

SHUWEIHAT WATER TRANSMISSION SCHEME - CONT. NO. SWTS-TC-011-LOT B, C & D

Infrastructure



Lot B

Project Introduction:

The Shuweihat Water Transmission Scheme consists of mussaffah and Mirffa pumping stations, plus a parallel double pipeline 1600mm dia, 250kms in length, with a transfer capacity of 100 million gallons of water per day. The capacity of the system will be increased from 100 million gallons a day (MGD) to 180 million gallons a day (MGD) to facilitate water transmission from the Shuweihat Phase 2 independent water and power project. Al Nasr Contracting Co was awarded for the installation of pipelines and fibre optic cable work for the project.

ADWEA wants to install the double 1600 mm diameter pipelines from chainage 64 to chainage 128 and single 1600 mm diameter pipeline to Unit IV in earth bunds, embankments and trenches.

Site preparation, trench and pit excavations, bedding and backfilling to pipes, structures and chambers, embankment and bund formation and other similar related earthworks will be performed by others.

ANC Scope:

Installing 1600 mm diameter pipes.

- Connections and disconnections to existing water pipelines.
- Installation of valves and fittings.
- Reinforced concrete valve and meter chambers, complete with all accessories, access ladders, manhole covers and frames, ventilation pipes, etc.
- Reinforced concrete inspection chambers for fibre optic cables complete with all accessories, manhole covers etc.
- Reinforced concrete service culverts under existing roads.

Client: Abu Dhabi Water & Electricity Authority (ADWEA)

Location: Abu Dhabi

Contractor: Taisei Corporation

SubContractor: Al Nasr Contracting. Co. L.L.C

Consultant: Tebodin Middle East Limited

Divisions: Fibre optic/ water works

Contract Period: 01/01/2003 - 08/11/2006

Value: 141,165,095 AED

PROJECT STATISTICS

Peak manpower	725
Man- hours accident free	3,540,000
Equipment hours accident free	485,000
Total lost time through incidents	Zero
Total Concrete poured	126,750 Cum



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D. All the above items shall be as per related attached drawings and details. Items which are not shown shall be designed/ proposed by the CONTRACTOR and will be deemed to be included in the subcontract price.

E. Complete Service Block (connected to pumpstation building) with control room, MV and LV room, transformer bays, office rooms, workshop, store room, battery room etc. comprising of the following:

F. Excavation and foundation works up to plinth level including cutting, filling and concrete works etc.

G. Construction of reinforced concrete floor slab, equipment foundation, concrete channel for pipes, cables and drains block work walls, partitions, plastering, tiling etc.

H. Structural concrete super structure, roof etc.

I. Supply and construction of doors, windows, ventilators, platforms and walkways, railings, stairways etc.

J. Construction of modular access floors and false ceilings in control room, MV and LV rooms.

Surge Vessel Foundation comprising of the following:

- Supply and construction of foundation including steel supports and access ladders including excavation and foundation works up to plinth level including cutting, filling, concrete works etc.
- Chambers and External Trenches comprising of the following shall be covered:
 - Valve Chambers
 - Flow Meter Chambers
 - External Pipe and Cable Trenches.
 - Anchor Blocks and Thrust Blocks for pipes and pipelines.
 - Auxiliary Structures and Buildings.
- Supply and Construction of shaded car parking and any other structure/ building required for the completion of the works.

External works.

- The subcontractor shall supply and construct the following items:
- Steel site entrance gates (sliding), steel chain link fence around the site, road works including culverts and covered car parking with interlocking tile base.
- Asphalt road as indicated on drawings.
- Septic tanks and soak away pits for service block, store and workshops and any other buildings as required.

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- Reinforced concrete drainage culverts under pipe bunds.
- GRP service ducts under pipe bunds.
- Split ducts to existing services.
- Protection to existing services under pipe bunds.
- Reinforced concrete anchor/ thrust blocks and line anchors.
- Reinforced concrete pipeline protection slabs.
- Thrust boring for road crossings.
- Thrust boring for gas and oil pipeline crossings.
- Installation of 26 KM Fibre Optic cables and associated ducts.

Lot C:

Project Introduction:

The Shuweihat Water Transmission Scheme consists of mussaffah and Mirffa pumping stations, plus a parallel double pipeline 1600mm dia, 250kms in length, with a transfer capacity of 100 million gallons of water per day.

The capacity of the system will be increased from 100 million gallons a day (MGD) to 180 million gallons a day (MGD) to facilitate water transmission from the Shuweihat Phase 2 independent water and power project.

Al Nasr Contracting Co was awarded with The Subcontract Scope of Works comprise the complete Civil and Building Works associated with the Mirffa Pumping Station as per the specifications, drawings and BOQ.

ANC Scope:

Complete Pump Station building superstructure including all structural steel work, roof sheeting, wall cladding, reinforced concrete work, platforms, stairs, equipment bases, windows, doors etc. with all specified internal and external finishes.

Chlorination Building housing gas cylinders, chlorinators and dosing pumps including neutralization area.

The work shall comprise of the following:

A. Excavation and foundation works up to plinth level including cutting, filling, concrete works etc.

B. Construction of reinforced concrete floor slab, equipment foundation, concrete channel for pipes, cables and drains etc.

C. Supply and construction of sliding/ folding shutters, doors, windows, ventilators, platforms, walkways, railings, stairways etc.

SHUWEIHAT WATER TRANSMISSION SCHEME - CONT. NO. SWTS-TC-011-LOT B, C & D

Infrastructure

Lot D:

Project Introduction:

The Shuweihat Water Transmission Scheme consists of mussaffah and Mirffa pumping stations, plus a parallel double pipeline 1600mm dia, 250kms in length, with a transfer capacity of 100 million gallons of water per day.

The capacity of the system will be increased from 100 million gallons a day (MGD) to 180 million gallons a day (MGD) to facilitate water transmission from the Shuweihat Phase 2 independent water and power project.

Al Nasr Contracting Co was awarded for the installation of pipelines and fiber optic cable work for the project.

ADWEA wants to install the double 1600 mm diameter pipelines from chainage 64 to chainage 128 and single 1600 mm diameter pipeline to Unit IV in earth bunds, embankments and trenches.

Site preparation, trench and pit excavations, bedding and backfilling to pipes, structures and chambers, embankment and bund formation and other similar related earthworks will be performed by others.

ANC Scope:

- Installation of Twin 1600 mm diameter pipelines inside the pumping station.
- Installation of free issued valves and fittings.
- Reinforced concrete valve and meter chambers complete with all accessories, access ladders, manhole covers and frames, ventilation pipes etc.
- Reinforced concrete inspection chambers for fiber optic cables complete with all accessories, manhole covers etc.
- Reinforced concrete service culverts under existing roads.
- Installation of electrical and control systems including electromagnetic flow meters, pressure transmitters, actuators and associated distribution boards and control cabinets etc.