GORIS TOWN WATER SUPPLY NETWORK ZONING, IMPROVEMENT

Country. Republic of Armenia  
Marz, city. Syunik marz, Goris town  
Client. RA Ministry of Urban Development  
Duration. 2000 – 2001

Terms of Reference

1. Pre-design investigations and modeling of distribution network system
2. Instrumental investigation and inventory of water supply distribution network
3. Development of working designs

Brief description of project and services provided

✓ The town plan was developed through GIS (ArcView software) with the existing water supply network. (The town population: 29200, area: 400 ha, elevation difference 300 m, water supply system: gravity).
✓ Water supply distribution network instrumental investigation, including detection of underground pipelines’ depth, path and condition, measurements and records of pressures and outlets on dictating joints of distribution
✓ Hydraulic modeling was carried out through EPANET software. Based on the results of field investigations network zoning and hydraulic model improvement was done.
✓ A working design of city water supply network rehabilitation and improvement was developed for the areas subject to urgent improvement. New 3 group DRRs (total capacity – 3600 m³), feeding water lines with 1.5 km length, street water lines with 3.8 km length, 42 distribution and regulating nodes, 35 fire hydrant joints, 85 inlet lines joints, etc. were designed.
✓ The town water supply system was developed through GIS, including main technological elements (chambers, regulating and water metering joints, waterlines) technical database, which will increase the operation process efficiency.

Project objective

Zoning of inter-town distribution network and improve the permanent operation of the town water supply network, increase drinking water quality and provide the population water demand.

Promote to increase of the system further operation efficiency.