# CONSTRUCTION OF WATER DISTRIBUTION NETWORK AND HOUSE CONNECTION IN RAS AL HADD 3 IN SUR WILAYAT IN SOUTH ASH SHARQIAYAH GOVERNORATE

## **SCOPE OF WORK**

## **Project Brief**

The scope of work includes inter alia civil and building works, procurement, construction and testing of water network; and Services design, engineering, manufacture, inspection and testing at the maker's works and at site, packing for export shipment, insurance, delivery to site, unloading, complete erection, site testing, start up, commissioning, performance testing, putting into operation; training of the Employer staff (or others) assigned to operate the Works; and maintenance support during the defects liability period, which expires one year after the completion of the whole of the Works.

comprises the following principal components: distribution network with all necessary accompanying equipment.

The main Scope of Work for Contractor shall comprise some of the following:

- 1. Construction of distribution network, total length of 13750 m
- 2. Construction/installation of one (8) fire hydrant
- 3. Construction of required isolation valves (28 Nos)
- 4. Construction of washouts and air valves. (one washout & 3 air valves)
- 5. Construction of house connections. (150 House connections)

#### **Summary**

The key components of the project are summarised in the table below.

#### **Distribution Network**

Locations	Description	Class	Approximate length of main required
	110 OD HDPE Pipe	PN16	8800 m
	180 OD HDPE Pipe	PN16	3550 m
	225 OD HDPE Pipe	PN16	1400 m
	Fire Hydrants		8
	Air Valves		3

Locations	Description	Class	Approximate length of main required
	Isolation valves Buiried condition		27
	Gate vlave inside chamber		1
	Thrust boring/Road cutting		150

The Employer has determined the pipe diameters and proposed routes of the pipelines to be constructed.

All necessary investigations, and preparatory work, including topographic survey of the pipeline route, geological survey for rock excavation and soil investigation surveys, are to be carried out by the Contractor, together with the obtaining of excavation permits and another other surveys, agreements and permits necessary for the construction of the Works.

The Contractor shall ascertain for himself the exact scope of work including all material / M&E Plant to be supplied such that the installation is complete and in working order on completion of the contract. It shall be the Contractor's responsibility to visit the site and ascertain for himself all the site constraints. The minimum pressure rating for pipelines are specified and the Contractor shall demonstrate through calculations submitted to the Engineer that the pipes he proposes for the Works shall satisfy the requirements for maximum working pressure, surge and backfilling with external load conditions.