

HAZARIBAGH URBAN PIPED WATER SUPPLY SCHEME

Job Description: Hazaribagh Urban Water Supply Scheme under Hazaribagh Municipal Corporation

Job Synopsis: Detailed Survey, Design & Drawing, Construction of RCC Intake Well with Pump House, Gangway, RCC Framed Substation Building, WTPs, Elevated Service Reservoirs, Pre-Settling Tanks, Storage Tanks, Renovation of Existing Intake and WTP, supplying and laying Raw and Clear Water Rising Main & Distribution Network and House Service Connection along with Water Meter, Boundary Wall, Staff Quarter, supplying and installation of Raw Water V.T Pumps and Clear Water Centrifugal Pumps, installation of SCADA etc. all complete for Hazaribagh Urban Water Supply Scheme under Hazaribagh Municipal Corporation.

Contract Value: Design & Build – Rs. 416 Cr & O&M Rs. 101 Cr (Total Rs. 517 Cr)

Contact Duration: 36 Months (33 Months for Construction + 03 Months for Trial run) and O&M duration – 60 Months.

Start Date as per Contract Agreement: 04-Dec-2018 & **Completion Date as per Contract Agreement:** 03-Dec-2021.

Benefits of the Scheme

By implementing this scheme, the following infrastructure will be added and following improvements will be achieved.:

1. Water Treatment Plant (WTP)

Presently, two separate WTP are functioning by the side of Chadwa Reservoir (capacity of each WTP are 1.9 MLD & 5.6 MLD) and one WTP is by the side of Jheel (capacity of 1.00 MLD)

Existing 5.6 MLD at Chadwa WTP will be augmented, 1.9 MLD will be closed.

As per proposed scheme three new WTP will be constructed as follows:

- a. 52 MLD WTP near Rola
- b. 8 MLD WTP at Chadwa
- c. 1 MLD WTP by the side of Jheel

2. Pipeline

At present, only 150 KM Pipe lines are available at Hazaribagh town.

By implementing the scheme, the total pipeline shall be laid:

Raw Water Rising Main – 53.15 KM, passing through Banaso, Vishnugarh, Tanti Jharia, Daru, Jhumra, Hutpa and Rola.

9 - - - - -
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Clear Water Rising Main – 39.99 KM, passing through Rola, Singhani, Nutan Nagar, Korra, PTC Colony, District More, Indrapuri Chowk, Nirmal Mahato Park, Sarley, Hazaribagh Medical College, Central Jail, Devvagna Chowk, Nilambar Pitambar Chowk and Stadium.

Distribution Network – 463 KM, covering Municipal Wards of Hazaribagh 32 nos and also areas to be covered within Municipal jurisdiction of villages 31 nos.

Total Pipe Line - 556.14 KM

3. Elevated Service Reservoirs (ESR)

At present, drinking water are being supplied through seven numbers of ESR in the town.

By implementing this scheme, 10 numbers new ESR of different capacity and height will be constructed. One existing ESR to be dismantled & reconstructed. Six number of ESR to be integrated with the proposed system.

Existing ESRs are:

- a. ESR at PTC Capacity 454 KL
- b. ESR at Bus Stand Capacity 454 KL
- c. ESR at Khirgaon Capacity 454 KL
- d. ESR at Indrapuri Capacity 454 KL, and
- e. ESR at Columbus College Capacity 454 KL
- f. ESR at Girls School Capacity 454 KL

New ESRs are:

- a. ESR 1: Capacity 2900 KL (Kadma)
- b. ESR 2: Capacity 3090 KL (Electric office)
- c. ESR 3: Capacity 1060 KL (Stadium)
- d. ESR 4: Capacity 920 KL (Co. Office)
- e. ESR 5: Capacity 1385 KL (Dipugarh)
- f. ESR 6: Capacity 240 KL (Nirmal Mahto Park)
- g. ESR 7: Capacity 850 KL (Open jail area)
- h. ESR 8: Capacity 1210 KL (Noora)
- i. ESR 9: Capacity 1160 KL (Shivpuri)
- j. ESR 10: Capacity 2175 KL (Rola)
- k. ESR 11: Capacity 450 KL (Jheel)

Apart from the above a new Intake system shall be constructed at Konar Reservoir. New Intake Well with Gangway of 70.80 MLD capacity shall be constructed at Konar Reservoir and from their Raw Water pumped & transported through Raw Water Rising Main to the proposed WTP at Rola.


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Raw water shall be conveyed from the Konar Dam point to Water Treatment plant at Rola by pumping through PST1 to ST1, ST1 to PST2, PST2 to ST2 and ST2 to WTP.

4. House Service Connection (HSC)

At present, there are 5,481 numbers of connections are existing.

By implementing this scheme total number of HSC will be 56,306 nos.

5. Service Parameter

At present, approx. @ 65.00 LPCD drinking water are being supplied in the Hazaribagh town.

In the new system, @ 135.00 LPCD Drinking Water will be supplied in the Hazaribagh town.

6. Pressure

At present system drinking water are being supplied to consumer end at low to medium pressure.

By implementing the new scheme, consumer will get Drinking Water at a pressure of 12 M head.

7. Water Losses

At present system, it is not possible to quantify the losses of precious drinking water in the town.

Through the proposed system, a target of 15% losses shall be achieved.

8. Duration of Supply Hours

At present approx. 2.00 hours (once in a day) Drinking Water are being supplied throughout the town.

By implementing the new scheme, 24x7 uninterrupted Drinking Water will be supplied throughout the town.

9. Customer Complaint Management System (CCMS)

Presently no structured Customer Complaint Management System is available in the Hazaribagh town.

Through the proposed system, a structured, well defined & scientific method CCMS will be implemented.

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10. Service coverage:

Through existing system, Drinking Water are being supplied only 32 no of wards.

Through proposed scheme Drinking water will be supplied for all the 32 nos wards as well as added area of municipal area comprising of 31 nos village and also provision has been made for supply of Raw Water to enroute 30 nos villages.

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