

**Habitats Directive Appropriate Assessment  
Screening Determination**

**Ballintubber Flood Relief Scheme**



**Cork County Council**  
Comhairle Contae Chorcaí

**Completed by - Ian McDermott**  
**Approved by - Sharon Casey**  
**Cork County Council.**

**Date: April 1<sup>st</sup> 2021**

This document contains the Habitats Directive Screening Determination of Cork County Council in respect of the Ballintubber Flood Relief Scheme, Ballintubber West, Co. Cork. The determination is based on the information provided in the Screening for Appropriate Assessment Report which has been prepared by J. B. Barry and Partners for Cork County Council and which is appended to this document. This screening determination should be read in conjunction with that report.

**Name of the project - Ballintubber Flood Relief Scheme**

**Description of the project**

The proposed scheme will involve the development of a 1.1km drainage network to attenuate and transfer stormwater run-off from low lying areas of Ballintubber to the West Ballintubbrid Stream.

The proposed drainage will consist of trapped gullies which will collect surface water run-off from low lying areas in Ballintubber and the Irish Plant Propagation Limited site. The gullies will connect to a network of pipes and fall by gravity. Catch-pit manholes will remove sediment and debris from the run-off. A proposed 22 no. manholes will be required to be constructed over the length of the route to facilitate changes in directions.

The pipe network has been designed to attenuate the surface water run-off, as it will have a pipe diameter of 450mm for over 500m. A headwall will be constructed at the outfall to the West Ballintubbrid Stream. Stormwater will then be conveyed through the stream channel to the existing outfall at the foreshore.

When operational, the scheme will result in a minor increase to water levels downstream of the outfall during periods of prolonged or heavy rainfall. It has been determined, based on flow calculations, that the scheme will only increase the surface stormwater run-off flow rate downstream by a maximum of 4% during the 1 in 1000-year flood event. Using measured pumping rates from previous floods at the catchment site, it was determined that 0.22m<sup>3</sup>/s of additional stormwater run-off and groundwater contribution will flow through the West Ballintubbrid Stream at times of flooding when the pipeline will be in use.

As part of the proposal, potential flood alleviation measures have been identified to be applied as part of the proposed works. These include, but are not limited to the following:

- Construction of 1.1km of concrete surface water pipes, 22 manholes, and 10 gullies to collect surface water run-off from low lying areas in Ballintubber.
- Plant used on site is restricted to plant approved in advance by Cork County Council engineering staff and will vary depending on requirements.
- Any excavated material will be transported to a designated tip with tractor and dump trailer/dumpers.
- Water will be pumped from excavations as required. Pumped silted water from excavations to be put through a de-silting or series of de-silting chambers prior to releasing into the river. The discharged water will meet the requirements of the Surface Water Regulations 2009 as amended.
- Rock breakers will be utilised in areas identified in ground investigations or elsewhere to reach the required pipe excavation depths.
- Diversion of any stormwater, sewerage, water pipes and services as required.
- No in-stream works are proposed as part of the construction methodology. All works will take place from the hard surface upgradient of the spring outfall.

- Removal of trees where necessary and all associated road resurfacing in the vicinity of the works.

**Name and location of EU sites subject to screening**

According to the Screening for Appropriate Assessment Report, two European sites are located within 15km of the proposed scheme. These sites are the Special Area of Protection, Cork Harbour SPA (Site Code 004030), and Special Area of Conservation, Great Island Channel SAC (Site Code 001058).

The proposed scheme intends to discharge into an existing ditch which feeds into the West Ballintubbrid Stream which flows in a southerly direction into the Great Island Channel SAC. It is proposed to install a headwall and approximately 20m of pipeline within the existing ditch, which is located on the SAC boundary. Additionally, the West Ballintubbrid Stream flows south into the Cork Harbour SPA approximately 250m downstream.

Overall, there is therefore a hydrological pathway to both the Great Island Channel SAC and Cork Harbour SPA, with the southernmost extent of proposed pipeline also being adjacent to Great Island Channel SAC.

**Is the project directly connected with or necessary to the management of the sites listed above?**

No

**Describe how the project (alone or in combination) is likely to affect the Natura 2000 Site.**

As stated within the submitted screening report, construction activities will involve the excavation of trenches and the installation of plant including a pre-cast concrete headwall and pre-cast concrete pipework.

These works will take place at the boundary of the Great Island Channel SAC and extend approximately 20m into the SAC boundary into a drainage ditch at the head of the Ballintubbrid Stream. Effects from construction works may include disturbance to alluvial sediments at the head of the stream, which may entrain in the surface water network. This may then discharge to the qualifying interest habitats; mudflats and sandflats not covered by water at low tide, and the Atlantic salt meadows previously recorded at Ballintubbrid Lagoon.

However, as per the screening report works will be minor, short term, and temporary in nature and are not expected to give rise to significant impacts upon the conservation objectives of Mudflats and sandflats not covered by water at low tide, Atlantic salt meadows and Wetland habitats, nor will the scheme likely result in significant impacts upon the population trend or distribution of the qualifying interest species of Cork Harbour SPA.

From an operation perspective, during periods of prolonged or heavy rainfall, the installed pipework will convey stormwater run-off from low lying areas to the Ballintubbrid Stream and into both the Great Island Channel SAC and Cork Harbour SPA.

The screening report states that the contributing area of the proposed flood relief scheme is rural in nature and contains no sources of contamination or material that would give rise to pollution. Additionally, a surface water flooding assessment determined that the scheme would only increase the surface stormwater run-off flow rate downstream by a maximum of 4% during the 1 in 1000-

year flood event. It was determined that 0.22m<sup>3</sup>/s of additional stormwater run-off and groundwater contribution will flow through the West Ballintubbrid Stream at times of flooding when the pipeline will be in use. This is considered minimal relative to the overall flow in the stream during flood events and as such will not impact the conservation objectives of the SAC or SPA.

**Are there other projects or plans that together with the project being assessed that could affect these sites (provide details)?**

The submitted screening report identified a wetland habitat at Brown Island known as the Ballintubbrid Lagoon which is located approximately 650m south east of the proposed scheme. This area was illegally infilled by its landowner in 2013. This infilled wetland habitat is located 720m downstream via hydrological pathway, the Ballintubbrid Stream. Ballintubbrid Lagoon is within the Great Island Channel SAC and Cork Harbour SPA.

Cork County Council are currently seeking orders from the High Court requiring the reinstatement of the wetland habitat on these lands with 45,000 tonnes of rubble to be removed from the former lagoon, and the habitats that previously occurred here to be reinstated. An Appropriate Assessment Screening Report was carried out for the proposed remediation works, as well as a Remediation Plan and a hydrological Assessment. The AA Screening Report determined that there would be no negative impacts observed as a result of the proposed reinstatement works.

As per the submitted screening report, it can be concluded that the proposed scheme in combination with the proposed remediation works at the Ballintubbrid Lagoon will not give rise to negative cumulative impacts.

Additionally, the submitted screening report took into consideration the East Cork Municipal District Local Area Plans, The River Basin Management Plan 2018 – 2021 and Other Development Plans by way of a search of online database. Overall, the screening report concludes that the proposed scheme is not expected to give rise to cumulative effects with the River Basin Management Plan, and specifically the Middleton Area for Action Plan and that no planned or existing developments will interact with the proposed scheme according to the East Cork Municipal District Local Area Plans. There are no existing or proposed projects in the area and the proposed scheme will subsequently not give rise to cumulative effects with any other existing or proposed projects or plans in the Ballintubber area.

**Screening Report Conclusion**

The AA screening assessment objectively concluded that the proposed scheme alone or in combination with other projects/plans, will not result in significant effects on the designated European sites; Cork Harbour SPA and Great Island Channel SAC. In light of this, the Appropriate Assessment process in relation to the proposed scheme need not proceed to Stage 2 with the preparation of a NIS to determine the likelihood of significant effects.

**Cork County Council evaluation and overall conclusion that there are no significant effects on European Sites foreseen as a result of the proposal.**

The primary issues of ecological concern to designated European sites as a result of the proposal are activities have the potential to give rise to significant negative impacts on the qualifying interests associated with these sites e.g. disturbance / displacement of qualifying species, alteration of natural hydrological flows, pose a threat of introducing toxic pollutants such as hydrocarbons, or increasing turbidity, silt or nutrients into aquatic systems.

In accordance with Part 5 of the Birds and Natural Habitats Regulations and on the basis of the objective information provided in the Appropriate Assessment Screening Report produced by J. B. Barry and Partners, it is concluded that the proposed project does not pose a significant threat to the any Natura 2000 site for the following reasons:

- There is no spatial overlap between the proposed development site and any qualifying habitats of the Great Island Channel SAC or the Cork Harbour SPA;
- No direct loss, alteration or fragmentation of habitats will occur within any Natura 2000 site;
- The risk of surface water emissions associated with the proposed development is considered low during the construction phase and imperceptible during the post construction phase. It is noted that silting up or accretion are natural processes in estuarine environment i.e. in habitats like Atlantic Salt Meadows and Mudflat and Sandflats. These habitats experience fluctuations in sediment on a daily basis and are only likely to experience negative effects from extremely severe changes in the sedimentation rate. These habitats as a whole will naturally adjust or reach equilibrium in response to any minor local changes. Therefore, given the scale and nature of the works, the risk generated by the proposal is considered minor at a local level in the short-term and imperceptible in the long-term;
- There is no requirement for in-situ curing or casting of concrete at or adjacent to watercourses. Any potential release of contaminants during the construction phase will not result in any significant effects to the qualifying interest of the SAC or SPA due to the intervening distance of the majority of the proposed works, construction methodologies (use of precast concrete pipes etc), presence of buffers and the assimilation capacity within the estuarine environment;
- During operation, the proposal will result in an increase in the surface stormwater run-off flow rate downstream by a maximum of 4% during the 1 in 1000-year flood event. This does not constitute a significant risk to qualifying interest habitats of the SAC or SPA due to the recorded distribution of these habitats i.e. mudflat habitat located 650m from the proposed works and saltmarsh habitat located at a remove of 2km. Additionally, these habitats are accustomed and adapted to fluctuations in water levels on a constant basis e.g. eb and flow of the tide.
- As per the submitted screening report, the contributing area of the proposed flood relief scheme is rural in nature and contains no sources of contamination or material that would give rise to pollution above what is already potentially occurring. It is noted that there is currently a hydrological link between the estuary and the Irish Plant Propagation Limited (IPPL) site. Standard operational procedures at the IPPL site will continue to remove/minimise the potential risk of release of contaminants to the estuary.
- The majority of the works are located sufficiently distant from the Cork Harbour SPA to be satisfied that there is no risk of activities associated with the project causing disturbance to qualifying species. Works the head of the Ballintubbrid Stream will be short term (3-5 days). It is noted that the proposed development site is located within an area which is subject to noise disturbance from the local population and agricultural practices. Noise levels associated with construction activities are not expected to be significantly elevated over typical background levels associated with the agricultural environment. Given the short-term nature of the works and the tolerance of local birds to the existing background noise levels, there should be no significant disturbance to QI's within Cork Harbour SPA as a result of the proposed works. Any displaced birds will likely return within a short period of time. Furthermore, there are no features or habitats of value within the proposed works areas

which would differentiate it as a critical resource from similar habitats in the surrounding area;

- No potential for in-combination effects have been identified.

It is therefore determined that Appropriate Assessment is not required.