

GENERAL INFORMATION

The subject Contract 4 forms a part of the Bausher Wastewater Networks, and is to provide construction of several components of a comprehensive wastewater network planned in Bausher Wilayat in Muscat Governorate.

The Bausher Wastewater Network is developed by the HAYA Water within the wastewater sector improvements in Muscat. The Bausher Project is a key part of a larger sewerage collection and treatment scheme -- the Muscat Wastewater Services Project -- implemented in phases under the state-owned HAYA Water. The project aims to minimise environment pollution by replacing the present drainage with a modern wastewater system and consists of planning, design and construction of required wastewater infrastructure for the Muscat.

The Tenderer is advised that the Bausher Wastewater Network Project, which will cover an area of 140 sq.km, with an estimated population of 120,000 inhabitants, consists of the five separate packages, Contract areas, constituting the Bausher Project, as further described in the Particular Specification. This Contract encompasses sewer networks of the Al Ilam and Al Qurum suburbs of Bausher Wilayat.

One of the main aims of the Contract is to establish a proper and efficient sewerage system, which provides a sustainable solution to the present day to day problem whereby hundred of tankers are used daily around the project area, to empty septic tanks and holding tanks that presently serve the existing communities.

The works comprise the execution and maintenance of the sewage disposal system (consist of a gravity sewerage collection network, including house connections and necessary pressure conveyance system with pumping stations and pipelines), as well as Treated Effluent (TE) system for irrigation purposes in the area. It also includes all electrical works at the pumping stations and control & automations work, and fibre optic ducting network for the area.

Some minor sections of the sewer network have already been constructed under previous contracts and these sections are clearly indicated in the tender drawings.

Generally, the Contract consists of the following:

- Sewer network construction, as detailed in the Tender Drawings
- Construction of lifting and pumping stations with associated rising mains and fibre optic ducts (FOD) and cables (FOC) for SCADA system.
- Property survey and indicative Property Connection (House Connection) design, where this information has not been supplied in the tender documents.
- Construction of individual Property Connections, by a two stage – dry & wet procedure.
- Construction of Treated Effluent irrigation mains as detailed in the Tender Drawings.
- CCTV survey and reporting of completed sewer network construction. Minimum of 10% of completed sewer network to be surveyed.
- Installation of Fibre Optic Duct and Cables system in the same trench of the TE irrigation main for SCADA. FOD will also be installed for telecommunication system

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- Construction of fibre optic duct network for the telecommunication system, in the same trench of the sewer network construction. No FOC shall be installed by the Contractor.
- Procurement of all necessary No Objection Certificates (NOC) wherever a valid NOC has not previously been obtained and maintain validity of all NOC's until completion of relevant section of the works.
- Procure and maintain validity of Excavation Permits for all installations.
- Participation in interface coordination with all other relevant contracts involved in the Muscat Wastewater Scheme, including but not limited to attendance at regular coordination meetings.

The Works are planned for an **1215 calander day** construction period, which includes a mobilization period of **120 calander days**.

WORKS CARRIED OUT BY PREVIOUS CONTRACTOR

The Tenderer is advised that a part of the works contained within this Contract site area have already been carried out by another Contractor under a previous contract.

The works desired under this Contract will require the incorporation of all suitable construction carried out under the previous contracts. This will involve inputs in terms of survey & site investigation, cleaning, verification, repair and preparation to ensure that the works are completed to the standard, which was intended originally.

The Tender Drawings shall show the approximate extent of the works carried out by the previous Contractor.

AL ILAM AND AL QURUM NETWORKS

Al Ilam and Al Qurum networks, subject of this contract, consist mainly of the construction of approximately 40,000 meters of sewers (200mm to 700mm), 885 nos. manholes, 66,000 meters of 150mm laterals sewers, 5600 inspection chambers, 13 nos. lifting or pumping stations with associated rising mains, and 166 kilometres of telecommunication ducts (25mm and 110mm) with associated chambers. The works shall also for all property connections.

TREATED EFFLUENT (TE) SYSTEM:

A treated effluent irrigation main is being constructed to supply treated effluent from Al Ansab Sewage Treatment Plant to Bausher Network area.

The irrigation supply system extends into Al Ilam and Al Qurum contract area at the locations indicated on the Tender Drawings.

A Fibre Optic Duct and cabling system will be constructed along the TE main for control and monitoring purposes. This duct system will be required to interface with a similar Fibre Optic Duct system, which is being constructed under Contracts No 2 and No. 3.

10,000 meters of TE lines and associated chambers are to be constructed

DETAILS OF CONTRACT NO. B4

In further detail, Contract No 4 consists of the following:

- Sewer network construction, as detailed in the Tender Drawings. This network construction will interface with the sewer network construction to be carried out under Contract 2, at the locations indicated on the Tender Drawings
- Some network sections shall be constructed by micro-tunnelling construction. Such sections are indicated on the Sewer Layout drawing as “NDRC”.
- Minimum of 10% of constructed sewer lines to be verified by CCTV survey.
- Incorporation of works carried out by previous Contractor. This will require such works to be appraised, cleaned, completed and approved for use, where necessary.
- Property survey and indicative Property Connection (House Connection) design, where this information has not been supplied in the tender documents. In all instances it is the responsibility of the Contractor to finalise the Property Connection design; any indicative details that are shown in the tender documents are intended as a suggested layout and the Contractor is responsible for all necessary revisions to optimize the property connection and to mitigate for any onsite conditions encountered.
- Construction of individual Property Connections, by a two stage dry & wet procedure.
- Construction of Treated Effluent irrigation main as detailed in the Tender Drawings.
- Installation of Fibre Optic Duct and cabling system in the same trench as Treated Effluent irrigation main.
- Construction of Fibre Optic Duct network in same trench as the sewer network construction. This Fibre Optic Duct system shall extend into each individual property, as detailed on the drawings
- Design and construction of minor network pumping stations and rising mains that will convey flow to gravity sewer network. At the current stage, 13 nos. lifting / pumping stations have been planned, with flow rates ranging from 3 to 120 l/s. The Tenderer shall note the possibility that additional minor pumping stations may be required during the operation of the Contract. A separate fibre optic ducting and cabling system shall be installed for these pumping stations for SCADA.
- Procurement of all necessary No Objection Certificates wherever a valid No Objection Certificate has not previously been obtained. Maintain validity of all No Objection Certificates until completion of relevant section of the works.
- Procure and maintain validity of Excavation Permits for all installations.
- Participation in interface coordination with all other relevant contracts involved in the Muscat Wastewater Scheme, including but not limited to attendance at regular coordination meetings.