

**Asset Management Directorate  
Guidelines  
For The Design Of Water  
Distribution Networks In  
Al Ain Region**

**GL.AM.01**

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Approved by:

Managing Director

The hydraulic analysis shall consider as a minimum the following design scenarios in steady state or extended period simulation for each design option and phase of the proposed scheme:-

- Peak demand without fire
- Peak demand with fire
- Average demand.

The following additional hydraulic analysis scenarios may be considered if requested by AADC:-

- Minimum demand
- Contingency and emergency plans.
- Extended period simulation
- Water Quality modelling

## **6.20 Rehabilitation and Replacement of Water Networks**

Generally the requirement for Rehabilitation and Replacement of existing Water distribution Networks is assessed and designed internally by AADC. In some cases AADC may require the designer to prepare tender document for the detailed design prepared by AADC.

## **6.21 Domestic Service Connections**

The service connections up to 1.5 inches / 50 mm are considered as domestic service connections (DSC). DSC shall be of MDPE PE80/PE100 pipelines of length not exceeding 50 m and preferably less than 30 m from the main pipeline to the customer's boundary and shall be laid at minimum depth of 600 mm from ground level. The Service connection shall include electronic meter (ultrasonic meter), NRV, lockable valve / service gate valve and strainer all designed according to ADWEA/AADC specifications and AADC standard detail drawings.

The meter shall be capable of communicating with both Automatic Meter Reading (AMR) options applied by AADC of touch pad and radio frequency (RF) transponder.

Service connection shall be provided with the water networks constructed by third party such as Developers, Al Ain Municipality, UPC, etc... Particularly when the infrastructure and buildings are constructed simultaneously.

Except for the replacement and diversion of water networks, service connections shall not be provided with AADC water networks.