

KILDARE COUNTY COUNCIL
Comhairle Chontae Cill Dara



Working in Partnership with



Timolin WWTP Upgrade

Part 8 Planning Report

Ref: P82017-008

Contents

1. Introduction	3
2. Description of the Development	4
3. Impact of the Scheme	5
3.1 Overview	5
3.2 Visual Impact of the Timolin WWTP Upgrade	5
3.3 Noise and Vibration	5
3.4 Odour	6
3.5 Dust	6
3.6 Traffic Management.....	6
3.7 Flora and Fauna.....	6
3.8 Water Quality and Fisheries.....	7
4. Archaeological Heritage	7
5. Habitats Directive Appropriate Assessment Stage 1 Screening	8
6. Discharge to Groundwater	8
7. Submissions.....	9
Appendix A: Photos.....	10
Appendix B: Development Drawings.....	12

1. Introduction

Kildare County Council in partnership with Irish Water intends to upgrade an existing Wastewater Treatment Plant (WWTP) at Timolin, Co. Kildare.

The funding for this project would be provided by Irish Water. Kildare County Council is responsible for the Project Management of the contract, which includes the Planning, Design and Site Supervision.

The current plant has major problems with the septic tank and discolouration of the percolation area. The current treatment system is not treating the wastewater efficiently and is leading to bad odours and is a potential ground water threat. The proposed scheme would upgrade the existing septic tank and install a small package plant downstream to provide for nutrient removal and an upgrade of the percolation area.

Site Construction Works to include;

- An upgrade to the existing septic tank with a package wastewater treatment plant
- An upgrade to the existing percolation area
- Fencing of site boundary
- Modifications to the existing internal road and site lighting layout to suit new arrangement
- Landscaping around the perimeter of the site

The Timolin WWTP will be operated under a certificate from the Environmental Protection Agency (EPA). Under these statutory consents, emission limits will be placed on parameters such as noise, dust and water etc.

2. Description of the Development

The existing Timolin WWTP site is located behind housing estates of Timolin Terrace and Millbrook in Timolin village (Appendix B).

The existing WWTP at Timolin, services Timolin Terrace and Millbrook housing estates and has a design capacity of 45PE (Population Equivalent), but serves 90PE.

The existing treatment system consists of a septic tank, discharging to groundwater through a percolation area (Appendix A, Photo 1).

The proposed upgrade will consist of the following work items;

- Upgrade of the existing septic tank with a package wastewater treatment plant to cater for 100PE
- An upgrade to the existing percolation area
- Fencing of site boundary
- Modifications to the existing internal road and site lighting layout to suit new arrangement
- Landscaping around the perimeter of the site

3. Impact of the Scheme

3.1 Overview

The design of the proposed development works has regard to engineering, visual and environmental considerations. The potential environmental impacts of upgrade works to the Timolin WWTP have been assessed and concerns addressed.

3.2 Visual Impact of the Timolin WWTP Upgrade

The Timolin WWTP is accessed from the back of the council estate Timolin Terrace. The treatment plant is surrounded by the following;

- Council housing estate Timolin Terrace to the West.
- Millbrook housing estate to the South.
- Agricultural land to the North and East.

The only visible structure will be a small control kiosk and the cover of the package plant (Appendix A, Photo 2). The proposed upgraded treatment plant and percolation area will be underground and will have negligible visual impact.

The site will be landscaped using native species of trees and shrubs around the perimeter of the site to minimise the visual impact.

The new treatment plant and percolation area would be secured with a 2.4m high post and rigid mesh panel fencing system, to prevent illegal dumping and for proper maintenance access (Appendix A, Photo 2).

3.3 Noise and Vibration

During construction, every effort shall be made to reduce noise and vibration through careful selection of plant, screening and working hours.

Post construction, minimal noise or vibration is envisaged with respect to the operation of the new package plant and percolation area. There will be no increase in current noise and vibration levels for the routine maintenance works.

3.4 Odour

Under current conditions, there are regular odour complaints from residents living in close proximity to the existing Timolin WWTP. This is due to the structurally unsound condition of the existing septic tank. It is envisaged that the new treatment plant and percolation area will greatly improve the issue of odour. The new treatment plant will mostly be located underground.

3.5 Dust

There is no current or proposed dust generating activities at the Timolin WWTP.

During construction, public roads used for access to and from the site shall be swept and kept clean. Existing public roads, including footpaths, used by vehicles of the Contractor and their suppliers shall be kept clean and clear of dirt and mud.

3.6 Traffic Management

Currently, operations traffic for the Timolin WWTP accesses the site via a laneway to the rear of Timolin Terrace. During construction, it is proposed to use the same entrance for construction vehicle access. The temporary traffic management arrangement during this period will be in accordance with Chapter 8 of the Traffic Signs Manual. The contractor will liaise with the residents of the estate to ensure a smooth construction process.

Post construction, it is considered that traffic for maintenance of the upgraded WWTP will be similar to that which currently exists.

3.7 Flora and Fauna

The site of the existing compound is south and west of grasslands, north of a vegetable garden and east of a hard-standing area. The existing lands consist of rough overgrown grasslands. On completion of the proposed treatment system the development lands will be fenced and landscaped accordingly.

3.8 Water Quality and Fisheries

A Site Characterisation and Assessment for the existing housing estate at Timolin and a Tier 2 Hydrogeological Assessment for Discharge to Groundwater report was carried out.

This report is available for inspection as a separate document.

The reports concluded that the proposed development will improve the current discharge to ground.

The proposed treatment system will be operated under a certificate by the EPA.

4. Archaeological Heritage

A review of the archaeology present within the proposed upgraded Timolin WWTP site and the Timolin area has been undertaken. This archaeological assessment report is available for inspection as a separate document.

It was recommended that further investigations be carried out within the proposed development area. This was due to anecdotal evidence of a recorded monument - a castle site and potential burgrave plots within the footprint of the proposed development area.

In line with these recommendations, geophysical surveys and archaeological test trenching was carried out at the proposed development. This report is also available for inspection as a separate document.

It is stated in the report that any impact due to the proposed development has been mitigated by photographic and drawn record completed during the archaeological assessment. No negative impacts are predicted upon the archaeological resource as a result of the proposed development and no further archaeological mitigation measures are deemed necessary as part of the proposed development.

5. Habitats Directive Appropriate Assessment Stage 1 Screening

A report was commissioned by Kildare County Council (KCC) to prepare a Stage 1 screening for Appropriate Assessment Report in relation to the proposal to upgrade the existing septic tank, wastewater treatment system and percolation area (Timolin WWTP) that will discharge to ground in Timolin Co. Kildare.

This report is available for inspection as a separate document.

The report concluded that the proposed development will have no significant impact on any Natura 2000 site.

6. Discharge to Groundwater

Kildare County Council intends to upgrade an existing WWTP at Timolin, Co. Kildare. The scheme proposes the installation of a small package plant to provide for nutrient removal and an upgrade of the percolation area which currently exists at the site, which would then discharge to groundwater.

A Site Characterisation and Assessment for the existing housing estate at Timolin and a Tier 2 Hydrogeological Assessment for Discharge to Groundwater report was carried out.

This report is available for inspection as a separate document.

The report concluded that the proposed development will improve the current discharge to ground. It will improve the filtration and nutrient removal of the wastewater and subsequently reduce the risk of groundwater contamination.

The proposed treatment system will be operated under a certificate by the EPA.

7. Submissions

Submissions with respect to the proposed development can be made to

Eamon Fagan,
Administrative Officer,
Water Services Dept,
Kildare County Council,
Aras Chill Dara,
Devoy Park,
Naas,
Co Kildare.

On or before **16:00 Wednesday 23rd August 2017**

Appendix A: Photos



PHOTO 1: EXISTING TREATMENT PLANT



PHOTO 2: A SIMILAR PROPOSED TREATMENT PLANT, CONTROL KIOSK AND FENCING DETAIL

Appendix B: Development Drawings