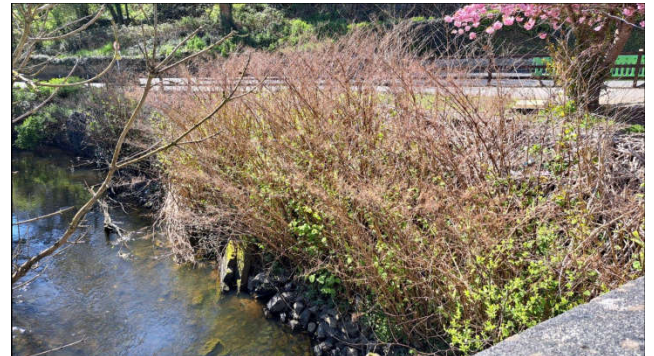
A baseline Landscape and Visual assessment was completed by a Specialist, TBS. The findings of their assessment fed into the environmental constraints assessment of which the report was submitted to the projects Steering Group for review in June 2023.

An initial desktop review and baseline Habitat and Species (H&S) walkover was completed by ByrneLooby within the Study Area, and from this, the environmental team has identified the requirement for five specialist ecological surveys. The intention of these surveys is to provide detail as to what existing environmental sensitivities are present within the Study Area. They will inform the assessment of environmental and ecological impacts as a result of the proposed scheme via the EIA and, if required, the NIS. The surveys will also inform the environmental assessment of viable flood defence options.

Through desktop review, the following specialist surveys were identified as being a requirement:

- **Tree Survey:**

Habitat mapping conducted as part of the H&S walkover identified the presence of trees of interest (i.e., trees of a particular species, age, with ecological potential, and/or with Bat Roost



Potential). The construction of flood defences has the potential to cause impact to such trees either directly through removal or more indirectly through root compaction/trimming/contamination etc., and therefore a dedicated tree survey by a qualified Arborist has been recommended. The survey will: a) identify the species and age of trees of interest, b) map these trees in relation to the proposed works, c) identify the potential impact of the proposed flood defence measures on these trees and, d) establish Root Protection Areas (RPAs) and other protective measures. The survey is tentatively scheduled for the end of July/beginning August 2023(weather dependent) and is expected to last 1 week. VEON Forestry, Ecology & Environment are appointed.

- **Aquatic Ecology Survey:**

Historical records of the presence of the following key species within and in proximity to the Study Area has informed the requirement for aquatic surveys: Freshwater White-Clawed Crayfish (WCC), Brook Lamprey, River Lamprey, Freshwater Pearl Mussel (FWMP) & Atlantic Salmon. Where flood defences are proposed in-river or near-river, risks of habitat loss,

contamination, sedimentation, and noise give rise to concerns for aquatic ecology. Identifying key aquatic sensitivities early in the project life cycle will inform the impact assessment in this regard, inform the options assessment, and identify key protection measures which may implicate the construction (i.e., avoidance of lamprey breeding season). The survey includes the completion of water quality sampling, Q-value and invertebrate sampling, river and fish habitat surveys, invasives species survey and electrofishing (with a Section 14 State License from IFI). The requirement for WCC and FWPM surveys will be determined on completion of initial habitat surveys. The survey commenced end of July and is continuing into August 2023 (weather dependent) and TOBIN Consulting Engineers are appointed.

- **Bat Survey:**

From desktop review, the area is identified as being of high suitability for all bat species in Ireland, except for the Lesser Horseshoe and the Whiskered bat. Further, evidence of bat presence was noted in the H&S walkover, and areas of Bat Roost Potential were identified (including structures, bridges and trees). The requirement for a dedicated bat survey was therefore established and will include daytime ground level roost assessments and identification of Bat Roost Features within the scheme area with overnight placement of static bat detectors at key roost potential sites. Ash Ecology are appointed and the survey is scheduled for early August 2023.

- **Otter Survey:**

Historical records show Otter as being present within the Study Area. It is also a Qualifying Interest of the Lough Oughter and Associated Loughs SAC located <500m from the Study Area. The proposed flood defences have potential to impact otter through habitat loss (for those defences in-river or near-river), contamination, and noise. A dedicated otter survey is therefore necessary and will involve the assessment of riverbanks and up to a 50m buffer zone to visually identify any signs of otter (holts, couches, slides,

prints, spraints and food remains). The specialist appointment is currently being confirmed.

- **Breeding & Wintering Bird Surveys:**

The Great Crested Grebe, Whooper Swan, Wigeon and Wetland and Waterbirds are listed as the Qualifying Interests of the Lough Oughter Complex SPA, located north-west of Cavan town and <800m from the Study Area. The proposed flood defences have potential to impact birds through habitat/roosting loss, contamination, and noise. Therefore, both breeding and wintering bird surveys are necessary. These surveys will include walkover surveys in August 2023 to capture late breeding bird visitors, walkover surveys in April/May 2024 to capture the early breeding bird visitors and between October 2023 and March 2024 to cover wintering birds. Vantage Point (VP) surveys will be undertaken of lands and Loughs which include Green Lough, Swellan Lough and Killemooney Lough.

- **Archaeological & Architectural Surveys:**

Cavan Town is rich in archaeological and architectural heritage. As outlined earlier, Tobar Archaeology have completed a desk-based assessment. They identified all potential sensitivities including two Architectural Conservation Areas (ACAs), 20 Sites and Monuments Records (SMR) and 6 Record of Protected Structures (RPS) sites within the scheme area. Some of these sites are also registered in the National Inventory of Architectural Heritage (NIAH). The requirement of specialist surveys (i.e., geophysical surveys, underwater archaeology surveys, archaeological testing etc.) will be identified at a later stage of the project, once the flood defences have been further defined. The procurement of a specialist will occur at this time.

Hydrology

The hydrology team are finalising the assessment on river flows to establish the hydrological regime of the rivers and streams in the scheme area.

All necessary assessments are being completed to allow estimations of the design standard flood flows for the scheme.

A Draft Hydrology Report is expected to be completed in Q3 of 2023. The report will detail:

- Overview of flood history in the Scheme Area
- Review the meteorological and hydrometric data identified.
- Review of Physical Catchment Descriptors
- Review Flooding from Pluvial and Groundwater Sources.
- Design Flows estimation and analysis and hydrograph for the scheme.

What's Next?

Most of the current project activities will continue over the next few months, including, but not only:

- ➔ Detailed Analysis of the Hydrology and Draft Hydrology Report.
- ➔ Specialist Environmental Surveys.
- ➔ Assessment and Modelling for the progression of Hydraulic Analysis.
- ➔ Collaborative Workshop.

CAVAN TOWN FLOOD RELIEF SCHEME



Contact Us

If you would like to contact our Project Team about any matter relating to the Cavan Town Flood Relief Scheme you can do so through the following:

Email

CavanTownFRS@ByrneLooby.com

Post

Project Manager Cavan Town FRS
ByrneLooby
Building 2100
Cork Airport Business Park
Kinsale Road
Cork

Phone

+353 (0) 21 240 7988

If you would like any further information on the Scheme, please visit our website:

<https://www.floodinfo.ie/frs/en/cavan-town/home/>