

Schedule of Quantity

Name of Work:- Improvement of LIS Kotla Bhajol in G.P. Kotla Tehsil Sunni District Shimla H.P (SH:- Providing Laying & Jointing of Rising main, Supplying & erection of Pumping Machinery with allied accessories etc) and Automation System for Booster, & 1st Stage.

				Estimated Cost Rs :- 03,02,100/-		
				Earnest Money Rs :- 6,050 /-		
				Time :- Six Months.		
Sr. No	Description of Work / Item(s)	Qty	Units	Rate		Amount
				In figure	In words	
1	Sub- stage (BOOSTER) Prov. Installation of submersible pumping set of reputed make approved by IPH Department such as KSB/Calama/SU/BS Kirloskar/Johnston conforming to latest relevent BIS. The pump should be fitted with free impellers of suitable alloys as per BIS 5659-1978 with upto date ammendment suitable for raw water having greased packedbearing and with wound stator on motor side and with shaft protection of pump side ensuring better life for shaft conforming to BIS specification. The pump shall be directly coupled to submersible squirrel cage electric induction motor of kirloskar/NGEF/Jyoti/Crompton make conforming to BIS-9283-1979 with upto date ammendments totally dust and water proof for submersible pump duly isolated and insulated from the pump by intermediate casing with double mechanical seal in oil chamber and grease packed bearing and provided with stainless steel thrust bearing plate to with stand vertical and non vertical loads with minimum wear and tear it should also be fitted with a device to make up expansion of water with heating of motor. The pump set should include water level guard i/c cable errection clamps cable clips and Gauge etc. and suitable for operation for the data given below. The power of motor should be atleast 10% in excess of the maximum power required by the pump in operator range of (+)10%(-) 25% of D.P. (load performancecertificate to be attached)	1.00	sets of 3 H.P		Rupees Only	0.00
	Specification.					
	i)Make.					
	ii)Model.					
	iii)No.of stages.					
	iv)Manufacturers.					
	Discharge:					
	ii)Head.					
	iii)Efficiency of pump.,					
	a)Duty Head.					
	(I) Discharge (Q) 1.50 LPS. Per Set					
	(ii) Total Dynamic Head: 36.89 Meters.					
	(a) LWL in sump well(h) :- Meters.					
	(b) Shaft level :- Meters.					
	© Level at discharge point :- Meters.					
	(d) Suction lift :- Meters.					
	(e) Residual head:- 3.00 Meters.					
	(f) Static head:- 30.00 Meters.					
	(iii) Rising main					
	(a) Length. 120 Meters.					
	(b) Dia :- 65 mm.					
	(iv) Pumping hours. 8 hours.					

	The Pump shall be installed in the raw water of the Nallah to lift the water to sump well.					
	b) (+)10% head					
	c) (-)25% head					
2	Controller for Automatic motor and pump control meeting the protection and control criteria enclosed at Sr. No.1	1	Each		Rupees Only	0.00
3	Automatic Star Delta starter of appropriate rating for motor specified in Sr. No 1 for the purpose of controlled starting and stopping of the pump, meeting the protection and control criteria enclosed at Annexure. I with display indicator for mains ON-OFF.	1	Each		Rupees Only	0.00
4	Float type two point low/high level monitoring system of water supply tank (Sump well) integrated with the Controller in Sr. No. 1 and starter in Sr. No. 2 for dry run protection and automatic pump control to start the pump at high level and stop at low level	1	Each		Rupees Only	0.00
5	Single Phase preventor to protect phase loss, phase reversal meeting the protection and control criteria enclosed at Annexure.I	1	Each		Rupees Only	0.00
6	Motor Protection Circuit Breaker for 3 phase, short circuit protection, motor overload protection and motor disconnect function meeting the protection and control criteria enclosed at Annexure.I	1	Each		Rupees Only	0.00
7	Digital VAF Meter to display Voltage, Ampere and Frequency for AC supply of appropriate capacity suitable for the above specified motor in Annexure I	1	Each		Rupees Only	0.00
8	Rust free powder coated Control panel suitable for housing all the above listed electrical and electronics components	1	Job		Rupees Only	0.00
9	Wiring of all the above equipment complete in all respect inside the control panel and to the external AC supply unit and the motor with PVC cable of appropriate rating including GI earthing if required.	1	Job		Rupees Only	0.00
10	Erection, commissioning and testing of all the above equipment as per site requirements and direction of Engineer-in-charge complete in all respect.	1	Job		Rupees Only	0.00
11(a)	Supply of Kirloskar/Kilburn/IVC/Fouress/Gled/BHEL/Leader/of reputed make of suitable size cast iron double flanged sluice valve having size equal to delivery of pump and capable of with standing nominal seat pressure as per Sr. No. 1	1	Each			
(b)	Supply of Kirloskar/Kilburn/IVC/Fouress/Gled/BHEL/Leader/of suitable size cast iron double flanged swing check type reflux valve having bye pass arrangement & size equal to delivery of pump for withstanding nominal seat pressure as per Sr. No. 1	1	Each			
(c)	Supply of Kirloskar/Kilburn/IVC/Fouress/Gled.BHEL/Leader of suitable size cast iron double flanged swing check type reflux valve having bye pass arrangement & size equal to dia of R/Main for withstanding nominal seat pressure as per Sr. No. 1	1	Each			
(d)	Supply of Kirloskar/Jyoti/Standard/Kilburn make cast iron flanged screwed type foot valve with strainer of dia equal to dia of suction pipe conforming to BIS 4038-1986 or latest with up to date ammendments.	1	Each			
12(a)	P/L suitable size copper PVC insulated armoured power 3 1/2 core cable conforming to BIS 1554(Part I)-1988 or latest with up to date ammendments Siemen/Gloster/ICC make from meter of HPSEB to OCB & from OCB to Busbar switch & starter(one cable carrying all three phases) including all other electrical	1	Job			
b)	P/L suitable size copper PVC insulated armoured power three core cable conforming to BIS 1554(Part I)-1988 or latest with up to date ammendments Siemen/Gloster/ICC make from switch to starter & starter to (one cable for carring all three phases) including all other electrical equipment/ accessories such as	1	Job			

c)	P/L double loop earthing with crpper plate 600x600x3mm thick electrode complete with material such as charcoal, common salt, GI pipes, thimbles, nuts & bolts, digging of pits, GI wiring & 25x5mm copper strips of required capacity conforming to BIS 3043-1987 latest with up to date ammendmentsfor above motors & other electrical equipment.	1	Job			
d)	Supply & errection of floor/wall mounted power factor capacitor conforming to BIS 2834-1986 latest with upto date ammendment BHEL/GEC/Machneil/Masger/Bajaj make to raise the pervailing power factor at site to 0.95 for direct connection to induction motor individually, or requird KVAR according to Himachal Pradesh of motor offered including cable siemens/ Gloster/ICC make from busbar chamber to capacitor & also including LT/LK/Kilburn make ICTP switches conforming to BIS 4064-1978 or latest with HRC fuses (Range to be specified by the tenderer.	1	Each			
d)	Supply & errection of floor/wall mounted power factor capacitor conforming to BIS 2834-1986 latest with upto date ammendment BHEL/GEC/Machneil/Masger/Bajaj make to raise the pervailing power factor at site to 0.95 for direct connection to induction motor individually, or requird KVAR according to Himachal Pradesh of motor offered including cable siemens/ Gloster/ICC make from busbar chamber to capacitor & also including LT/LK/Kilburn make ICTP switches conforming to BIS 4064-1978 or latest with HRC fuses (Range to be specified by the tenderer.	1	Each			
14	Laying jointing testing & commissioning of suction,delivery pipe considering site requirements , NPSH required & available & common header having area equal to times the area of delivery branch of pump including tapers, flanges, rubber gaskets, 3mm thick as per BIS-2712-1978 nuts & bolts as per 1364-1983 & special up to 5 mtrs. Away from the outer wall of pump house as per layout drawings approved by Engineer-in Charge The pipes shall be capable of withstanding 1.5 times the total presure indicated in item no. Ie(ii). BIS 4064-1978 or latest with HRC fuses (Range to be specified by the tenderer.	1	Job			
15	1st Stage Prov. Installation of submersible pumping set of reputed make approved by IPH Department such as KSB/Calama/SU/BS Kirloskar/Johnston conforming to latest relevent BIS. The pump should be fitted with free impellers of suitable alloys as per BIS 5659-1978 with upto date ammendment suitable for raw water having greased packedbearing and with wound stator on motor side and with shaft protection of pump side ensuring better life for shaft conforming to BIS specification. The pump shall be directly coupled to submersible squirrel cage electric induction motor of kirloskar/NGEF/Jyoti/Crompton make conforming to BIS-9283-1979 with upto date ammendments totally dust and water proof for submersible pump duly isolated and insulated from the pump by intermediate casing with double mechanical seal in oil chamber and grease packed bearing and provided with stainless steel thrust bearing plate to with stand vertical and non vertical loads with minimum wear and tear it should also be fitted with a device to make up expansion of water with heating of motor. The pump set should include water level guard i/c cable errection clamps cable clips and Gauge etc. and suitable for operation for the data given below. The power of motor should be atleast 10% in excess of the maximum power required by the pump in operator range of (+)10%(-) 25% of D.P. (load performancecertificate to be attached)	1	sets of 12.50 H.P		Rupees Only	0.00
	Specification.					
	i)Make.					
	ii)Model.					
	iii)No.of stages.					
	iv)Manufacturers.					
	Discharge:					
	ii)Head.					

	iii)Efficiency of pump.,					
	a)Duty Head.					
	(I) Discharge (Q) 1.50 LPS. Per Set					
	(ii) Total Dynamic Head: 159.34 Meters.					
	(a) LWL in sump well(h) :- - Meters.					
	(b) Shaft level :- Meters.					
	© Level at discharge point :- Meters.					
	(d) Suction lift :- Meters.					
	(e) Residual head:- 3.00 Meters.					
	(f) Static head:- 146.10 Meters.					
	(iii) Rising main					
	(a) Length. 290 Meters.					
	(b) Dia :- 65 mm.					
	(iv) Pumping hours. 8 hours.					
	The Pump shall be installed in the raw water of the Sump well to lift water to the delivery tank.					
	b) (+)10% head					
	c) (-)25% head					
16	Controller for Automatic motor and pump control meeting the protection and control criteria enclosed at Sr. No.15	1	Each		Rupees Only	0.00
17	Automatic Star Delta starter of appropriate rating for motor specified in Sr. No 1 for the purpose of controlled starting and stopping of the pump, meeting the protection and control criteria enclosed at Annexure. I with display indicator for mains ON-OFF.	1	Each		Rupees Only	0.00
18	Float type two point low/high level monitoring system of water supply tank (Sump well) integrated with the Controller in Sr. No. 1 and starter in Sr. No. 2 for dry run protection and automatic pump control to start the pump at high level and stop at low level	1	Each		Rupees Only	0.00
19	Single Phase preventor to protect phase loss, phase reversal meeting the protection and control criteria enclosed at Annexure.I	1	Each		Rupees Only	0.00
20	Motor Protection Circuit Breaker for 3 phase, short circuit protection, motor overload protection and motor disconnect function meeting the protection and control criteria enclosed at Annexure.I	1	Each		Rupees Only	0.00
21	Digital VAF Meter to display Voltage, Ampere and Frequency for AC supply of appropriate capacity suitable for the above specified motor in Annexure I	1	Each		Rupees Only	0.00
22	Rust free powder coated Control panel suitable for housing all the above listed electrical and electronics components	1	Job		Rupees Only	0.00
23	Wiring of all the above equipment complete in all respect inside the control panel and to the external AC supply unit and the motor with PVC cable of appropriate rating including GI earthing if required.	1	Job		Rupees Only	0.00
24	Erection, commissioning and testing of all the above equipment as per site requirements and direction of Engineer-in-charge complete in all respect.	1	Job		Rupees Only	0.00
25(a)	Supply of Kirloskar/Kilburn/IVC/Fouress/Gled/BHEL/Leader/of reputed make of suitable size cast iron double flanged sluice valve having size equal to delivery of pump and capable of with standing nominal seat pressure as per Sr. No. 15	1	Each			
(b)	Supply of Kirloskar/Kilburn/IVC/Fouress/Gled/BHEL/Leader/of suitable size cast iron double flanged swing check type reflux valve having bye pass arrangement & size equal to delivery of pump for withstanding nominal seat pressure as per Sr. No. 15	1	Each			

(c)	Supply of Kirloskar/Kilburn/IVC/Fouress/Gled.BHEL/Leader of suitable size cast iron double flanged swing check type reflux valve having bye pass arrangement & size equal to dia of R/Main for withstanding nominal seat pressure as per Sr. No. 15	1	Each			
(d)	Supply of Kirloskar/Jyoti/Standard/Kilburn make cast iron flanged screwed type foot valve with strainer of dia equal to dia of suction pipe conforming to BIS 4038-1986 or latest with up to date ammendments.	1	Each			
26(a)	P/L suitable size copper PVC insulated armoured power 3 1/2 core cable conforming to BIS 1554(Part I)-1988 or latest with up to date ammendments Siemen/Gloster/ICC make from meter of HPSEB to OCB & from OCB to Busbar switch & starter(one cable carrying all three phases) including all other electrical equipment/ accessories such as thimbles,flexible pipe, solder,nuts & bolts,cable glands etc. laid in pipes or trenches under floor.The type,size & make will be subject to aproval of HPSEB authorities. In case of non acceptance by HPSEB authorities it shall have to be replaced by the tenderer free of cost ..	1	Job			
b)	P/L suitable size copper PVC insulated armoured power three core cable conforming to BIS 1554(Part I)-1988 or latest with up to date ammendments Siemen/Gloster/ICC make from switch to starter & starter to (one cable for carrng all three phases) including all other electrical equipment/ accessories such as thimbles, flexible pipes, solder,nuts & bolts, cable glands etc. laid in pipes or trenches under floor. The type ,size & make will be subject to approval of HPSEB athorities. In case of non acceptance by HPSEB authorities it shall have to be replaced by the tender free of cost .	1	Job			
c)	P/L double loop earthing with crpper plate 600x600x3mm thick electrode complete with material such as charcoal, common salt, GI pipes, thimbles, nuts & bolts, digging of pits, GI wiring & 25x5mm copper strips of required capacity conforming to BIS 3043-1987 latest with up to date ammendmentsfor above motors & other electrical equipment.	1	Job			
d)	Supply & urrection of floor/wall mounted power factor capacitor conforming to BIS 2834-1986 latest with upto date ammendment BHEL/GEC/Machneil/Masger/Bajaj make to raise the pervailing power factor at site to 0.95 for direct connection to induction motor individually, or requird KVAR according to Himachal Pradesh of motor offered including cable siemens/ Gloster/ICC make from busbar chamber to capacitor & also including LT/LK/Kilburn make ICTP switches conforming to BIS 4064-1978 or latest with HRC fuses (Range to be specified by the tenderer.	1	Each			
27	Supply & urrection of floor/wall mounted power factor capacitor conforming to BIS 2834-1986 latest with upto date ammendment BHEL/GEC/Machneil/Masger/Bajaj make to raise the pervailing power factor at site to 0.95 for direct connection to induction motor individually, or requird KVAR according to Himachal Pradesh of motor offered including cable siemens/ Gloster/ICC make from busbar chamber to capacitor & also including LT/LK/Kilburn make ICTP switches conforming to BIS 4064-1978 or latest with HRC fuses (Range to be specified by the tenderer.	1	Each			
28	Laying jointing testing & commissioning of suction,delivery pipe considering site requirements , NPSH required & available & common header having area equal to times the area of delivery branch of pump including tapers, flanges, rubber gaskets, 3mm thick as per BIS-2712-1978 nuts & bolts as per 1364-1983 & special up to 5 mtrs. Away from the outer wall of pump house as per layout drawings approved by Engineer-in Charge The pipes shall be capable of withstanding 1.5 times the total presure indicated in item no. le(ii). BIS 4064-1978 or latest with HRC fuses (Range to be specified by the tenderer.	1	Job			

29	Excavation in foundation trenches etc.in earth work upto all depths in all kinds of soil such as pick work,jumper work,blasting and chiselling soft/hard rocks where blasting is prohibited in all leads and lifts including trimming and dressing of side levelling of bed to correct grade and returning the stacked soil in trenches in 15cm.layers by ramming and watering and then disposing of all surplus excavated soil as directed in all leads and lifts and soring strutting/timbering and dewatering where ever required including restoration of un metalled/metalled paved surfaces of its original conditions including caution boards in all respect and to the entire satisfaction of the Engineer-in-Charge.	161.44	Per Cubic Mere.		Rupees Only	0.00
30	Laying, testing and commissionig at site in trenches bevelled ended of BIS markrd GI pipe conforming to relevent codes IS-1239-2004, and equivalent latest with up to date ammendments of following dia, wall thickness and per running metre weight as mention below and capable of withstanding required test pressure as prescribed in BIS code, in a random length of 5.50 to 6.50 metres. The pipes ends shall be bevelled suitable for butt welding, including the cost of jointing with butt welding confirming to IS 816-1969 or latest as applicable with up to date ammendments (leak proof) at site of work with welding rods of standard make and all allied accessories whatever required for welding at site, tail pieces, tees bends & other specials manufactured from parent pipes as applicable to the particular reach and of approved specifications as per site conditions and cutting of pipes wherever required as per site requirement i/c carriage in all leads and lifts and as directed by Engineer-in-charge. The laying shall confirm to BIS 5822-1970 or latest with up to date ammendments to entire satisfaction of Engineer-Incharge (Earth work and cost of MS flanges after 100 metre length shall be measure & paid for separately). 65 mm dia Heavy Class					
30.01	RD 0 to290, = 290 65 mm Flange Table- 28 & 17 (GI H)	290	Per/ Rmtr.		Rupees Only	0.00
31	Providing welding & fixing MS plate Flanges of various dia (nominal bore) of following flange table conforming to IS-6392-1971 or latest with up to date ammendments to G.I. after every 100 metre pipe or as per site requirement including cutting of pipes wherever required, welding(leak proof) confirming to specifictions as prescribed relvent IS code i.e. IS 816-1969 or latest as applicable with up to date ammendments with nuts, bolts & washers and specials etc. confirming to IS 1963 or latest with up to date ammendments including packing sheet i.e. asbestos fibre sheet minimum 3 mm thick and painting with anticorrosive paints complete in all respects in all leads lifts and carriage of material at site & as directed by Engineer-In-Charge					
31.01	RD 0 to 120, = 120 65 mm --- Flange Table-28 MS	2	Per/ pair .		Rupees Only	0.00
31.02	RD 120 to 290, = 170 65 mm ---- Flange Table-17 MS	3	Per/ pair .		Rupees Only	0.00
32	Supply & errection of PVC Nylon layer flexible house pipe 65 mm dia heavy duty with in all leads and lifts to the entire satisfaction & direction of Engineer -in- charge.					
32.01	Booster 0-120	120.00	Per Running metre		Rupees Only	0.00
					Total Rs.	0.00
<u>TERMS AND CONDITIONS</u>						
1	The work will be executed as per PWD/IPH specification and as per the direction of the Engineer-in-Charge.					
2	Income tax, labour cess & sale tax will be deducted from every bill.					
3	10% Security will be deducted from each bill.					
4	Income tax, & sale tax will be deducted as per relevent clause of NIT. .					
5	Payment will be made after satisfaction of the Engineer-in-Charge as per the billing schedule attached and as per the relvent clause on receipt of bill from contractor.					
6	The material shall be issued for bonafied use at allotted to the contractor.					

7	The un-used material issued by the Department if not returned shall be recovered at double the issue rate.
8	The site shall be inspected by the tenderer before his offer.
9	The offer shall be including all transportation charges upto site of work.
10	The offer shall comply with technical specification and shall conform to specified standard nominal bore out side diameter, wall thickness Wt.per Mtrs. etc. shall clearly given.
11	The pipes shall under go a mile test pressure and tensile test at manufactures work as per standard and a certificate to this effect shall be provided by the tenderers before the release of first instalment of the payment
12	The hydraulic test pressure after laying shall not be less than 1.5 times the actual working pressure.
13	The entire pipe line before actual commissioning shall be thoroughly disinfected and flushed in accordance with standard practice.
14	The validity of the offer shall remain open for a period of 120 days from the opening date of tender.
15	G.I. Pipe shall be issued free of cost from IPH divisinal Store at Suni
16	5% payment (amount) will be released after testing of Rising Main.
17	The contractor / firm must have experience to execute the similar nature of work i.e P/L of R/Main & civil works & P/Machinery .
18	The firm shall forward a copy of supply order/indent placed by it for the supply of pumps and motors on the manufacturers/authorised dealer of the pumps and motors to the consignee within 30 days after issue of the letter of indent/award by the Engineer-in-charge. The copy of supply order/indent to the consignee should also accompany the dealership certificate of the dealer for the pumping machinery in case the pumps and motors are arranged from the authorised dealer.
19	The firm shall arrange despatch of offered pumps and motors to the consignee direct from the manufacturers/ their authorised dealer of the pumping machnery for which the supply order/indent has been placed by the firm.The packing slip should indicate the details of materials in the package and material of construction of pumps and motors.
20	The shop test for the pumps and motors shall be carried out at manufacturer's works in the presence of respresentative of the department as per IS:325-1978. The test performance certificate of the pumping machinery shall be arranged by the firm from the manufacturers and get it approved from the Engineer-in-charge before actual despatch for the pumpinmg machinery.
21	Those contractors/ firm who are exempted from depositing earnest money at the time of tendering shall have to deposit the same in prescribed shape with Executive Engineer concerned within seven days positively after the issue letter of intent indicating acceptance of tender falling which it shall be presumed that contractor/ firm is not interested in executing the work and the competent authority reserves the right to cancel the tender without serving any notice.
22	The firm shall supply the recommended list of spares and quantities required for normal working of pumping machinery(2 years) from the manufacturers of the aforesaid equipment at the time of quoting rates and shall quote item rates for the same also.
23	The firm shall supply the manufacturer's manuals for the operation and maintenance of the pumping equipment.
24	The firm shall arrange operation and maintenance training to the operating staff for the pumping machinery without extra cost for a period of 7 days i.e.during the testing period.
25	The characteristics curvces of the pumpijng equipment shall be supplied with the offer otherwise the tendershall be rejected.
26	The firm shall supply layout drawing in respect of various components, such as suction pipes, valves, cable trenches, control panel etc. from the foot valve location to the common header which shall extend upto5 metre from the outer wall of the pump house towards rising main. The details of foundations required for various components shall also be supplied by the firm within 30 days of the letter of intent award.
27	The installation of pumping machinery above 100 HP shall be inspected by the technical representative of the manufacturers, of rank not less than that of a service engineer, at the work site and inspection certificate shall be supplied to the Engineer-in-charge. This inspection shall be in addition test report and nothing extra shall be paid on this account.
28	All the civil work shall be constructed by the department.
29	The wiring and installation of electric equipment shall be as per HPSEB rules and regulations and subjected to the approval of the Chief Electrical Inspector and or his authorised officer. Any defect pointed out shall be rectified by the firm without any extra cost. The wiring and installation of all electric equipment, shall be done by a licensed contractor of approved class of HPSEB and test report shall be got accepted from the HPSEB authorities on their approved format of (form D) for release of power connection by the firm without extra cost.
30	The temporary electrical connection, if required during installation shall be arranged by the firm at its own cost and energy charges shall also be paid directly by the firm to the HPSEB.
31	Prices of all the items shall be FOR site of work inclusive of all leads and lifts and shall be inclusive of all charges of transportation, insurance, packing, taxes and duties such as sales tax, excise duty and local taxes extra.

32	The rates shall be quoted only on the format of schedule of quantities which is attached with the tender document giving all specified data so desired therein.
33	The site of work is located at Thachi khad on Suni Dhami road via Basantpur 20 Km from Suni near Baghi .The site is mechanical and manual transport within all leads and lifts.
34	All the the equipment/material shall confirm to the relevant IS specifications wherever applicable, and in its absence to any accepted National/Internationals standards.
35	The general specifications of work shall conform to Punjab P.W.D/HPPWD. Specifications per direction of the Engineer-in-charge.
36	All the equipment shall be guaranteed against any manufacturing defect including metallurgy and its performance for a period of 12(tweleve) months from the date of commissioning/15(Fifteen) months from the date of supply which ever is earlier. Any defect if noticed within the stipulated period shall be rectified by the firm at its own cost within 15 days of bringing the same to its notice. The guarantee clause shall be substantiated by a gaurantee bond of a Nationalised Bank for an amount equal to the cost of .pumping and electric equipment (accessories included) pledged in the name of the Executive Engineer incharge at the time of applying for refund of security deposts. The guarantee bond shall be released after the expiry of the guarantee period.
37	The installed pumping machinery and other allied accessories shall be tested daily for stipuated pumping hours in the NIT for a period of seven days without extra cost. However the cost of the electricity and water shall be borne by the department.
38	During the guarantee period efficiency of the pumping and electric equipment should not vary beyond the range of (+/-)2.5%. If during guarantee period, the efficiency falls beyond 2.5% to a maximum of 5%, 1% cost of the pump set for 1% fall of the efficiency shall be deducted. In case of fall of efficiency beyond 5% the pump shall be rejected and cost of the effected pump set recovered,from the pledged Bank guarantee & or from the security deposit as the case may be.
39	80% (Eighty percent) payment of the cost of pumping machinery and equipment less 10% security and other stautory recovery shall be made after receipt of complete pumping mechinery i.e.Pump and Motor received together at site of work in good condition. The balance 20% cost after deduction of the security and other recoveries shall be released after successful and satisfactory installation testing of the entire equipment. Ten percent security deposit shall be released as stipulated in the agreement.
<p>Executive Engineer, I&PH.Division Suni, Distt.Shimla.171301</p>	