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1 GENERAL DESCRIPTION OF THE PROJECT

1.1 Introduction

The Kerry Central Regional Water Supply Scheme (CRWSS) is the largest water supply scheme in County Kerry and caters for the water supply requirements of the principal population centres of Tralee and Killarney as well as Castleisland, Castlemaine and an extensive rural area in County Kerry. It serves in excess of 59,000 persons across an area equivalent to 25% of the county (685 km²).

The scheme has two Category A1 raw water sources, at Lough Guitane and the Owgarra River, which are located in adjacent catchments of the Flesk River some 5km south east of Killarney.

Water abstracted from the two sources is treated at a plant installation at Lough Guitane where facilities exist for disinfection with Chlorine gas, Fluoridation and pH correction. Treated water is pumped to the main Service Reservoir for the scheme at Sheheree.

From Sheheree, water is transferred to Killarney Town Distribution System and to Coolcorcoran Pumping Station for onward transmission to the rest of the Scheme area.

The East Kerry Regional Scheme is also served for the Central Regional Scheme via a separate pumping installation located at Coolcorcoran Pumping Station. This scheme serves a large rural area to the east of the county as far as the county boundary and includes the town of Rathmore.

The existing tank at Sheheree, located approximately 2.5km to the south-east of Killarney, is the main service water reservoir for the scheme. All water for the scheme is directed through this tank, which provides a reserve of purified water in the event of supply disruption at the head works and mains failures.

Sheheree Reservoir also acts as the main service reservoir for the Greater Killarney Area and provides balancing storage for the diurnal fluctuations in demand within the Killarney town network.

At the current peak demand level of 49,000m³/day, Sheheree reservoir provides less than 15 hours storage which is considered inadequate from a security of supply viewpoint.

1.2 Proposed Building Works

The existing 30,000m³, circular post-tensioned concrete reservoir is in good condition and is considered suitable for retention as part of the upgraded scheme. The existing site is capable of accommodating a twin 30,000m³ reservoir. Site development works to facilitate such a tank were carried out under the original tank construction contract in 1985-87.

Therefore, the building works, which are required to be carried out under this part of the scheme, and which form this Part 8 Planning Application, are:

1. Construction of a new 30,000m³ circular post tensioned reservoir to the same dimensions and height as the existing tank.
2. Interconnecting pipework between the new tank and the existing valve chamber and control building.

2 DRAWINGS

The following drawings illustrate the nature and extent of the works.

Drawing No.	Drawing Title
3284-2101	Sheheree Reservoir - Location Map
3284-2102	Sheheree Reservoir - Existing Site Layout Plan
3284-2103	Sheheree Reservoir - Proposed Site Layout Plan
3284-2104	Sheheree Reservoir - Elevations and Sections

3 DESCRIPTION OF PROPOSED STRUCTURE

3.1 Proposed Service Reservoir

3.1.1 External Appearance

The proposed tank will be identical in appearance to the existing tank on the site. Top Water level will be 107.0m OD (Poolbeg datum) and the capacity of the tank will be 30,000m³.

The height of the tank above existing ground level will be 12.03m at its highest point and 11.55m at the sides. The internal diameter of the tank will be 60.0m.

Drawing No. 3284-2104 shows the elevations and sections of the proposed tank.

3.1.2 Landscaping and Boundary Treatment

The tanks are not visible from the public road. Mature hedgerows run along the existing boundaries of the site and these will be maintained.

3.1.3 Access from the Public Road and Frequency of Visits to the Building

Access from the public road will remain unchanged. The new tank will not increase any maintenance requirements at the site and therefore vehicular movements to the reservoir site will not increase.

4 ENVIRONMENTAL CONSIDERATIONS

• Human Beings

The proposed development will meet the long term storage requirements for the entire Kerry Central Water Supply Scheme, and will ensure the provision of a secure supply for Killarney, Rathmore, Castleisland, Farnfore, Tralee, Abbeydorney, and the surrounding areas. The supply area serviced through the Sheheree storage facility, as stated in Section 1, has an existing population estimate in excess of 59,000 people and the proposed development will cater for a future population of approximately 100,000 people in the year 2025. Consequently, the proposed development will have a very beneficial impact due to increased water supply security for residential, commercial, industrial and agricultural uses.

During the construction period there will be an increase in traffic volumes as a result of employees travelling to and from the site and for the delivery and disposal of construction related materials. This will impact on local residents only during working hours but will be temporary in nature. There will be no permanent increase in traffic volumes, as the proposed development is an expansion of an existing facility and future traffic volumes will closely mirror the very low existing levels.

Suitable traffic management measures will be implemented during the construction period to mitigate potential construction related impacts and it is intended that construction related activities will be restricted to normal working hours.

• Flora and Fauna

No part of the proposed development is located within any designated Natural Heritage Areas (NHA) or candidate Special Areas of Conservation (cSAC). The boundary of the Sheheree Bog SAC is located approximately 200m south of the site, but it is not expected that the construction of the reservoir will have any negative impact on this SAC.

• Air

There may be an impact on air quality through the generation of dust during the construction stage. This impact will be temporary in nature and best construction practice will be implemented to mitigate the impact. The proposed reservoir at Sheheree is an extension of an existing works and there will be no permanent impact on air quality as a result of this development.

• Noise

During construction, additional noise will be generated by construction equipment and additional construction traffic. Best practice measures will be implemented to ensure levels remain within acceptable limits. As the proposed reservoir at the site is an extension of an existing facility, there will be no permanent noise impact as a result of this development.

- **Cultural Heritage**

A desktop archaeological assessment of the proposed location has been carried out by the Office of the Kerry County Archaeologist, and an Archaeological Impact Statement Report has been prepared dated July 2007.

No impact on cultural heritage, arising from the proposed development, is anticipated.

- **Water Quality and Fisheries**

There are no streams or rivers in close proximity to the proposed reservoir and there will be no direct impact in streams and rivers from the proposed reservoir. Consequently, it is not anticipated that the proposed development will have any impact on Water Quality and Fisheries.

- **Landscape**

The proposed reservoir will be located adjacent to the existing reservoir on the site. The reservoir structure itself will be screened with grassed embankments which will be placed up to the full height of the reservoir walls and will match the existing adjacent Sheheree Reservoir. There will be no significant impact on views from the local public road network in the area.