

# Inspector's Report PL04.247978

**Development** Upgrade existing wastewater

infrastructure to provide pumping station with septicity dosing kiosk within the boundaries of existing plant

**Location** Bandon IDA, Laragh Industrial Estate,

Laragh, Bandon, Co. Cork

Planning Authority Cork County Council

Planning Authority Reg. Ref. 16/5851

Applicant(s) Irish Water

Type of Application Permission

Planning Authority Decision Grant subject to conditions

Type of Appeal Third Party

Appellant(s) Inland Fisheries Ireland

Observer(s) n/a

**Date of Site Inspection** 11<sup>th</sup> May 2017

**Inspector** Mary Crowley

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## 1.0 Site Location and Description

1.1. The appeal site with a stated area of 0.1059ha is located within the Bandon IDA Industrial Estate, off regional road R586 and is located several kilometres to the west of Bandon town a Laragh. A set of photographs of the site and its environs taken during the course of the site inspection is attached. I would also refer the Board to the photographs available to view throughout the appeal file.

# 2.0 **Proposed Development**

- 2.1. This is an application for the upgrading of the existing wastewater infrastructure to provide a pumping station with septicity dosing kiosk within the boundaries of the existing treatment plant. A rising main and pumping station is proposed to discharge wastewater to a header manhole on the existing main Bandon network. It is stated that the works also include the construction of c2.8km of rising mains to transfer flows from the IDA estate to existing foul network. I note that the actual proposal to provide a rising main to the Bandon WWTP does not form part of this planning application, no details of same have been submitted and it is not included in the red line boundary of the planning application.
- 2.2. It is stated that treatment will no longer occur on site and the existing redundant treatment equipment will be decommissioned and left in suitable and safe condition. The application was accompanied by a Planning Report including an Appropriate Assessment Screening Report.
- 2.3. In response to a request for **further information** the applicant submitted a Flood Risk Assessment Report that concluded that no flooding has been reported in the location of the proposed works and that having regard to CFRAMs flooding is not expected to occur at the site of the proposed pump station. Further stated that the pump is designed in a manner so that there are no overflows during normal operation of the pump station and during storm events and that conveyance of effluent via pump station and treatment of this effluent will not overload the hydraulic nor organic capacity of Bandon WWTP. In a response to a request for **clarification** the applicant submitted proposals for 24-hour storage, emergency breakdown measures and an outfall.

## 3.0 Planning Authority Decision

#### 3.1. **Decision**

3.1.1. Cork City Council granted permission subject to 8 no conditions.

## 3.2. Planning Authority Reports

- 3.2.1. Planning Reports
- 3.2.2. The Local Authority Planner in their first report requested further information pertaining to the submission of a Flood Risk Assessment and item raised by Inland Fisheries Ireland. In their second report they recommended that clarification be sought and that the applicant submit details for reconfiguring the pumping arrangements to ensure a minimum 24-hour emergency storage is provided. The new Case Planner having considered the further information and clarification recommended that planning permission be granted subject to conditions. The notification of decision to grant planning permission issued by Cork County Council reflects this recommendation.
- 3.2.3. Other Technical Reports
- 3.2.4. The **Area Engineer** in their first report requested further information regarding the Flood Risk Assessment which was not included with documentation.
- 3.2.5. The Environment Section in their first report have no objection subject to conditions as set out in their report. In their second report they requested that the applicant reconfigure the pumping arrangement to ensure a minimum 24-hour emergency storage is provided by way of clarification. In their third and final report and having considered the further information and clarification they have no stated objection to the grant of permission on environmental grounds subject to conditions as set out in their report.
- 3.2.6. The **Engineering Report** states that they have no objection to the development.
  - 3.3. Prescribed Bodies
- 3.3.1. **Inland Fisheries Ireland** (IFI) have no objection provided there is sufficient capacity in existence so that it does not overload either hydraulically or organically. With

respect to the pumping station the IFI also ask that planning conditions ensure the station is designed in a manner so that there is no overflow discharge to waters.

## 3.4. Third Party Observations

3.4.1. No third party observations are recorded on the planning file.

# 4.0 Planning History

4.1.1. There is no evidence of any previous planning appeal at this location.

# 5.0 Policy Context

## 5.1. **Development Plan**

5.1.1. The operative plan for the area is the **Cork County Development Plan 2014– 2020**.

## 5.2. Natural Heritage Designations

5.2.1. The site is not located within any designated Natura 2000 site. The relevant European sites are the Courtmacsherry Estuary SAC (Site Code 001230) and the Clonakilty Bay SAC (Site Code 00091)).

# 6.0 The Appeal

### 6.1. **Grounds of Appeal**

- 6.1.1. The third party appeal has been prepared and submitted by the Inland Fisheries Board and may be summarised as follows:
  - The Bandon River is one of the premier salmon and trout fisheries in the south west and therefore any potential negative impacts associated with this scheme is a concern.
  - Currently effluent from the estate is tankered to the Bandon town wastewater treatment plant. Prior to this effluent was treated in an on-site treatment plant

- at the estate with varying degrees of success and ultimately discharged to the Bandon river.
- This permission permits the construction of a pumping station to transfer the effluent to Bandon WWTP. The appellant does not object to the transfer of the effluent for treatment as there is sufficient capacity at this plant or the principle to convey effluent vi a pumping station.
- IFI is seriously concerned that the permission granted will allow for an overflow pipe on the pumping station which will facilitate the discharge of this "highly polluted" effluent to the Bandon River in the event of a malfunction at the pumping station.
- IFI feel that the precautionary principle should be applied and permission refused for the overflow element of the pumping station with alternative measures being put in place to cater for anticipated malfunctions such as overflow to adjoining lands where effluent could potentially percolate as opposed to discharging directly to the river in unanticipated emergency situations.

# 6.2. Applicant Response

- 6.2.1. The First Party Response to the appeal has been prepared and submitted by Nicholas O'Dwyer on behalf of the applicant Irish water and may be summarised as follows:
- 6.2.2. The applicant notes that IFI object to the proposal, specifically the proposed outfall to the Bandon River. However, the proposed development is considered to be orderly planning for the following reasons:
  - The pumping station has the capacity to accommodate existing and estimated future flows from the industrial estate.
  - The pumping station design is based on "Formula A" flow in accordance with the relevant guidance, DoEHLG, Procedures and Criteria in Relation to Storm Water Overflows, 1995.
  - A Duty/Standby pump with automatic changeover will be in place should the main pump fail.

- Several additional back-up measures are proposed to manage and alert Irish
  Water to a pump failure.
- 24hours dry weather flow back-up storage is proposed on site.
- The outfall, if used, will include a solids separation screen to provide primary treatment.
- If the outfall is used the dilution ratios of the overflow into the Bandon River that can be achieved will significantly exceed the limits provided by the DoEHLG 'Procedures and Criteria in Relation to Storm Water Overflows, 1995'.
- 6.2.3. Based on the unlikely requirement of the outfall, primary treatment provided by the outfall if used and the ability of the Bandon River to dilute the overflow the proposed pumping station and associated outfall is considered appropriate.
- 6.2.4. Noted that a reasonable consistent approach, as IFI previously undertook in Castlecomer, County Kilkenny, is requested for this proposal. Overall the proposed development is considered to be orderly planning and it is requested that the Board uphold the Grant of Permission from Cork County Council.

### 6.3. Planning Authority Response

6.3.1. There is no response from Cork County Council recorded on the appeal file.

#### 6.4. **Observations**

6.4.1. No third party observations are recorded on the appeal file

## 6.5. Further Responses

6.5.1. No further responses are recorded on the appeal file

## 7.0 Assessment

7.1. Having regard to the information presented by the parties to the appeal and in the course of the planning application and to my site inspection of the appeal site, I

consider the key planning issues relating to the assessment of the appeal can be addressed under the following general headings:

- Principle / Policy Considerations
- Overflow
- Screening for Appropriate Assessment
- Development Contribution(s)

## 7.2. Principle / Policy Considerations

- 7.2.1. As set out previously the proposed pumping station is required to replace a malfunctioning wastewater treatment plant (WWTP) located at the IDA Industrial Estate, Laragh, Bandon, County Cork. The existing IDA WWTP does not comply with the Wastewater Discharge Certificate of Authorisation issued by the EPA on 20th May, 2011. Due to this, waste from the industrial estate is currently collected in the on-site WWTP tanks and five times a week the tanks are emptied by a tanker. The waste is then transferred to Bandon WWTP. It is submitted that the IDA Industrial Estate is currently operational and that several established businesses are located within the industrial estate and are reliant solely on the continued management of wastewater by the existing infrastructure and therefore a wastewater management solution must be achieved.
- 7.2.2. As set out by the applicant the proposed upgrade works at the wastewater treatment plant will have the following benefits:
  - Convey the effluent to a treatment facility without the requirement for tankers
  - The conveyance to Bandon will effectively eliminate the impact of "difficult" discharges as the flows will be diluted by scale and
  - Highly polluted effluent discharges from the Industrial Estate will be removed, resulting in improvement in water quality in the River Bandon at the existing discharge point
- 7.2.3. I accept that the existing wastewater treatment plant treating effluent is not functioning as it is overloaded due to poor quality effluent from the food manufacturing process and extreme high and low flows in line with production schedules. Having regard to these deficiencies I consider that in all likelihood the

risk to public health and the environment is much greater in respect of the existing WWTP than from any new proposed upgraded system. Accordingly, I am satisfied that the principle of the development to be acceptable at this location subject to the acceptance or otherwise of site specifics / other policies within the development plan and government guidance.

#### 7.3. Overflow

- 7.3.1. As stated Inland Fisheries Ireland (IFI) has no objection in principle to the proposed development of the pumping station, however it does object to the proposed overflow associated with the pumping station and to the potential of wastewater being discharged to the River Bandon. The IFI has suggested that a percolation area be utilised as an alternative to the proposed emergency outfall.
- 7.3.2. The applicant states that the pumping station is designed with the capacity to pump storm water flows and that during normal operation to the pumping station or during storm events overflows are not expected. However, in addition, existing tanks associated with the existing IDA WWTP are proposed to be retained to provide overflow storage on-site.
- 7.3.3. It is also proposed to convert the existing outfall into the emergency overflow for the proposed pumping station and that this outfall will only be used in the case of a "catastrophic breakdown" of the pumping station in order to control spills from the sump and to avoid flooding of the site and neighbouring land. It is submitted that while these spills would be extremely rare, measures have been included in the design in order to avoid such spills during emergency breakdown events. These measures are in accordance with established best practice and include the following:
  - Duty/Standby pump arrangement with automatic changeover.
  - Additional on-site storage capacity in excess of the industry standard 2-hour
    Dry Weather Flow storage of the pump sump, further details below.
  - Call-out alarm system to notify the caretaker of failure of the pumps/loss of power supply/high water level/overflow.
  - A bauer connection is provided on the rising main in order to facilitate over pumping (whereby a mobile pump could be brought to site as a temporary measure during repair).

- A requirement for a mobile generator connection point is included in the design to facilitate back up power.
- Uninterruptible Power Supply for up to 30 minutes is provided for all instrumentation, controllers, alarms and data storage systems. This ensures alarms are sent in the event of a loss of power.
- 7.3.4. The proposed storage capacity can provide a minimum of 24 hours future dry weather flow storage and up to 84 hours existing average flow storage. In the context of best practice this volume of storage is considered an extra-large volume of storage for a pumping station, and can be achieved in this instance by using the existing WWTP tanks located on site. A 6mm solids separation screen with a minimum solid capture rate of 80% is to be installed at the overflow point. This will provide primary treatment in the event that effluent spills to the existing WWTP outfall i.e. the proposed emergency outfall.
- 7.3.5. In the case of pumping station breakdown, the on-site tanks would still provide a 2.6 hours of retention time before the activation of the emergency outfall. This 2.6 hours of storage is larger than the standard of 2-hour DWF storage for pump sump storm storage. It is submitted that any discharge to receiving water which occurs after the 2.6 hours would be significantly diluted by storm water. The applicant submits that an assessment of the proposed pumping station overflow in terms of compliance with the criteria set out in the 'Procedures and Criteria in Relation to Storm Water Overflows' 1995 DoEHLG document found that the overflow to Bandon River bears "Low" significance due to the dilution being over 8:1 and that there is no interaction with other discharges.
- 7.3.6. The applicant states that, the likelihood of an overflow occurring is small due to the measures in place to prevent it, but that there is always a possibility, albeit highly unlikely, that these measures would fail. However, the IFI's preference is for no outfall to be in place and in the case of a catastrophic breakdown allow the surrounding fields to flood. They suggest a percolation area as an alternative to the outfall. The applicant in considering this option states that this approach would require the construction of a percolation area where overflow from the pumping station would be distributed evenly and uniformly to infiltrate foul water into the subsurface soil and that such a percolation area would require a large footprint and

- relatively flat ground to minimise civil work requirements. In addition, land which is not at risk of flooding, is favoured.
- 7.3.7. Due to the large footprint requirement, the percolation area cannot be accommodated within the existing site. The applicant submits that the private agricultural land further south, where the gradient of the land is sufficiently flat, could be suitable for the installation of a percolation area. However, in order to construct the percolation area and ancillary civil structures, such as access road and diverted overflow pipeline land purchase would be required together with on-site percolation tests would need to be completed to confirm the suitability and proposed design of the sand filter. It is pointed out that this agricultural land is within the flood zone A and B as per the Cork County Municipal District Local Area Plans, therefore prone to flooding and a percolation area would be at risk of flooding and flood damage. Adjoining land to the east and west is generally not considered suitable for a percolation area, due to the its distance from the proposed pumping station.
- 7.3.8. As has been established the existing wastewater treatment plant treating effluent is overloaded and deficient in its function. While the treatment of wastewater can be a complicated process due to the type, flow and load produced I agree with the applicant that the pumping station is the most suitable solution in this case and is necessary to ensure compliance with the EPA Wastewater Discharge Certificate of Authorisation. Having regard to the information available on the appeal file I am also satisfied that the proposal is compliant with all relevant guidelines and is capable of accommodating the existing and future wastewater requirements of the industrial estate. While I note the concerns raised by the IFI in relation to outfall discharge I consider the applicant's arguments to be robust in this case and I agree that the outfall and storage proposals (as amended) are satisfactory in this case. It is recommended that should the Board be minded to grant permission that conditions similar to those set out by Cork County Council be attached.

## 7.4. Screening for Appropriate Assessment

7.4.1. Having regard to the nature and scale of the proposed development, the nature of the receiving environment and proximity to the nearest European site (Courtmacsherry Estuary SAC (Site Code 001230) and the Clonakilty Bay SAC (Site Code 00091)), it is reasonable to conclude on the basis of the information available

including the Appropriate Assessment Screening report submitted with the application, that the proposed development, individually and in combination with other plans or projects would not be likely to have a significant effect on any European site. An Appropriate Assessment (and submission of a NIS) is not therefore required.

## 7.5. **Development Contribution(s)**

7.5.1. Cork County Council did not attach any S 48 Development Contrition condition.

## 8.0 **Recommendation**

8.1. Arising from my assessment above, I consider the proposed development to be generally in accordance with the proper planning and sustainable development of the area and I therefore recommend that planning permission be **GRANTED** for the proposed development subject to conditions set out below.

## 9.0 Reasons and Considerations

9.1. Having regard to the Development Plan objectives for the area and the pattern of land use in the vicinity it is considered that, subject to the conditions set out below, the proposed development will not seriously injure the amenities of the area or property in the vicinity and would not be prejudicial to public health. The proposed development would, therefore, be in accordance with the proper planning and sustainable development of the area.

## 10.0 Conditions

The development shall be carried out and completed in accordance with the plans and particulars lodged with the application [as amended by the further plans and particulars submitted on the 25<sup>th</sup> July 2016, 29<sup>th</sup> September 2016 and 20<sup>th</sup> December 2016 except as may otherwise be required in order to comply with the following conditions. Where such conditions require details to be agreed with the planning authority, the developer shall agree such details in writing with the planning authority

prior to commencement of development and the development shall be carried out and completed in accordance with the agreed particulars.

Reason: In the interest of clarity

Noise levels emanating from the proposed development when measured at the site boundaries shall not exceed 55 dBa (15 minute Leq) between 08.00 hours and 20.00 hours, Monday to Saturday inclusive, and shall not exceed 45 dBa (15 minute Leq) at any other time. Measurements shall be made in accordance with I.S.O. Recommendations R.1996/1 "Acoustics - Description and Measurement of Environmental Noise, Part 1: Basic quantities and procedures". If the noise contains a discrete, continuous note (whine, hiss, screech, hum, etc.), or if there are distinct impulses in the noise (bangs, clicks, clatters or thumps), or if the noise is irregular enough in character to attract attention, a penalty of +5 dBA shall be applied to the measured noise level and this increased level shall be used in assessing compliance with the specified levels. (Ref. BS 4142 Section 7.2)

Reason: To safeguard the amenities of the area

- (a) Chemical storage areas shall be bunded, either locally or remotely, to a volume of 110% of the largest tank within each individual bunded area.
  - (b) There shall be no interfering with, bridging, piping, draining, or culverting of any watercourse, its banks or bankside vegetation to facilitate this development without the prior approval of the Planning Authority.

**Reason:** To safeguard the amenities of the area and prevent accidental spillages.

4. Foul drainage arrangements including odour control shall be in accordance with the plans and particulars submitted, and as modified by the response to RFI dated 19/12/16. 24-hour emergency storage shall be provided via the adjacent decommissioned WWTP. Any existing tanks proposed to be used for emergency storage shall be either covered, or provided with arrangements to facilitate periodic emptying to retain 24-hour storage

**Reason:** In the interests of orderly development, and to provide for satisfactory drainage

5. . Works shall take place in accordance with the Construction and Environmental Management Plan(CEMP) which shall be prepared prior to the commencement of any construction works onsite. The CEMP will have regard to standard best practise methods during construction (CIRIA Guidance No C532 - Control of Water Pollution From Construction Sites). A suitably qualified and experienced person shall be responsible for implementation of the CEMP including environmental protection measures, and for the supervision of the works. A copy of the CEMP will be kept on site and will be available for inspection during the construction phase.

Reason: In the interests of protecting the natural heritage of the area

- 6. .(a) No construction materials or waste will be stored within the Bandon Valley west of Bandon proposed Natural Heritage Area (pNHA 001034) which is located to the south east of the site boundary.
  - . (b) No machinery will have access to the Bandon Valley west of Bandon proposed Natural Heritage Area during the construction phases

**Reason**: In the interests of protecting the natural heritage area

<sup>.</sup> Mary Crowley

<sup>.</sup> Senior Planning Inspector

<sup>. 16&</sup>lt;sup>th</sup> May 2017