

EXECUTIVE SUMMARY

Thrissur District is situated in the middle Kerala with head quarters at Thrissur Corporation, a beautiful green coastal belt located in the southwest corner of India. Thrissur is known as the cultural capital of Kerala. The city is famous for Vadakkumnathan Temple and Thrissur Pooram extravaganza, which attracts pilgrims and tourists from all over India and outside India. Thrissur being the cultural capital of Kerala, Foreign tourist inflow into Thrissur district has grown significantly in the past few years, which is more than the state average. This indicates that Thrissur district has a potential for tourism development as well.

Thrissur Municipality was upgraded to Thrissur Municipal Corporation in the year 2000 by amalgamating adjoining Ollur, Koorkanchery, Ayyanthole and Vilvattom and Ollukkara Panchayaths fully and three wards (VIII,IX and X) of Nadathara Panchayath. The new city Corporation has an aerial extent of 10.47 sq.km. It has a population of 315596 as per 2011 census. Thrissur city alone accounts for 38% of the urban population in the district and with the land price going high, the city has started growing vertically. This is posing heavy demand on the infrastructural facilities of the city particularly water supply.

Thrissur Water Supply Scheme, which is a major comprehensive one, draws water from Peechi reservoir which is situated in the North-East boundary of the district. This scheme supplies water to the Corporation area as well as the adjoining Panchayaths of Pananchery, Adat, Manalur, Arimpur, Kolazhy and Mulamkunnathukavu. The total ultimate water demand of the Thrissur Municipal Corporation alone in the year 2050 taking into account wastage and demands in other categories is around 91.55 MLD. The installed capacity of the WSS at Peechi is only 50.5 MLD which is now catering to the corporation and adjoining Panchayaths.

Peechi reservoir provides water for agricultural purposes in addition to drinking purposes. Water from the reservoir is withdrawn to two water treatment plants of capacity 14.5 MLD and 36 MLD via 600mm pipe which is connected to booster pump sets for withdrawal at an enhanced rate during summer months, when the water level in the reservoir is lowered considerably. The treatment plant is located just downstream of the dam. Two conventional treatment units were functioning with a total installed capacity of 50.5 MLD and 14.5 MLD which commissioned during the year 1961 was exceeded the design life and due to the old age of the components of the treatment plant, the present water production is considerably

reduced. The 24 MLD second one, commissioned in 1986 was augmented to 36 MLD in 1995. The maximum water that can be extracted from Peechi reservoir works out to 56 MLD.

The 6th State level high Powered Steering Committee (SHPS) of AMRUT held on 26th August 2016 at the committee room of chief secretary Kerala, has given the suggestion to decommission the existing 14.5 MLD water treatment plant and to construct a new water treatment plant of capacity of 20 MLD to serve the needs of the Urban local body using the already existing conveyance system. The proposal is to collect the raw water from Peechi dam throughout the year by gravity to the proposed 20 MLD water Treatment Plant and the treated water 41 MLD (20 MLD from new water treatment plant + 21 MLD from existing 36 MLD Plant) collected in the proposed clear water sump of 10 LL capacity is pumped to the OHSR at Chembukavu through the existing 700 mm DI K9 pipe line for a length of 18776m using 245 HP Centrifugal motor pump set. The balance 15 MLD treated water from the existing 36 MLD WTP is proposed to transmit through the existing 600 mm Hume steel gravity main for a length of 18776 m commissioned in 1961 to the existing OH tank at Thekkinkadu. The land required for the construction for the treatment plant is available with KWA.

Proposed project includes the following components

- Construction of new 20 MLD water treatment plant at Peechi,
- Supply and erection 245 HP Centrifugal Pump set 2 Nos – 1 as standby for pumping water to the OHSR at Chembukavu
- Laying 500 mm DI K9 pipe line from existing CW Sump of 36 MLD to the proposed CW sump of 20 MLD for a length of 100 metre for conveying 21 MLD water.
- Interconnecting the existing 700 mm DI K9 pipe with the motor pumpset using 700 mm DI K9 for a length of 50 metre.

This proposal on its implementation will ensure the quality of supplied water to the Thrissur Corporation. The total estimated cost of the project comes to Rs. 17.30 Crores and it is proposed to be completed by March 2020.