

LENASIA HIGH LEVEL RESERVOIR



PROJECT NUMBER: 16299

Lenasia High Level Reservoir



DISCIPLINE/S: Water Infrastructure
Reservoir

PROJECT DESCRIPTION:

The Lenasia High Level Reservoir forms part of an overall project of which the scope entails the design, tender and construction of a 15ML circular concrete reservoir, 1.2km ND600 bulk steel water pipeline and upgrade of existing pump station to 32ML a day at 75m head (555kW).

The new 15 ML reservoir was required to supplement the existing 6ML reservoir. The reservoir was designed as a post-tensioned reservoir with a jointless floor slab.

In addition to the reservoir the project included the construction of 8 concrete valve chambers of which 4 were necessary for the new reservoir and 4 was designed as upgrades for the existing reservoir to allow the two reservoirs to be used in combination but also isolated and used separately.

The project also included the construction of drainage, fencing and a guard hut.

The objectives achieved through this project were:

- Improvement of the capacity and reliability of storage at the Lenasia High Level Reservoir. Storage capacity was increased to 350% of the original capacity.

CLIENT:

Johannesburg Water

CONTACT:

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DATE:

January 2014 - Present

Project Value

R 45 million

SALIENT FEATURES:

All designs had to be done to utilise the existing infrastructure and to the allow the new and existing reservoirs to function as a unit but also allow each reservoir to be isolated.

The location of the reservoir was constrained by property boundaries and servitudes, which required innovative design to optimise the land that was available to construct the reservoir and hydraulic assemblies.



PROJECT SHEET: INTERNAL INFORMATION

LAST UPDATE: June 2021
UPDATED BY: XXX
PROJECT LEADER: XXX
PROJECT MANAGER: XXX
KEYWORDS: WATER, RESERVOIR

PROJECT SHEET PHOTO PROPERTIES:

