2. (C) Estimate of Gravel Pack Borewell

S.no	USR-II PHE, Chhattisgarh	Item of work	Qty.	Unit	Rate	Amount
1	CH-I/I	Carrying out resistivity survey by VES method using Schlumberger configuration for locating the proper spot for drilling of tube well with in the selected habitation. Including interpretation of resistivity data of report in the desired format along with resistivity readings and the necessary graph & photographs	6	sucessful l sounding	1509.00	9054.00
2	CH-3/1.b	Drilling of perfectly vertical bore hole of a diameter for constuction of gravel packed tube well upto desired depth in alluvial formation consisting of soils, clays, sand, gravel, moorum, boulders etc. and retaining the bore hole by using suitable drilling mud or foam or temporarily housing pipe including all woks pertaining to drilling such as transportation, installation and removal drilling machine etc. compete.				
		350mm diameter	90	Meter	857.00	77130.00
3	CH-3/2.b	labour charge for assembling centering and lowering of properly designed casing pipe assembly inside the bore hole drilled for construction of gravel packed tube well including the cost of providing and fixing of centraliser and transportation of casing assembly etc. coplete.				
		Casing assembly composed of 150mm diameter blanck and slotted G.I. casing pipe.	90	Meter	54.00	4860.00
4	CH-3/3.b	Providing and fixing of M.S. bail plug as per I.S. 2800 (Part-I) 1991 in the bottom of casing assembly.				
		150mm dia.	2	Each	358.00	358.00
5	CH-3/4	Providing gravel packing with uniformly graded gravel as per I.S. 4097 of 1967 (revised up to date) in the annular space between outer wall of casing pipe assembly and inner wall of bore hole including cost of gravel, transportation, stacking washing, and packing in layers of suitable thickness including all lead and lifts complete.	9.06	cum	1471.00	13327.26

6	**CH-5/4**	Development of gravel packed tube well by air compressor of suitable capcity including hire charges for all the required tools and plants etc. compete, for maximum duration of eight hours.	16	per hour	582.00	9312.00
7	**CH-2/3.b**	Drilling of perfectly vertical bore hole of a diameter suitable to recive 150 mm nominal diameter casing pipe upto desired depth below ground level inclusive of the labour charges for transporting, lowering and fixing of 150 mm nominal diameter M.S/ G.I./ U.P.V.C. casing pipe inside the bore hole including all works pertaining to drilling such as transportation, installation and removal of drilling machine etc. complete. In all types of rocks.	110.00	Meter	629.00	69190.00
8	**CH-5/5**	Measurment of yield of tube well by operating hand pump continously for four hours mannually.	2	each	501.00	1002.00
9	**CH-5/6**	Disinfection of tube well using bleaching powder solution as per the directin of the Engineer in Charge including the cost of bleaching powder and labour etc. complete.	2	Job	38.00	76.00
10	**CH-4/6**	Construction of sokage pit of 70 cm diameter and 1.0 meter deep including excavation, brick lining at top in 1:4 cement mortar, filling of boulder, broken bricks etc.and cost of all materials and labour and curing etc. complete.	2	Job	482.00	964.00
					Total	**185273.26**
		Part B- Materials				
11	**CH-6/6.c**	ISI marked GI casing pipe confirming to IS 4985/1988 (with up to date ammendments)				
		(a) 150 mm dia (If Provided as per requirment)	90	meter	1353.00	121770.00
12	**CH-6/5**	ISI mark 32 mm dia G.I. riser pipe in 03 meter length socketed on one end as per I.S.:1239(part-1) 1990 upto date amendments and socket as per I.S. 2062/1990 up to date amendment	60.00	Meter	199.00	11940.00

13	31.1.1	Providing, erecting and giving test of submersible pump set Conforming to IS 8034-2002 with Amdt. No. - 1, (With Up to date amendments) and motor Conforming to IS 9283-1995, with amdt.1 & 2, (With Up to date amendments) with water proof winding. Pump shall be suitable for various delivery head and discharge with stainless steel shaft. Motor suitable for working on 415 V + 10%, 3 Ph. 50 Hz A.C. Supply, with cableguard, thrust carbon/fiber bearing to withstand entire hudraulic thrust. The pump set shall be suitable for direct coupling with suitable suction strainer. Pump should have suitable discharge outlet as per manufacturer's design. Antithrust stream lined non return valve shall be provided with the pump. 3 m submersible copper conductor cable in single/double run and 2 pairs of suitable size erection clamp 10 mm thick shall be provided with each pump				
		Submersible pumpset 100 mm dia (with Polypropelene/Noryl Impeller)				
a	31.1.1.4	3.0 HP	2.00	no	21409	42818.00
					Total:-	**176528.00**
					Add PartA + Part B	361801.26
					Grand Total:-	**361801.26**