DNIT/SCHEDULE OF QUANTITY

NAME OF WORK:- Aug.of source of LWSS SURAJPUR MOHTALI in Tehsil Indora Distt. Kangra HP)
(SH:- Drilling, Lowering and Development of 1 No. tube well 140 mtr deep)

Estimated cost :-859070/-
E/Money :- 18900/-
Time :- 6 months

S.No.	Description of items of work.	Qty.	Rates in	Unit	Amount
1	Transportation of Rig along-with allied accessories etc.complete including erection and levelling at site through all kind of roads,approaches field etc.in all leads and lifts upto site of work complete in all respect.	1 No.		Each	
2	Earth work in foundation for digging Tube-Well in all kinds of soils including dewatering,shoring,strutting from ground level upto 5.00 Metres including disposing excavated soil in all leads and lifts complete in all respect.	5.00 Metres		Per Metre	
3	Drilling of bore as per specifications laid down in IS-2800-1991(Part-I) with uptodate ammendments,if any;with Percussion Rig or combination drilling Rig starting with 650-600mm.dia M.S.Pipe reduced to 450-400mm.dia M.S.pipe confirming to IS-4270-2001 with uptodate ammendments,if any in all kinds of soils,boulders,rocks, collapsible strata,saturated soil, artesian conditions including the cost of all consumables,stores, water, fuel, lubricants and other accessories etc.complete in all respect.				
a	Drilling and lowering of M.S.casing pipes 650-600mm.dia confirming to IS-4270-2001 with uptodate ammendments, if any of suitable sizes as mentioned above from 5 to 30 Metres below ground level.	25.00 Metres		Per Metre	
b	Drilling and lowering of M.S.casing pipes 600-550mm.dia confirming to IS-4270-2001 with uptodate ammendments, if any of suitable sizes as mentioned above from 30 Metres to 60 Metres below ground level.	30.00 Metres		Per Metre	
c	Drilling and lowering of M.S.casing pipes 550-500mm. Dia confirming to IS-4270-2001 with uptodate ammendments, if any of suitable sizes as mentioned above from 60 Metres to 100 Metres below ground level.	40.00 Metres		Per Metre	
d	Drilling and lowering of M.S.casing pipes 500-450mm.dia confirming to IS-4270-2001 with uptodate amme dments if any of suitable sizes as mentioned above from 100 to 140 Metres below ground level.	40.00 Metres		Per Metre	
4	Collection,preservations and display of suitable size sample box with top lid and locking arrangem,ent till handing over of the Tube-Well to the Department complete in all respect.	1 No.		Each	
5(a).	Supply and lowering of IS-Marked "Electric Resistance Welded Mild Steel Pipe 300mm.nominal size housing, 8mm. thick having outside diametre 323.9mm.screwed and socketted confirming to IS-4270-2001 with uptodate ammendments, if any, about 4.00 Metres to 7.00 Metres in length,welded without any circumferential joints into bore hole in vertical position including cost of all scaffolding derricks, poles clamps embedded in foundation etc. including cost of all cuttings,threading and welding of pipes etc.complete in all respect.	70.00 Metres		Per Metre	
(b).	Lowering at site electric resistance welded (ERW) stainless steel cage type v wire wound screens of size 300mm, 8mm O.D 322.00 Load Tensil 392.40 KN ending 80mm thick with slots opening 1.0 mm as per IS 8110-2000 with upto date ammendments, if any and material specifications as perAISI-American iron and steel Inst type grade SS-304 in suitable lengths as per site conditions, including the cost SS socket 6mm thickness of length 140mm (Supply by the deptt.) confirming to AISI grade 304, suitable to accomdate screen end ring including jointing screen with blind pipes complete in all respect including cost of all scaffolding, derricks, poles, clamps embedding in foundation etc., within all leads and lifts complpete in all respect as per the direction of Engineer-in-charge screen willo be continuous trapezoidal wire spirally wound around fabricated cage. The wrapping wire having a v shaped (wedge) profile wire with flats surface on the outside and producing expanding slots on the inside of various dimentions, resistance weldded to a cylindrical body made of number of longitudinal special high tensile support rods to provide smooth unrestrictred bore which are in turn welded into cylindrical ring couplings on both side of screens.	5.00 Metres		Per Metre	
6	Providing and fixing M.S.Taper/Reducer as per lengths approved by the Engineer-in-Charge. The material of M.S. taper/reducer shall be equivalent to prevent pipe material and shall conform to Chemical composition as per Clause-5.2 and Mechanical properties as per Clause-6.1 and Table-1 of IS:4270-2001 with uptodate ammendments, if any, complete in all respect.	1 No.		Each	

7.(a).	Supply and lowering of IS-Marked Electric Resistance Welded Mild Steel pipe 200mm.dia nominal size housing, 6.4mm.thick having outside diametre 219.1mm.screwed and socketted confirming to IS-4270-2001 with uptodate ammendments, if any, about 4.00 Metres to 7.00 Metres in length, welded without any circumferential joints into bore hole in vertical position including cost of all scaffolding derricks, poles, clamps embedded in foundation etc. including cost of all cuttings, threadings aqnd welding of pipes etc.complete in all respect.	50.00	Metres	Per Metre
(b).	Lowering at site electric resistance welded (ERW) stainless steel cage type v wire wound screens of size 200mm ,6.30mm thick O.D 217.37 Tensil load 186.39 KN endring 6.40 with slots opening 1.0 mm as per IS 8110-2000 with upto date ammendments, if any and material specifications as perAISI-American iron and steel Inst type grade SS-304 in suitable lengths as per site conditions, including the cost SS socket 8mm thickness of length 140mm(Supplied by the deptt) confirming to AISI grade 304, suitable to accomdate screen end ring including jointing screen with blind pipes complete in all respect including cost of all scaffolding, derricks, poles, clamps embedding in foundation etc., within all leads and lifts complpete in all respect as per the direction of Engineer-in-charge screen willo be continuous trapezoidal wire spirally wound around fabricated cage. The wrapping wire having a v shaped (wedge) profile wire with flats surface on the outside and producing expanding slots on the inside of various dimentions, resistance weldded to a cylindrical body made of number of longitudinal special high tensile support rods to provide smooth unrestrictred bore which are in turn welded into cylindrical ring couplings on both side of screens.	15.00	Metres	Per Metre
8	Providing and fixing of M.S.centralized guides at suitable spacing for each Tube-Well as per IS-226-1991 with uptodate ammendments, if any complete in all respect.	2	Nos.	Each
9	Supply,lowering,fixing and lowering in position IS-Marked Mild Steel bail plug of 200mm/330mm. Diametres with 'U' hooks as per IS-2800-1991 with uptodate ammendments,if any complete in all respect.	1	No.	Each
10	Providing,fikxing and lowering in position threaded iron cap with locking arrangements of approved design to prevent foreign matter from getting into bore hole as required complete in all respect.	1	No.	Each
11	Supply and packing of gravel consisting of hard quartz or other suitable material with an average specific gravity of not less than 2.5, not containing more than 2% by weight of thin flat or stangated pieces shall be of sub rounded grains with minimum anuglar features of size 2-3.35mm.shall be free from impurities such as; shafe,shale mica, felspar, clay, sand, dit loam haematite and organic materials as per IS-4097-1967 with uptodate ammendments, if any arround intake of Tube-Well with minimum thickness of shroud around screen generally 100mm. to the entire depth of the bore as per IS-2800(Part-I):1991 with uptodate ammendments, if any, complete in all respect.	140.00	Metres	Per Metre
12	Development of Tube-Well by backwashing method with Air Compressor of minimum 750CFM capacity Pumping pipe of 200mm. Size and Air line of minimum 65mm size or with other suitable method, till the Well is thoroughly developed as per Clause-4.2 of IS-11189:1985, with upto date ammendments, if any; complete in all respect.	30.00	Hours	Per Hour
13	Development of Tube-Well by continuous over Pumping method with V.T.Pumps/Submersible Pumps of suitable capacity not less than double the discharge established by the Compressor method/design discharge, untill the well sand free as per IS-11189:1985 with uptodate ammendments, if any; complete in all respect as per the directions of the Engineer-in-Charge. The draw-down and discharge to be established by running the VT/Submersible pump continuously for 8 Hours in the presence of the officer not less than the rank of the Assistant Engineer.	20.00	Hours	Per Hour

14	Testing the vertcality of the Tube-Well as per Clause-4.3 of IS-2800(Part-II)-1979 with uptodate ammendments, if any, using plumb or plunger 6mm.smaller in dia within the inside diameter of the Well casing. The result of the verticality test shll be recorded on proforma shown in Appendix-A of IS:2800(Part-II)-1979 with uptodate ammendments, if any.	1 Job	L.S.	
15	Dismentalling of Rig or other allied, accessories after completion of job complete in all respect.	1 Job	Each	
			Total=	

(Rs. Eight lac., fifty nine thousand & seventy only)

TERMS AND CONDITIONS :-

1. **V.Wire Screen required for the job will be issued free of cost from the divisional store indora.**
2. All arrangements for the transportation of drilling equipment to the site of work and operation i.e. katcha trackes approach road/water electric light etc., if required shall be made by the contractor himself at his own cost.
3. The department shall be a full liberty to tenderor a particular well. If the borewell abondones to any reason i.e. on accuring hard rock strata, non-abailability of equipment or any other reason, the contractor shall be paid only for drilling work. In this case the direction of the Engineer-in-charge shall be binding on the contractor. If the tubewell remain un-successful due to faulty construction on the part of contractor. Nothing to be paid to the contractor for the drilling of tubewell.
4. A Gold, Silber, Oil other material any relies antiques and other similar things may be found in or upon the site shall be property of the Govt., and contractor shall deliver the same to the persons appointed by the Govt., from time to time.
5. The scope of the work can be increased and decreased by the Engineer-in-charge.
6. The work shall be executed strictly in accordance with the IPH and ISI-specifications.
7. The work shall be executed as per programme laid down by the Engineer-in-charge.
8. Any damage done by the contractor to any public/private property during the course of construction/execution of the work tendered for shall be made good by him at his own cost.
9. All the taxes and other incidential charges shall be borne by the contractor and nothing shall be paid to him on this account.
10. All extracted material available during the time of execution shall be stacked properly as desired by the Engineer-in-charage.
11. Tubewell assembly shall be got approved from Engineer-in-charge duly recommended from the Sr. Hydrogeologist Ground Water Organisation before lowering.
12. Contractor shall ensure un-intrupted execution of the work.
13. The firm/contractor shall abide by the time schedule strictly and shall furnish fortnightly progress achieved by them to the Engineer-in-Charage.
14. The contractor shall be responssible for the Govt., material issued to him for use on the work and shall maintain proper account of the same which will be open for inspection by the department officers at any time
15. The rates are inclusive of all types of classifications of soil and as such no claim in respect in the classification shall be accepted.
16. The contractor shall obtain orders in writing from the Engineer-in-charge about the site, where surplus excavated material will be disposed off.
17. The royality charges of stones, sand, aggregate etc., used shall be deducted from the bill of the contractor at the rates prescribed by Govt., of HP from time to time on the basis of quantities of such materials, required for furnished work.
18. The contractor must take all precautions to avoid accident by exhibiting day and night, necessary cattion boards speed limit boards red flag red light etc., He shall be responsible for all damages and accidents caused due to negligence on his part, No hindrance shall be caused to traffic during execution of work.
19. The contractor shall give complete postal, telegraphic address in tender and also leave the copy of the same in the office of Executive Engineer. All correspondance telegramme etc sent on above mentioned address, duly accepted by postal authorities shall be deemed to have been served on the contrctor from the date of its posting irrespective of that the same may be returned to the postal authorities undelivered due to any reason whatsoever, change in address shall be properly intimated to the office of Executive Engineer and acknowledgement received to that effect, unless this is done old address shall remain effective.
20. All the rates given above for drilling, lowering and development of tubewell include the cost of carriage, handing insurance and transportation charges of plants and materials to the site of work and back where required and nothing extra shall be paid to the contractor on this account.
21. This site shall be carried out by the contractor strictly in accordance with the attached in contract specifications and ISI specifications as per IS-2800-part-I-1991 IS-2800-part-II-1979 and IS-8110-2000 with upto date ammendments.
22. The contractor shall clear the site properly after the completion of the work within 15 days failing which penality @ Rs. 500/- per day will be imposed for Ist fortnight and Rs. 1000/- for each subsequent day.
23. Tender document shall be submitted by the contractor in one lot (duly sealed) and subsequent correspondance before opening the tender shall not be entertained/considered.
24. The work shall be carried out in a manner complying in respect with the requirement of relevant by laws of the local body in whose jurisdiction the work is situated.
25. The final payment shall be made to the contractor after handing over of the tubewell as per items No. 18 of the schedule of quantity to entire satisfaction of the Engineer-in-charge.
26. Security, Sale tax, Income tax & Labour cess will be deducted as per rule.

Executive Engineer,
I&PH Division Indora.