

## **SCOPE OF THE WORKS**

**The following are the proposed improvements to Water Supply System in Hospet under the NKUSIP.**

- A.** Providing & Fixing 17 nos electromagnetic flow meters of size from 150mm to 600mm dia, for existing & proposed water supply system including supply and fixing of necessary fittings and specials, electrification testing, commissioning etc along with construction of chambers,
- B. Rehabilitation and Improvements to Water Supply Scheme**
- i) Rehabilitation of Electro / mechanical works of raw water pumps (2x55 HP pumps) at Power Canal water works by replacing with suitable panels, starter, cables, etc.
  - (ii) Rehabilitation of Electrical / mechanical works of clear water pumps (2x90 HP pumps) at Power Canal water works by replacing panels, starter cables etc
  - (iii) Supplying, erecting, testing and commissioning of two centrifugal pumping machinery with accessories & connected electrical works including panels, starter, etc (368.37 LPS,35m Head) at Raya-Basava Canal raw water works.
  - iv) Supplying, erecting, testing and commissioning of two centrifugal pumping machinery with accessories & connected electrical works including panels, starter, etc (352.36 LPS,50m Head) at Raya-Basava Canal clear water works
  - v) Construction of additional two nos of Rapid Sand Filters of capacity 9.08 MLD capacity with necessary building, control valves, pipes etc.,
  - vi) Providing and laying of 813mm dia and 8.70 mm thickness MS pipe pumping main of length 150mtrs from WTP to BPT (replacement of existing PSC pipe 600mm dia ) with necessary specials and supply and fixing of air valves ,NRV etc including earth work excavation and refilling after work.
  - vi) Providing and laying of 150mm dia to 450 mm dia DI K-7 pipe clear water feeder main of length 11853 mtrs from existing feeder main to proposed service reservoirs including supply and fixing of air valves, scour valves ,etc including earth work excavation and refilling after work.
  - vii) Construction of one RCC Over Head tank of capacity:10.0 lakhs litres & staging height 12 metre (shaft type) @ Vinayakanagar including providing and fixing of

inlet , out let pipes connect feeder and distribution mains, with by pass arrangement, scour and overflow pipes etc, construction of 4 nos of valve chambers .

- viii) Construction of one RCC Over Head tank of capacity:5.0 lakhs litres & staging height 9 metre (shaft type) @ Kariganur including providing and fixing of inlet , out let pies connect feeder and distribution mains, with by pass arrangement, scour and overflow pipes etc, construction of 4 nos of valve chambers
- ix) Construction of one RCC Over Head tank of capacity:5.0 lakhs litres & staging height 9 metre (shaft type) @ Kondanaykanhalli including providing and fixing of inlet , out let pies connect feeder and distribution mains, with by pass arrangement, scour and overflow pipes etc, construction of 4 nos of valve chambers
- x) Construction of one RCC ground level service reservoir at Vivekanandnagar of capacity:5.00 lakhs litres including providing and fixing of inlet , out let to connect feeder and distribution mains, scour and overflow arrangements with by pass arrangement etc, construction of 4 nos of valve chambers
- xi) Construction of RCC circular pure water sump of size 6m. Dia & 3.30m. Height at Kariganur for feeding 5.0 Lakh litres GLSR, providing and fixing of inlet and out let for feeder and pumping mains scour and overflow pipes along with supply and fixing of CI valves, etc
- xii) Supplying, erecting, testing and commissioning of two submersible pumping machinery with accessories & connected electrical works including panels, starter, etc (18 LPS,22m Head) including RCC Hume pipe.

### **C. DISTRIBUTION NETWORK**

Providing, laying, jointing (using electro fusion welding machine for PE pipes) testing ,and commissioning of a length of 139km length with varying diameters from 90mm dia to 300mm dia HDPE & DI pipe as follows. Distribution system works involve jointing of new pipe line with existing net work along with supply and fixing of 44 nos

of sluice valves and necessary chambers including road restoration and providing support to existing utilities. etc including earth work excavation and refilling after work

<b>DI pipes K7</b>		<b>HDPE (PE 80)</b>	
150 mm	5030 m	90 mm	1144652 m
200 mm	1267.69 m	110 mm	10220.09 m
250 mm	3034.52 m	125 mm	406 m
300 mm	34.37 m	140 mm	432.84 m
350 mm	514.36 m	160 mm	2671.29 m
<b>Total</b>	<b>9880.94m</b>	<b>Total</b>	<b>128382.22 m</b>

D; Restoration of road works includes WBM, asphalt, and concrete surfaces and protection to existing utilities including shifting where ever it is found necessary. The cost of permanent shifting alone will be paid by the Employer. Obtaining of permissions from the line departments is within the scope of the Contractor. Necessary letters and requests for the same including requests for traffic diversions will alone be issued on specific requests by the Contractor.