

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

GL.AM.01

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Managing Director

The network within the DMA boundary shall be supplied through single feeding point. The feeding point shall include all or part of the following components in one or more chambers as per AADC particular specifications and AADC standard details drawings:-

- Electromagnetic flow meters with logger and connection to SCADA system
- Automatic Control valves for controlling pressure and flow with connection to SCADA system
- Strainer upstream the flow control valve
- Two manually operated isolation valves
- Pressure transmitter
- Water quality sensors
- Power connection or solar power source if there is no power connection.
- All the required accessories and software to connect the DMA to AADC SCADA system.

The components to be provided at each DMA shall be defined by AADC. A bypass of the DMA chambers may be provided if requested by AADC.

The size of pipework at the DMA chambers may be reduced by one size or more than the feeding pipeline according to the flow rates. The design of DMA chamber shall allow easy removal of any of the components inside the chamber during the maintenance works.

One or more alternative feeding point to the DMA shall be provided for use during the emergencies. An isolating valve shall be provided at the alternative feeding points; the valve shall be closed during the normal operation case.

6.24 Interface Points with Transco

AADC receive water within Al Ain region through many Interface Points with Transco Company (more than 80 existing and planned interface). The interface points are considered as water sources to AADC system. Transco try to provide the flow and pressure requested by AADC at each interface with the residual chlorine limits specified by the RSB. This reduce the need for pump stations, storage and chlorination facilities in AADC system, but not eliminate the need for these facilities.

Each interface point include flow meter, control valve, water quality instrumentations, power source, isolating valves, pressure transmitter and connection to Transco SCADA and AADC systems. The isolation valves, flow meters, control valves and water quality instruments are connected to Transco