

SCHEDULE OF QUANTITY

NAME OF WORK: - Augmentation of LWSS Garsar in Tehsil Bhoranj Distt. Hamirpur
(SH: Drilling of 1No 200mm dia deep well bore well 95 metres).

Estimated Cost :- Rs. 339640.00
Earnest Money :- Rs. 6793.00

Time : 1 months

S.No.	Description of item.	Quantity		Rate in		Unit.	Amount.
		Fig.	Words	Fig.	Words		
1	Transportation of suitable truck/ tractor mounted DTH /ODEX attachment/ Percussion / Calyx / Rotary drilling tractor rigs along with necessary accessories etc. to the site of work and erection of rig including leveling etc. complete in all respects as per decision of Engineer-in-charge.	1	Nos			Each	
2	Drilling bores of 225 mm dia as per IS:2800-1979 using ODEX (TUBEX) attachment required drilling in collapsible strata conglomerate, boulders, pebbles, gravels, silt, clay, etc. including cost of attachments, consumable stores, bits,water POL etc.complete with system of simultaneous lowering of 200 mm dia normal bore, 6.4mm thick MSERW fin cut casing pipe which will be welded together using 2.5mm or 3.25mm dia. Advani Oerlikon electrodes, with one plain end and the other end chamfered to 50 degrees removing paint on the area to be welded, inclusive of the cost of bio- degradable and non –toxic foam flush etc. complete in all respects as per directions of Engineer-in-Charge. 1x95=95 mtrs	95	Mtr			Mtr.	
3	Supplying and lowering IS marked 200mm mm NB 6.40 mm thick fincut MSERW casing pipes as per IS: 4270 :2001 in a randum length of 4 to 7 metres without any circumfrential joints into the bore hole in vertical position including cost of scaffolding derricks and embeded in foundation etc. complete including threading and welding of pipes where required on sockets complete in all respects as per direction of Engineer -in-Charge 1x95=95 mtrs	95	Mtr			Mtr.	
4	Development of bore well and yield testing with air-compressor through V-Notch and disinfection etc. complete in all respects as per IS 2800: 1979 and as per direction of the Engineer-in-Charge.	1	Nos			Each	
5	Collection and preservation of soil samples in polythene bags complete in all respects as per directions of the Engineer-in-Charge.	1	Nos			Each	
6	Providing and fixing suitable casing shoe 175mmdia and bit tube as per requirement of ODEX attachment complete in all respects as per the directions of the Engineer-in-Charge	1	Nos			each	

A SPECIFICATIONS:-

- 1 The free end of the casing pipe shall be minimum 300 mm above the ground level.
- 2 The verticality shall not vary in excess of the diameter of the well per 30 meter length.
- 3 A record of the strata encountered, depth of each Hand pump together with properly labelled samples of drilling, cutting shall be maintained as per IS:2800(Part-I) 1979 and its upto date ammendments.
- 4 The water sample shall be arranged by the department to ensure that water from Hand Pump is fit for human consumption. If the water is unsuitable the Hand Pump shall not be provided and casing retrieved.

- 5 Casing detail shall be bore specific keeping in view the rock formation/geological conditions.
- 6 The anti-corrosive treatment painting, as per IS:15500:2004 and its upto date ammendments shall be provided.
- 7 Fin cut MSERW casing pipes as per item No.6 shall be painted both on the inside and outside with an anticorrosive paint as per IS:4270-1971 and its upto date ammendments.

B TERMS AND CONDITIONS:-

- 1 For item NO.3 the MSERW pipes shall be purchased from approved manufactures short listed by the state departmental Screening Committee only as per **Annexure-II**. The pipes shall be inspected by the third party i.e. SGS/QSS/DET NORSAKE/NORSAKE VARITAS/BUREAU VARITAS in the
- 2 The accessories, pipes coupling etc. shall be ISI marked.
- 3 The UNICEF approved tool kit shall be used for installation of hand pumps. One such kit should be deployed with each rig.
- 4 The drilling shall commence with normal conventional set up and when problem area is encountered the conventional set up shall be removed and drilling through the problem area with simultaneous casing system be undertaken until the problem area has been passed through and safely ceased off. All casing used with the simultaneous casing system shall be welded together and then the simultaneous casing shall be removed and drilling with a conventional set up continued to the required total depth. The drilling rates for (a) standard drilling and (b) simultaneous casing drilling shall be as per item No.2 respectively.
- 5 The height of the internal weld projection shall not exceeds 0.5 mm on the outside, the weld should not rise more than 2mm above the surface.
- 6 The Pump and accessories shall be guaranteed 12 months from the date of installation against bad workmanship/badmaterial.The life of rubber components shall, however be guaranteed for not less than six months from the date of installation.failing which the same shall be replaced as per directions of Engineer-in-Charge at the cost of contractor/ firm immediately.
- 7 The Hand Pump shall be tested as per requirements of IS:13056:1991 The discharge of water for 40 continuous strokes per minutes shall not be less than 15 litres.
- 8 The development of the well shall be continues for minimum period of one hour and till the bore does not yeild clear water to turbidity not more than 20% PPM.The decision of the Engineer in charge shall be final.
- 9 For drilling of 225 mm dia bore holes drill rods will have to be 200 mm diameter. Drilling will not be permitted if rod of smaller size/dia are used.
- 10 The firm shall have to maintain hand pump i.e. to carry out repairs and maintenance of their installed hand pumps minimum for one year at its costs. Spare parts (if required) shall be supplied by the firm during this period without any extra cost.
- 11 For delay in installation of hand pump within aforsaid period of one week time firm shall be levied penalty @ **Rs.1000/-** per day.
- 12 The firm should attach the certificate of Registratiobn with HP Ground Water Authority otherwise the tender shall be rejected.
- 13 Firm rates should be quoted and no enhancement what so ever on account of increase in cost of material /labour etc will be paid
- 14 The rates shall remain valid till 30th April 2018
- 15 Security, GST, income tax and 1% labour cess charges will be deducted as applicable from the each running bill of the contractor.
- 16 The firm/ Contractor shall be registered with Central Ground Water Authority for drilling of bore wells/ hand pumps or registered with HP I&PH Deptt. for drilling of bore wells/ hand pumps in Class "C" category and above.
- 17 The rates are inclusive of carriage of materials with in all leads and lifts and no extra cost will be paid for this.
- 18 These tenders have been called to finalize the lowest rates for installation of hand pumps during the years 2017-18, however firms registered with HP I&PH Department for installation of Hand Pumps shall be allotted as per their eligibility on the undertaking of the firm/ contractor for excuting the work at lowest rates.
- 19 Minimum 10% of allotted hand pumps will have to be installed at off road sites by the firm as per Government instructions issued vide Special Secretary letter No.IPH-B(F)5-4/2012 dated 30th August, 2013
- 20 Firm will have to make its own arrangement including right of way for transportation of equipment/ rig to the off road location and nothing extra shall be paid on this account.

**Executive Engineer
I&PH Divn. Barsar**