

## DATABASE CONTENTS

In order to assist researchers in the select of possible network models for use in their research programs, a detailed spreadsheet database of the available data for each network file has been assembled. The attributes of the database are summarized below:

- Spatial Data
  - Geometric data
  - Elevation data
  - GIS shapefile
  - Background map
- Demand Data
  - Total system demand
  - Temporal demand curves
  - System leakage
- Pipe Data
  - Pipe diameter
  - Pipe diameter type (nominal or actual)
  - Pipe wall thickness
  - Pipe material
  - Pipe age
  - Pipe pressure class
  - Number and type of pipe fittings
  - Calibrated pipe roughness
  - Calibrated water quality parameters
  - Customers per pipe
  - Estimated pipe leakage
  - Prior break history
- Junction Node Data
  - Elevation data
  - Coordinate data
  - Nodal demand data
- Pump Data
  - Pump type
  - Coordinate data
  - Elevation data
  - Pump horsepower

- Pump operating curves
- Tank Data
  - Tank type
  - Coordinate data
  - Elevation data
  - Tank volume
  - Tank storage curve
  - Water quality data
  - Maximum elevation
  - Minimum elevation
- Reservoir Data
  - Reservoir type
  - Coordinate data
  - Water surface elevation
  - Water quality data
- Control Valves (PRVs, PSVs, FCVs)
  - Type of valve
  - Coordinate data
  - Elevation data
  - Operating set points
- Isolation valves
  - Type of valve
  - Coordinate data
  - Minor loss coefficient
- Hydrant data
  - Type of hydrant
  - Coordinate data
  - Elevation data
- Operational Data
  - Temporal demand data
  - Pump operational rules
  - Tank operational rules
  - SCADA data

- Water Quality Data
  - Disinfection method
  - Source concentration
  - Single or multi-species
- Booster Disinfection Station
  - Coordinate data
  - Source concentration