Office of the Engineer-in-Chief
Public Health Engineering Department
Chhattisgarh, Raipur

No.....64...../ES./ENC/PHED/Raipur Dated....09/04/2021.....

Amendment No.2/2020-21

Under the unified schedule of rates for Water Supply, Sewerage and allied works enforce from 1st June 2020 in C.G. P.H.E. Department. The amendments to following items is hereby made with immediate effect.

<table>
<tr><th>S.No.</th><th>Details of Items added or Replaced in the USOR</th></tr>
<tr><td>1.</td><td>General Notes Water Supply and Sewerage works para no. 17 Page no. 8 is deleted and replaced as under.
17. All necessary permissions regarding road cutting, blasting, electrical line/pole shifting, road diversion/closer, under ground utility services shifting/closer disturbance, tree cutting etc. and all other permissions or licenses or permits etc. where ever applicable, such as from Labour dept., Mining dept., P&T dept., PWD, WRD, Electricity board/ company, District administration, Local Urban bodies etc. shall also be obtained by the Contractor from the competent authority, the department will assist to the contractor and any liability will be paid by the department.</td></tr>
<tr><td>2.</td><td>Chapter No. IV Item no. 4.33 page no. 70 is deleted and replaced as under
<table>
<tr><th>Particulars of Item</th><th>Unit</th><th>Rates in Rs.</th></tr>
<tr><td>Providing, Laying including testing and Jointing of welded double flanged centrifugal cast (spun) ductile Iron Pressure pipes conforming to IS: 8329/2000 in the length of 5.2m for class K-9 with inside cement mortar lining for the following sizes/ dia pipes.</td><td></td><td></td></tr>
<tr><td>100 mm dia</td><td>Each</td><td>32509</td></tr>
<tr><td>150 mm dia</td><td>Each</td><td>39222</td></tr>
<tr><td>200 mm dia</td><td>Each</td><td>50305</td></tr>
<tr><td>250 mm dia</td><td>Each</td><td>60973</td></tr>
<tr><td>300 mm dia</td><td>Each</td><td>81916</td></tr>
<tr><td>350 mm dia</td><td>Each</td><td>91400</td></tr>
<tr><td>400 mm dia</td><td>Each</td><td>122551</td></tr>
<tr><td>450 mm dia</td><td>Each</td><td>132509</td></tr>
<tr><td>500 mm dia</td><td>Each</td><td>139222</td></tr>
<tr><td>600 mm dia</td><td>Each</td><td>150305</td></tr>
</table></td></tr>
</table>

3	**In chaper No.- XIX, GENERAL MISCELLNEOUS in NOTES FOR PE-AL-PE PIPES AND FITTINGS FOR HOT & COLD WATER SUPPLIES** Specification for Integrated Saddle with inbuilt SS FCV and compression Elbow is added as following :-

21. "Integrated Saddle with inbuilt SS 316 FCV and Compression Elbow"

- Integrated Saddles shall be contoured to fit around the pipe, have a Rubber Grommet/ Seal/Bush.
- Materials of Construction of Saddles shall be food Grade Polypropylene.
- Integrated Saddle shall be supplied in Blue/Black Colour.
- Integrated Saddles must be suitable of 63mm, 75mm, 90mm, 110mm, 125mm, 140mm, 160mm and 200mm HDPE/PVC pipes.
- FCV must be embedded in the integrated Saddle and cannot be removed from the body.
- All body parts of the FCV must be stricly manufactured using SS316 steel bars only and machined on CNC.
- The Integrated saddle shall be designed to give 5 LPM flow at 0.5 bar inlet pressure and flow of 7.0 LPM at 1 bar pressure. +/-20% tolerance.
- Integrated Saddle shall act as non-return valve to prevent contamination through back flow of house connection.
- Champing of the integrated saddle on the pipe shall be done with 4 Numbers of SS-304 Bolts and Nuts.
- Material of Construction of Rubber Grommet/Seal/Bush shall be food Grade TPE/NBR.
- Outlet of the Integrated saddle must have compression fitting arrangment (elbow) for fitment with composite pipe. (PE-AL-PE)
- Material of construction of various components of compression elbow shall be as given below-

  a. Nut / Cap - Polypropylene
  b. Clip Ring - POM
  c. Thrust Ring – Polypropylene
  d. Rubber Gasket – NBR/EPDM
- Integrated Saddles shall be able to accommodate the maximum and minimum tolerance of pipe diameter and ovality.
- Integrated Saddles shall be PN-10 rated.
- The manufacturer shall have a well-equipped, in-house laboratory to carry out tests as per approved QAP.
- The Manufacturer shalk maintain complete traceability of the production and testing Processes. The records shall be made available for review to the visiting Officer / Inspector.
- Integrated Saddles must be manufactured from materials approved by WRAS for and tested as per BS6920 for suitability of non-metallic products for use in contactwith water inteded for human consumption with regard to their effect on the quality of water.
- Integrated Saddle shall be homogeneous product, which include PP Mechanical Clamp Saddle integrated with SS 316 Flow control valve and a compression elbow (FTO) injection moulded / welded/ fused in one piece.

  Flow Control Valve made of SS316 steel bars machined on CNC, suitable for drinking water supply, supplying water of 5 LPM at 0.5 bar and 7 LPM at 1 bar pressure +/-20% tolerance.

Chapter no. XIX - Item no. 19.35 Page no. 253 is deleted and replaced as under

Particulars of Item	Unit	Rates in Rs.
Providing and constructing one stand post as per type design with excavation 15 cm thick PCC 1:3:6 bedding 20 mm thick PCC 1:2:4 convert for platform of 1.0mx1.0m with side curb and bucket rest of 80 mm dia. 160mm dia PVC pipe central post duly filled therein with C.C. 1:2:4, 2.2m long, 15 mm dia medium G.I. pipe. From point of tapping to stand post additional 1620 (20 mm dia) composite pipe 6.0 m long. Providing and fixing of 15 mm dia, one steel water tap, Integrated Saddle piece which include Poly Propolence Mechanical Saddle with Flow Control Valve SS 316 and compression elbow, 5 LPM complete together with all labour and material charges as per drawing and as directed by Engineer-in-charge when good foundation in available. Rate includes draining arrangement by excavating open gutters complete	Each	6969

4. **Chapter no. XIX - Item no. 19.41 Page no. 256 is deleted and replaced as under**

Particulars of Item	Unit	Rates in Rs.
FLOW CONTROL VALVE :- Flow control valve made of SS-316 steel bar machined on CNC suitable for drinking water supply 5 lpm, 10 lpm and 15 lpm capacity.	Each	402

5 **Chapter no. XXXIV - Item no. 34.1 Page no. 341 is deleted and replaced as under**

Item	Unit	Rate in Rs.
Hydro fracturing of perfectly vertical bore hole for 200/ 150/115 mm diameter bore hole up to 90m depth below ground level including yield testing bofore and after Hydro fracture, transportation, installation and removing of Hydro fracturing unit.	1 Job	17110

6 **Chapter no. VII - Item no. 7.1 Page no. 108 is deleted and replaced as under**

Items	Unit	Rates in RS		
Providing, laying and jointing following P.V.C pipes with solvent cement joint for 6, 8 and 10 kg/sq. cm. pressures including testing of joints, cost of jointing materials etc. complete in all respect		6Kg/Cm^2	8Kg/Cm^2	10Kg/Cm^2
90 mm dia	R.mtr.	184	265	300
110 mm dia	R.mtr.	254	359	401
140 mm dia	R.mtr.	423	604	667
160 mm dia	R.mtr.	543	766	862
180 mm dia	R.mtr.	705	1018	1115
200 mm dia	R.mtr.	952	1309	1516

7. **Chapter No. XXIII Rate for Elevated Service Reservoirs up to 12m Staging is deleted and replaced as under**

S.No.	Capacity of Liters	Unit	For Seismic Zone-III Rate (in Rs.)
23.1	Upto 25000 lit	Litre	35.76
23.2	Cost of 25000 lit capacity	Job	894035
23.3	Add for capacity above 25000 to 50000 lit	Litre	14.76
23.4	Cost of 50000 lit capacity	Job	1263055
23.5	Add for capacity above 50000 to 75000 lit	Litre	11.07
23.6	Cost of 75000 lit capacity	Job	1539813
23.7	Add for capacity above 50000 to 75000 lit	Litre	14.00
23.8	Cost of 100000 lit capacity	Job	1889859
23.9	Add for capacity above 100000 to 150000 lit	Litre	8.61
23.10	Cost of 150000 lit capacity	Job	2320381
23.11	Add for capacity above 150000 to 200000 lit	Litre	7.38
23.12	Cost of 200000 lit capacity	Job	2689401
23.13	Add for capacity above 200000 to 250000 lit	Litre	8.93
23.14	Cost of 250000 lit capacity	Job	3136130
23.15	Add for capacity above 250000 to 300000 lit	Litre	6.15
23.16	Cost of 300000 lit capacity	Job	3443645
23.17	Add for capacity above 300000 to 400000 lit	Litre	6.15
23.18	Cost of 400000 lit capacity	Job	4058677
23.19	Add for capacity above 400000 to 500000 lit	Litre	7.19
23.20	Cost of 500000 lit capacity	Job	4776947
23.21	Add for capacity above 500000 to 750000 lit	Litre	4.88
23.22	Cost of 750000 lit capacity	Job	5997159
23.23	Add for capacity above 750000 to 1000000 lit	Litre	5.83
23.24	Cost of 1000000 lit capacity	Job	7456147
23.25	Add for capacity above 1000000 to 1500000 lit	Litre	4 92
23.26	Cost of 1500000 lit capacity	Job	9916274
23.27	Add for capacity above 1500000 to 2000000 lit	Litre	3.70
23.28	Cost of 2000000 lit capacity	Job	11761369

8. **Chapter No. IX HDPE PIPE, MDPE PIPE & SPECIALS in Notes no. 5 Raw Material and no. 9 Detectability is deleted and replaced as under.**

5. Raw Material - (a) Resin used to manufacture the HDPE pipes shall be 100% virgin natural HDPE resin with carbon black master batch or PE Black pre-compounded confirming to IS: 4984, IS: 7328 and ISO: 4427-2007 (latest version). The resin proposed to be used for manufacturing of the pipes should also comply with the norms as per ISO 9080-2003 (latest version).

(b) and (c) deleted

9. Detectability – Deleted

09.4.2021

Engineer-in-Chief
Public Health Engineering Department
Chhattisgarh, Raipur

Endt. No. 3381 /T.S./ENC/PHED/Raipur Dated 09/04/2021

Copy is forwarded to:-

1. Secretary, Govt. of Chhattisgarh, Public Health Engineering Department, Mantralay Raipur.
2. Mission Director Jal Jeevn Mission, Neer Bhawan, Civil Lines, Raipur.
3. Engineer-in-Chief, PWD/Water Resources Department, Raiupr.
4. The Accountant General, Chhattisgarh, Near Vidhan Sabha, Raipur.
5. The Chief Technical Examiner, Indrawati Bhavan, Raipur.
6. The All Chief Engineer, Zone Raipur / Bilaspur / Jagdalpur.
7. All Superintending Engineer, PHED Circle Raipur / Bilaspur / Jagdalpur / Durg / Ambikapur / Kondagaon. Superintending Engineer (E/M) Raipur.
8. All Executive Engineer, Civil / E/M.

09.4.2021

Engineer-in-Chief
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