



Wimbledon Park Lake Project - (Reservoir Safety and Desilting)

Summary of Technical Steering Group Meeting – 04 June 2019

Flood Study Report:

- The meeting welcomed representatives from BWB.
- The Stage 1 hydraulic assessment identified that the existing configuration of the dam and overflow do not meet the required safety standards for a Category A dam. This is because the dam crest is subject to uncontrolled overtopping during flood surcharge and wave run up events, including the probable maximum flood (PMF).
- The stage 2 review has also included a breach study associated with the dam in respect of reservoir safety, in addition to overtopping.
- The existing over flow sluice and associated outflow pipe have a relatively low capacity and are unable to convey what is needed to safely pass the probable maximum flood (PMF) and design flood conditions.
- The hydraulic assessment confirmed that the dam crest is overtopped in all events investigated: from the 20% AEP event through to the design flood (0.01% AEP) and the safety check flood events (the PMF). The reservoir safety standards require no overtopping of the dam in these events. As the flood surcharge water level for all return period events exceeds the height of the dam, it can be concluded that wave overtopping also occurs at rates in excess of the reservoir safety standards.
- In all magnitude events up until the 1.0% AEP flood event with a 35% allowance for climate change, flood water is contained within the park, and drains slowly over time to the River Wandle via the railway culvert and Thames Water sewer network.
- The options being considered are to:
 - Construction of a new overflow with a greater capacity.
 - Construction of a new auxiliary overflow offering an alternative flow route over the dam.
 - Raising of the dam height, or provision of a wall or similar, to prevent overtopping of the dam by waves and flood surcharge.
- Indicative design, cost estimates costs and hydraulic modelling of the options has been completed and a preferred option is presented. All of the shortlisted options offer a degree of flood relief to the downstream catchment and residential area.

Surveys:

- It was noted that when the Geotechnical Survey is undertaken, it will need to include a utilities survey.

Procurements:

- It was agreed that the All Reservoirs Panel Engineer (ARPE) would be procured through the London Tenders Portal. The appointed ARPE would work directly for the LB Merton and client team.
- Consider procuring the Design and Build contract works through a framework should one appropriately exist or otherwise directly – whichever meets council procurement rules and regulations.

Date of Next Meeting: 06th August 2019