ई–मेल/स्पीड पोस्ट

# पत्रांकः—3प् / मु0मं0नि0यो0—19—01 / 2017 /र्द्धः 🖒 पं०रा०

## बिहार सरकार पंचायती राज विभाग

प्रेषक,

अरविन्द कुमार चौधरी, सचिव \*

सेवा में,

सभी जिला पदाधिकारी, बिहार।

विषयः— गैर गुणंवत्ता प्रभावित क्षेत्रों में मुख्यमंत्री ग्रामीण पेयजल निश्चय योजना के अंतर्गत छोटी—छोटी योजनाओं के क्रियान्वयन हेतु तैयार मानक प्राक्कलन के प्रेषण के संबंध में।

महाशय,

उपर्युक्त विषय के संबंध में कहना है कि गैर गुणवत्ता प्रभावित क्षेत्रों में पंचायती राज विभाग द्वारा मुख्यमंत्री ग्रामीण पेयजल निश्चय योजना के क्रियान्वयन हेतु निर्गत दिशा—निर्देश के आलोक में लोक स्वास्थ्य अभियंत्रण विभाग द्वारा तैयार बारह प्रकार के मानक प्राक्कलन आवश्यक कार्रवाई हेतु संलग्न कर भेजी जा रही है।

अनुलग्नकः-यथोपरि।

विश्वासभाजन

(अरविन्द कुमार चौधरी)

सचिव

#### बिहार सरकार लोक स्वास्थ्य अभियंत्रण विभाग।

व चायसी राज विभाग गोरकीय होषाँग गै॰ स॰ प्रे॰सं 2560

पत्रांक-अभि० प्रव व्या वरी - 57

पटना, दिनांक— 3/4/20 निर्ने

प्रेषक :

दिनेश्वर प्रसाद सिंह,

अभियंता प्रमुख-सह-विशेष सचिव

सेवा में,

निदेशक,

पंचायती राज विभाग, बिहार, पटना।

विषय:— गैर गुणवत्ता प्रभावित क्षेत्रों में मुख्यमंत्री ग्रामीण पेयजल निश्चय योजना के अंतर्गत छोटी—छोटी योजनाओं के लिए प्राक्कलन के संबंध में।

महाशय,

उपर्युक्त विषय के संबंध में कहना है कि पंचायत राज विभाग द्वारा मुख्यमंत्री ग्रामीण पेयजल निश्चय योजना के कार्यान्वयन हेतु निर्गत दिशा—निदेश के आलोक में बारह प्रकार के मानक प्राक्कलन तैयार कर आवश्यक कार्रवाई हेतु संलग्न किया जा रहा है।

अनु0—यथोपरि।

विश्वासभाजन

(दिनेश्वर प्रसाद सिंह) अभियंता प्रमुख-सह-विशेष सचिव

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All Draft 2017



### **GOVERNMENT OF BIHAR**

### PUBLIC HEALTH ENGINEERING DEPARTMENT

#### **MODEL ESTIMATES**

**FOR** 

CONSTRUCTION OF RURAL PIPED WATER SUPPLY SCHEME TO BE CONSTRUCTED BY PUNCHAYATI RAJ DEPTT, GOVT. OF BIHAR

UNDER MUKHYAMANTRI GRAMIN PEYJAL YOJNA

**FOR** 

100, 150 AND 200 HOUSEHOLDS

**WITH** 

DIFFERENT TYPES OF TUBEWELLS
AND
3.0 MTR. M.S.STAGING WITH WATER STORAGE

FOR NON QUALITY AFFECTED AREAS

2017-18

**INDEX** 

O

Various types of Model Estimates for Construction of Rural Piped Water Supply Scheme with 3 metre high Steel staging for 5000 Ltr. water storage

SI. No.	No. of Households in the Ward	Type and size of Tubewell	Estimated Cos in Rs. Lakh	t	Page No	
1	100	150mm X 90m deep Gravel packed T/W	9.22	6 1		- 11
2	100	125mm X 75mm dia & 90M deep T/W for alluvial soil	8.67	5 12	-	- 22
3	100	125mm X 75mm dia & 90M deep T/W for rocky strata	9.089	9 23	+	33
4	100	200/165 mm dia 90 M deep drilled Tubewell by DTH Rig machine	8.514	34	-	44
5	150	150mm X 90m deep Gravel packed T/W 11.111		. 45	<del>-   -</del>   -	55
6	150	125mm X 75mm dia & 125M deep T/W for alluvial soil	75mm dia & 125M deep T/W for alluvial soil 10.977			66
7	150	125mm X 75mm dia & 125M deep T/W for rocky strata	125mm X 75mm dia & 125M deep T/W for rocky strata 11.546		-	77
8	150	200/165 mm dia 90 M deep drilled Tubewell by DTH Rig machine	10.399	78	-	88
9	200	150mm X 90m deep Gravel packed T/W	12.426	89	<del>  -</del>   -	99
.0	200	150mm X 100mm dia & 125M deep T/W for alluvial soil	deep T/W 12.690			111
1	200	150mm X 100mm dia & 125M deep T/W for rocky strata	13.256	112	-	123
2	200	200/165 mm dia 90 M deep drilled Tubewell by DTH Rig machine	11.713	124	-	134
5		Drawing of steel staging		135	_	135



### GOVERNMENT OF BHAR

PUBLIC HEALTH ENGINEERING DEPARTMENT

MODEL ESTIMATE

**FOR** 

CONSTRUCTION OF RURAL PIPED WATER SUPPLY SCHEME FOR A WARD HAVING 100 HOUSE HOLDS

ESTIMATED COST-- Rs. 9.226 Lac

2017-18

#### **GOVERNMENT OF BIHAR** Public Health Engineering Department

ABSTRACT OF COST

NAME OF WORK:- CONSTRUCTION OF RURAL PIPED WATER SUPPLY SCHEME FOR WARD **HAVING 100 HOUSE HOLDS** 

S.		
1	Construction of 150mm X 90m deep Gravel packed TAV etc. all acres to	Total Amount
	I a modern of Dr.	
<u> </u>	(As per sub Estimate no 1)	<u>_</u>
2	Constructing masony Chamber 100v100v75 om incide in the	Rs.1,65,744.00
	The transfer of the second of	1
	is an a start of aggregate 20 Hill Holmings elzot and incide at a con-	
1	TO A SOUND DOUGLOUS SALIKIT LY MAD THINK WILL FOR	
	The state of the original of the state of th	
	: 4coarse sand) 12 mm thick complete as per standard specifications & direction	
	(As per sub Estimate no2)	_
3	Providing and Laying Distribution network of High Density Polyethyene pipe	Rs.13,210.00
-	The result of the control of the con	D- 0.00 055 04
4	Supply installation, commissioning and testing of single phase 2 4.5	Rs.3,90,355.94
ĺ	patriersible purify set having discharging capacity 2.5 lbs. at a total hand at a.c.	ļ
	meter(approx) of KSB/ Kirloskar or equivalent make with all accessories & fittings	
}	ote including loading unloading and transportation of the number to the sumb	
! !	site with all required labour, materials, tools, and tackles installation, that is	
	commissioning as per standards specifications and direction of E/I.	
	11 bei 200 Estilliate in - 41	
5	Providing house connection for each house hold including	Rs.64,403.00
	I - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	ŀ
	I(As per sub Estimate no - 5)	D 454555
6	Providing and erecting 3 M high staging of suitably designed MS section of angle,	Rs.1,51,300.00
	channel etc. as per drawing attached. (As per sub Estimate no 6)	D 400
	TOTAL	Rs.1,28,500.00
	Add 1% Contingency	Rs.9,13,512.94
	G. TOTAL	Rs.9,135.13
	(Rs. Ning Lakh Twenty true The Say	Rs.9,22,648.07
lote:	(Rs. Nine Lakh Twenty two Thousand six hundred) only	Rs.9,22,600.00

·O

i) This model estimate has been prepared in the light of Guidelines of PRD, Bihar memo no. 6278 dt.23.09.2016. This estimate may not ensure standard pressure in the distribution network. Hence on the spot change in staging of storage tank may be required.

ii) Water quality testing of source should be done after construction of Tube well.

iii) Road cutting cost may increase or decrease as per local condition.

Technical approval accorded for Rs.9,22,600.00 (Rs. Nine Lakh Twenty two Thousand six hundred)

only

An Journal

Chief Engineer (Design) Public Health English on Topicts.ent

Binar, Patna

(Sub Estimate - 1)

	(Sub Esti							
S.	(A) Construction of 150mm	X 90m	X 90m deep Gravel packed T/W					
No.	Particulars	,	antity	1	,			
	Transportation of machine, equipments including a			- L	Rate	Amount		
	accessories etc.							
2	Boring/drilling hore well of		No.	Each	Rs.1,010.0	0 Rs.1,010.00		
	casing/strainer pipe, by suitable method prescribe	or		ĺ	' ' '			
l li	in IS: 2800 (part I), including collecting sample	a				j		
[ ]f	from different strata, preparing and submitting strat	S						
	chart/ bore log, including hire & running charges of	a		ĺ	1			
l a	all equipments, tools, plants & machineries require	الا						
l J'	ior the job, all complete as per direction of Engineer	- I						
10	n-charge, upto 90 metre depth below ground leve	, <u>]</u>						
17	All types of soil)	"]						
	400mm dia bore from GL to 90.0M	an	Mtr.	D/F 7	D 500			
3A S	Supplying, assembling, lowering and fixing in	2	IVIU.	P/M	Rs.529.3	Rs.47,637.00		
ĮV	reflical position in bore well linnlasticized DVC	<u> </u>						
- 10	OPVO) medium well casing (CM) nine of required	<b>.</b> .[	ļ					
ļū	ita, conforming to IS: 12818, including required bire	ا اد		1	<u> </u>			
ļa.	ind labour charges, tittings & accessories etc. at	il i	Ī		]			
C	complete, for all depths, as per direction of Enginee	<u>.</u>		]	ĺ			
<u> </u>	n-charge.							
(€	a) 150 mm nominal size dia	59	M	P/M	De C45 00	<del> </del>		
3B S	supplying, assembling, lowering and fixing in			1 /14	Rs.615.30	Rs.36,302.70		
ve	ertical position in bore well unplasticized PVC							
(L	JPVC) medium well screen (RMS) pipes with ribs,			1 1				
l cc	onforming to IS: 12818, including hire & labour							
lct	Parces fittings & accompanies at all	1						
all	harges, fittings & accessories etc. all complete, for	1 1		1 1				
1.5	depths, as per direction of Engineer-in-charge	<u> </u>		<u> </u>		1		
	50 mm nominal size dia	30.0	М	P/M	Rs.554.30	Rs.16,629.00		
4 SL	upplying fitting & fixing the following Fitting of	<u> </u>		<del>                                     </del>		1.0.10,025.00		
lab	proved make and specification at work site			[				
	emplete job.			} }				
(a)	) 150mm center guide Nos. in each T/W	91	Vos.	Each	Rs.150.00	Rs.1,350.00		
	) 150 mm dia well plug	1 1	Vo.	Each	Rs.205.10	Rs.205.10		
(b)	) 150 mm dia M.S. Clamp 1.6 M long (one Pair)	1 1	No.	Each	Rs.1,031.10			
5  Su	ipplying 3mm to 6 mm Well washed assorted near			Lacii	NS. 1,031. 10	Rs.1,031.10		
gra	avel and doing surrounding around the annular							
spa	ace between bore hole & 125mm pipe uniformity					1		
up	to the depth 10 mtr. below G.L all work complete		ļ			1		
as	per direction of E/I.	44 -	.		_	ľ		
Cai	rriage of Pea grave! from Dhalbhumigarh (taken	11 N	n°	P/M <sup>3</sup>	Rs.917.00	Rs.10,087.00		
av	distance 400Km)	44 4	43	D/4-3				
' Sur	pplying all materials laobours and equipments to	11 N	1	P/M <sup>3</sup>	Rs.4,336.54	Rs.47,701.94		
	al T/W up to the depth of 12 mtr below G.L. by			1	ł	j		
						ļ		
	cky clay to prevent contamination from surface		]	- 1		}		
Sup	n all complete job as per direction of E/I.	1 It	em	Each	Rs.51.01	Rs.51.01		
inch	oplying all materials laobours and equipments		T					
casi	uiding 150mm dia G.I. Cap /C.I. Cap over the ing of 150mm dia T/W properly all complete.	<b>.</b> -	l		İ	J		
Can	riage of necessary equipment & materials.	1 N		Each	Rs.205.10	Rs.205.10		
	plying all tools equipments & labour for flushing	1 N	0.	Each	Rs.287.50	Rs.287.50		
was	thing and developing the T/W to give clean &			}_				
clea	ir water and all complete job as per direction of							
1	" The sine all complete job as per direction of		- 1	_	i			
IE/I			1.4	I	D= 040 40	<b>a</b> a 1		
E/I.		<u>5 H</u>		P/H	Rs.649.40	Rs.3,247.00		
<u> E/I.</u>		<u> 5 H</u>		P/H]	TOTAL	Rs.3,247.00 Rs.1,65,744.45 Rs.1,65,744.00		

Supplying materials, labours and constructing chamber of following dimension having 250mm thick wall in C.M. (1:4) in cluding lifting ring etc. all complete.

Analysis of Chamber for TW chamber of following dimension having 250mm thick wall in C.M. (1:4) in cluding lifting ring etc. all complete.

	SIZE	1.0	M 00	x	1,	00 M ×			
S.O.	B T					OO ME X	0.75	M deep	
No.	Particulars	No.	Ŀ	w	H	Qty.	Unit	Rate	Amount
<u>1</u>	Earth work in excavation	1	1.75	1.75	1.0	3.063 M <sup>3</sup>	3 P/M <sup>3</sup>	<u> </u>	
3.0.R. <u>2</u>	. No. 2.8					0,000 IV	P/M°	Rs.230.50	Rs.705.91
S.O.R.	Sand filling No. 2.28	~ 1	1.75	1.75	0.07	5 0.230 <sub>M</sub> 3	P/ <b>M</b> 3	Rs.204.40	Rs.46.95
3 S.O.R.		1	1.75	1.75		3.063 M²	P/M <sup>2</sup>	Rs.253.80	Rs.777.26
\$.0.0.	P.C.C. (1:2:4) in foundation 4.1.3	1	1.75	1.75	0.10	0.306 M <sup>3</sup>			
<u>5</u>	B/Work in (1:4) C.M.	2	2.50	0.25	^	0.306 M <sup>3</sup>		Rs.3,850.50	Rs.1,179.22
	No. 6.1.1 <u>2/1</u>	-	2.50	0.25	0.75	0.938 M <sup>3</sup>	P/M <sup>3</sup>	Rs.4,724.40	Rs.4,429.13
<u>6</u> S.O.R. I	R.C.C. Cover slab(1:1.5:3) No. 5.2.2 & 5.9.3	1	1.50	1.50	0.15	0.338 M <sup>3</sup>	P/M <sup>3</sup>	Rs.5,139.70	Rs.1,734.65
<u>7</u>	shuttering C.P. (1:3) with 5% Cico & neat cement	2	1.50	1.50	0.15	3.15 M²	P/M²	Rs.291.00	Rs.916.65
S.O.R. <b>No</b> .	Internal face	2	1.00	1.00	1.00	4.00 M <sup>2</sup>			
13.17.1 +13.36.1		1	1.00	1.00		1.00 M²		,	
8	C.P. (1:4) out side of wall					5.00 M²	P/M²	Rs.166.30	Rs.831.50
_	lo. 13.11.2	2	1.50	1.50	0.75	4.5 M <sup>2</sup>	P/M <sup>2</sup>	Rs.114.70	Rs.516.15
9 S.O.R. <b>N</b>	8mm dia T.S. Rod o. 5.22,7A								
<u>10</u>	Lifting Ring of 10mm dia	0.338 A	√3 ×	70 K	(g/ M3	23.625 Kg.	P/Kg	Rs.56.00	Rs.1,323.00
	Rod					4 No.	Each	Rs.30.00	Rs.120.00
11	Carnage of materials 5%							Total	Rs.12,580.41 Rs.629.02
						Q	D- 40 644		Rs.13,209.43
						əay	Rs.13,210	0.00	

		<u>st No. 3</u>			
	WATER SUPPLY D	ISTRIBUTION	SYSTEM		
S.N. 1A	Particulars  Factorial in the second	Quantity	Unit	Rate	Amount
1/1	Earthwork in excavation over areas (exceeding 30 cm in		i		
	depth 1.5 in width as well as 10 sqm on plan) including				
	disposal of excavated earth lead upto 50m and lift upto				
	1.5m, disposal earth to be levelled and neatly dressed.				
	75mm dia Pipe 150.00 0.30 1.10 =	49.50	+	<del>-</del>	
	63mm dia Pipe 150.00 0.30 1.10 =	49.50	··· <u>L</u> ·		
	50mm dia Pipe 300.00 0.30 1.10 =	99.00	- :		
	40mm dia Pipe 400.00 0.30 1.10 =	132.00			
		330.00 M <sup>3</sup>	- :		
·	Add 5% extra for fittings =	16.50 M <sup>3</sup>		··	·
В	Provision for PCC road cutting and its restoration	346.50 M <sup>3</sup>	P/M <sup>3</sup>	Rs.230.50	Rs.79,868
2	Filling available excavated earth (excluding rock) in	11.25 <sub>_M</sub> 3	P/M <sup>3</sup>	Rs.4,428.80	Rs.49,824
j	trenches, plinth, sides of foundations etc. in layers not				
ļ	exceeding 20cm in depth, consolidating each deposited			:	
ļi	ayer by ramming and watering, lead up to 50 m and lift.		: :		
	upto 1.5 m.	339.57 M <sup>3</sup>	D/43	5 -	
3 1	Providing and laying High Density Polyethyene pipe	339.37 NI	P/M <sup>3</sup>	Rs.74.50	Rs.25,297
(	HDPE pipe) of 20 mm to 225 mm OD and pressure 6.0				
i r	Kg/cm2 and 10 Kg/cm2 sutable for water supply which	:			
Ü	s available in all standard, like ISI-4984/1995 and arrious grades like PE-80 PE-100 including required				
s	pecials. Rates are inclusive of , all taxes and duties				
1(1	Exise duty @12.50% &CST @2% against Form 'C'),			_	
Ha	abour cess, contractor profit and overhead chames all				
į c	omplete as per direction of Engineer-in-charge		:		
\  H	DPE pipe of materials grade PE100- PN10 (dia in mm)				
 : <b>7</b> !	5mm dia Pipe from PVC Tank to Distribution main				
	5mm dia Pipe	10.00 M	P/M	Rs.239.81	Rs.2,398.
+-	3mm dia Pipe	150.00 M	P/M	Rs.239.81	Rs.35,971.
		150.00 M	P/M	Rs.168.77	Rs.25,315.5
- 1	DPE pipe of materials grade PE100- PN8 (dia in mm)	:	T		
Н	o u i vo (dia ili hiili)				
H	······································			·	
50	mm dia Pipe	300.00 M	P/M	Rs.89.99	Rs.26,997.0
50 40	omm dia Pipe	400 00 M	P/M P/M	Rs.89.99 Rs.59.78	
50 40 40	mm dia Pipe mm dia Pipe mm dia Pipe from T/well to PVC Tank				Rs.23,912.0
50 40 40 Pr	omm dia Pipe  mm dia Pipe  mm dia Pipe from T/well to PVC Tank  oviding and fixing brass gate valve with C.I. wheel of	400 00 M	P/M	Rs.59.78	Rs.23,912.0
50 40 40 Pr	Omm dia Pipe Omm dia Pipe Omm dia Pipe Omm dia Pipe from T/well to PVC Tank Oviding and fixing brass gate valve with C.I. wheel of proved quality (screwed end).	400.00 M 12.00 M	P/M P/M	Rs. 59.78 Rs. 59.78	Rs.23,912.0
50 40 40 Pri ap	Omm dia Pipe Omm dia Pipe Omm dia Pipe Omm dia Pipe from T/well to PVC Tank Oviding and fixing brass gate valve with C.I. wheel of proved quality (screwed end).  mm dia Pipe	400 00 M	P/M P/M	Rs.59.78	Rs.23,912.0 Rs.717.3
50 40 40 Pri ap 75 63	omm dia Pipe omm dia Pipe omm dia Pipe omm dia Pipe from T/well to PVC Tank oviding and fixing brass gate valve with C.I. wheel of proved quality (screwed end). omm dia Pipe omm dia Pipe	400.00 M 12.00 M	P/M P/M	Rs. 59.78 Rs. 59.78	Rs.23,912.0 Rs.717.3 Rs.4,054.8
50 40 40 Pr ap 75 63	Omm dia Pipe Omm dia Pipe Omm dia Pipe Omm dia Pipe from T/well to PVC Tank Oviding and fixing brass gate valve with C.I. wheel of proved quality (screwed end).  mm dia Pipe	400 00 M 12 00 M 3 Nos.	P/M P/M	Rs. 59.78 Rs. 59.78	Rs.26,997.0 Rs.23,912.0 Rs.717.3 Rs.4,054.8 Rs.2,703.20

<b>Ş.N.</b> 5		Quantity	Unit	Rate	
	Constructing masonry Chamber 60x60x75 cm inside, in		- J.III	Rate	Amount
0.50	blick work in cement mortar 1:4 (1 cement : 4 come	ļ			
	Journal to suice valve, with C.I. surface how 100mm to-				
	Maineter, 100 mm bottom diameter and 100 mm dear				
	iniside) with chained lid and RCC too slab 1:2:4 mix /4	į			
	Cineta . 2 warse sand : 4 graded stone pogramma	İ			
	Zoriili Hominai Size )   necessary excavation   foundation	:		:	
	Concrete 1.5:10(1 cement : 5 fine sand 10 graded)	i			
	Storie aggregate 40 mm nominalsize) and incide	i i			
	plastering with cement mortar 1:3 (1 cement : 3coarse				
ľ	sand) 12 mm thick, tinished with a floating coat of party				
	cement complete as per standard specifications & direction of E/I,				
	Work for additional depth	9 Nos.	Each	_ Rs.5,807.50	
					Rs.52,267
- ‡	Brick work (1:4) in foundation		· ·	<del></del> .	
	<u>2 1.10 0.25 0.35</u> 0.193	:	· ·-		
	2 0.60 0.25 0.35 0.105		! -		
Ţ	0.298		<del> </del>		
F	Plaster (1:3)	2 678 CuM	CuM	Rs.4,724.40	Rs.12,649.5
- †	——————————————————————————————————————	=			
5 6	8 1.10 0.35 3.08	27.72 SqM	SaM	Rs.128.20	
	Carriage 10% of item 5	···	†— <b>"</b> —		Rs:3,553.7
40	Providing and placing on terrace (at all floor levels)		+ · i		Rs.6,847.0
p	olyethylene water storage tank, ISI: 12701 marked,				
W	vith cover and suitable locking arrangement and		:		
m	Paking necessary holos for inter- and			•	
_	naking necessary holes for inlet, outlet and overflow		:		
-  P	ipes but without fittings and the base support for tank	5000 Ltrs.	P/Ltr	Pc 6 60	D 45 5
jFi et.	roviding and fixing PTMT extension nipple for water	:		Rs.6.60	Rs 33,000.00
-	thk pipe, fittings of approved quality and colour.		:		
	Omm dia	2 Nos.	each	Rs.250.00	
75	omm dia				Rs.500.00
1		1 No.	each	Rs.400.00	Rs.400.00
				TOTAL	Rs.3,90,355.94

Sub Est. No. 4

Model estimate for supply, installation & commissioning of single phase 2 H.P submersible motor pump set with all accessories including extension of L.T. line from nearest source up-to pumping

Si. No.	Particulars	Quantity	Unit	Rate	Amount
1	2	3	4	5	6
() () () () () () () () () () () () () (	Supply Installation, commissioning and testing of single phase 2 H.P. submersible pump set having discharging capacity 2.5 lps at a total head of 35 meter(approx) of KSB/Kirloskar or equivalent make with all accessories & fittings etc including loading unloading and transportation of the pump set to the work site with all required labour, materials, tools and tackles installation, testing & commissioning as per standards specifications and direction of E/I.  (i) 40 mm dia x 3 mtrs long medium class G.I column pipe both end threaded and one end socketed- 6(six)nos  (ii) 1x3x1.5 mm² flat copper conductor ubmersible cable -40 (forty) mtrs.  (iii) 40 mm dia union socket- 1(one) 10.  (iv) 50 mm dia x 250 mm long G.I. ipple-1 (one) no.  (vi) 40 mm dia M.S. clamps—2(Two) airs.  (vii) 40 mmx 250 mm long G.I nipple-(One) no.  (viii) 40 mmx 250 mm long G.I nipple-(One) no.  (viiii) Tube well cap for 125 mm dia (Well – 1(one) no.  (viiii) Tube well cap for 125 mm dia (Well – 1(one) no.  (viiii) Tube well cap for 125 mm dia (Well – 1(one) no.	1 (one) job	p/job	Rs.30,500.00	Rs.30,500.00

				Total Rs.	Rs.64,403.00
-	IS specification.	l job_	p/job	Rs.2,803.00	Rs.2,803.00
	etc.with salt, charcoal,etc.as per IE &		İ		
	arrangement and watering pipe			i	
	cover plate having locking				
	providing masonry enclosure with				
	accessories excavation of earth				
	mtrs 20fts. long G.I pipe including				
	with G.I earth pipe of 40 mm dia x 4.5				
, ,,	required for doing earthing station				
[D]	Providing all materials and labour	20 mtrs	P/Mt	Rs.130.00	Rs.2,600.00
	nearest source up-to pumping	20		}	
]	service cable from power point from		ļ	İ	
[C]	Supplying & fitting 2.5 mm <sup>2</sup> copper				
[C]	- 1(one) no.				
	panel for above motor of BCH /L&Tmake				
	(ii) Suitable single phase starter control				
	any. 1 No.		ļ		
	Sen & Pandit/ Vertex/ISI marked If			]	
	automatic voltage stabilizer make-	]			
	following accessories (i) 95-272 V range single phase 5 KVA	1 (one) job	p/job	Rs.28,500.00	Rs.28,500.00
	spray powder coated painting with				
	sheet ( minimum 2mm thick) duly				
	following accessories made of M.S				
	spray power coated painting with				
	sheet (minimum 2 mm thick) duly				
	Submersible pump set made of MS				
	220 V, 3 phase , 50 c/s for 2 HP				
1	starter controll pannel operated on			1	
1	type L.T feeder pillar single phase				
	Supply Installation, commissioning and testing of floor mounted outdoor	!			ļ

Sub Est. No. 5

	Estimate for the work - Hous		ce conn	ection	
<del></del> _	SUB-ESTIMA		oc conti	cetton	
S.No.	Description	Qt	/ Unit	Rate	Amoust
1A	Providing and fixing MDPE (PE a	30		· · · · · · · · · · · · · · · · · · ·	Amount
	GradeCompound) pipes PN-12.5 (12.5kg/Sqcn	n)			
	as per ISO 4427 and specification for	or	- [	Í	
	waterapplication rates are inclusive of, taxes ar	ıd			
	duties (Exise duty @12.50% &CST @2% again	st			
	Form C), labour cess, contractor profit ar	ndi			
	overhead charges all complete asper direction of	of			
	Engineer-in-charge.complete.				
	MDPE Pipa 20mm dia nominal bore	-			
1B	Providing and fixing Chlorinated Polyving	6.00	PM	Rs.19.97	Rs.119.8
	Chloride (CPVC) pipes, having thermal stabilit		1	}	
	for hot & cold water supply, including all CPV	$\sum_{i=1}^{N}$			
	plain & brass threaded fittings, including fixin	<u>_</u>		1	
	the pipe with clamps at 1.00 m spacing. Thi	el El	ļ		
	includes jointing of pipes & fittings with one ste	s)			
	CPVC solvent cement and testing of joint	P		İ ,	
	complete as per direction of Engineer in Charge.	<b>"</b>	1		
	Internal work - Exposed on wall	-		1	
	·				
18.7.1	15 mm nomonal bore	1.0	PM:	Rs.138.70	Rs.138.70
2	Earth work in excavation in foundation trenches	5			113.130.71
	or drains(not exceeding 1.5 m in width or 10 sqm			1	
	ion plan) including dressing of sides and amming	, [		] !	
	of bottoms, lift upto 1.5 m. including getting out	t]	Ì	1	
	the excavated soil and disposal of surplus	;]		j	
	excavated soil as directed, within a lead of 50 m.	.]		f f	
3.0.4	All kinds of soil				
2.8.1	6.00 0.30 0.60 1.08	1.08	СиМ	Rs.230.50	Rs.248.94
2.26	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in			1	, , , , , , , , , , , , , , , , , , , ,
	consolidating each deposited layer by ramming		j	Rs.74.50	Rs.78.85
	and watering lead	l			
4	Providing and fixing brass ferrule with CI mouth	1.06	CuM		
	cover incuding boring and tapping the main:			ĺ	
			[ ]		
8.20.1	15mm nominal bore	1	Each	Rs.254.10	Rs.254.10
	Providing and fixing P.P. Black service Saddle (Brass threaded)		i	Rs.400.00	
5		_1	Each	NS.400,00	Rs.400.00
	Providing and fixing brass bib cock of approved quality:			-	
	15mm nominal bore	1	Each	Po 272 00	D 070
	Total		Eacil	Rs.273.00	Rs.273.00
	Say			<del></del>	Rs.1,513.41 Rs.1,513.00
	Total Nos. of House Holds= 100	Nos.	@	Rs.1,513.00	Rs.1,51,300.00

S.N.	Sub Est 3 M HIGH STEEL STRUCTURE STAG	GING FO	)R 50	OO LITER	DVC TANK	<u> </u>
	Particulars Particulars	Qua		Unit	Rate	Amount
1	Structural steel work riveted or bolted in built up		<b>⊤</b> ′		Tutto	AirOulii
<u>10.3</u>	sections, trusess and framed work, including	٠.				
	cutting, hoisting, fixing in position and applying a					
	priming coat of approved primer all complete.		1		•	
	8M high staging with GI enclosure to house		+	<del>  -</del>	<del></del>	
	electric switch panel of suitably designed MS				•	
	section of angle, channel, etc. as per drawing		-	i i		
	attached.	149	0 Kg	P/Kg	Pc 60 20	Po 1.00 400 0
2	Earth work in excavation in foundation trenches		<u> </u>	i ng	13.09.20	Rs.1,03,108.0
2.8.1	or drains(not exceeding 1.5 m in width or 10 sqm					
	on plan) including ressing of sides and ramming			1		
	of bottoms, lift upto 1.5 m. including getting out					
	the excavated soil and disposal of surplus				: :	
	excavated soil as directed, within a lead of 50 m.			4		
	All Kinds of soil					
	base of footing		<del>-</del>		<u> </u>	
			∔	<u></u>	<u> </u>	
·		_ ··	<u> </u>	<u> </u>	<u> </u>	
	For fixing Ladder			<u> </u>		
	1 1.00 0.50 0.275 = 0.138					
	8.346	8.346	$M^3$	P/ <b>M</b> <sup>3</sup>	Rs.230.50	Rs.1,923.64
3-	Supplying and filling in plinth with local sand and		1	<del></del>		
2.28	under floors including watering, ramming					
į	consolidating and dressing complete.		ĺ			
	base of footing		<del> </del>	<del></del>	<u> </u>	
			<u> </u>		<u> </u>	
	4 1.20 1.20 0.10 = 0.576 Landing Plateform		· · · · · · · · · · · · · · · · · · ·	- <del>-</del>	<u> </u>	
					·	
·	0.000					
	0.626	0.626	$\mathbb{I}M^3$	P/M <sup>3</sup>	Rs.204.40	Rs.127.95
4-	Providing designation of 100A Brick flat Soling			<del>1</del>		
1.72 ∃j	oints filled with local sand including cost of		r			
1	watering, taxes & royalty all complete as per					
	specification & direction of E/I.		•			
1	pase of footing		ļ			
	4 1.20 1.20 = 5.760					
; L	anding Plateform					
	1 1.00 0.50 = 0.500		i	t		
	6.260		ļ - <u>,</u>	: 	1	
1		ር ባርላ	442			
5 F	Providing and laving in position coment consent	6.260	M²	P/M <sup>2</sup>	Rs.253.80	Rs.1,588.79
12	Providing and laying in position cement concrete	6.260	M²	P/M²	Rs.253.80	Rs.1,588.79
12	Providing and laying in position cement concrete	6.260	M²	P/M <sup>2</sup>	Rs.253.80	Rs.1,588.79
.1.2	Providing and laying in position cement concrete of specified grade extuding the cost of centring	6.260	M²	P/M <sup>2</sup>	Rs.253.80	Rs.1,588.79
1.2 c	Providing and laying in position cement concrete of specified grade exluding the cost of centring and shuttering-all work upto plinth level.	6.260	M <sup>2</sup>	P/M <sup>2</sup>	Rs.253.80	Rs.1,588.79
.1.2 c	Providing and laying in position cement concrete of specified grade exluding the cost of centring and shuttering-all work upto plinth level.	6.260	M <sup>2</sup>	P/M <sup>2</sup>	Rs.253.80	Rs.1,588.79
1.2 c	Providing and laying in position cement concrete of specified grade exluding the cost of centring and shuttering-all work upto plinth level.  1.5:3(1 Cement :1.5 coarse sand:3 graded)	6.260	M <sup>2</sup>	P/M <sup>2</sup>	Rs.253.80	Rs.1,588.79
1.2 c	Providing and laying in position cement concrete of specified grade exluding the cost of centring and shuttering-all work upto plinth level.  1.5:3(1 Cement :1.5 coarse sand:3 graded tone aggregate 20 mm nominal size)	6.260	M <sup>2</sup>	P/M <sup>2</sup>	Rs.253.80	Rs.1,588.79
.1.2 c	Providing and laying in position cement concrete of specified grade exluding the cost of centring and shuttering-all work upto plinth level.  1.5:3(1 Cement :1.5 coarse sand:3 graded tone aggregate 20 mm nominal size)  ase of footing	6.260	M²	P/M <sup>2</sup>	Rs.253.80	Rs.1,588.79
1.2 c	Providing and laying in position cement concrete of specified grade exluding the cost of centring and shuttering-all work upto plinth level.  1.5:3(1 Cement :1.5 coarse sand:3 graded tone aggregate 20 mm nominal size) ase of footing  4 1.20 1.20 0.100 = 0.576	6.260	<b>M</b> <sup>2</sup>	P/M <sup>2</sup>	Rs.253.80	Rs.1,588.79
1.2 c	Providing and laying in position cement concrete of specified grade exluding the cost of centring and shuttering-all work upto plinth level.  1.5:3(1 Cement :1.5 coarse sand:3 graded tone aggregate 20 mm nominal size)  ase of footing	6.260	<u>M²</u>	P/M <sup>2</sup>	Rs.253.80	Rs.1,588.79
1.2 c	Providing and laying in position cement concrete of specified grade exluding the cost of centring and shuttering-all work upto plinth level.  1.5:3(1 Cement :1.5 coarse sand:3 graded tone aggregate 20 mm nominal size) ase of footing  4 1.20 1.20 0.100 = 0.576 or Grouting at base plate	6.260	M <sup>2</sup>	P/M <sup>2</sup>	Rs.253.80	Rs.1,588.79
1.2   c	Providing and laying in position cement concrete of specified grade exluding the cost of centring and shuttering-all work upto plinth level.  1.5:3(1 Cement :1.5 coarse sand:3 graded tone aggregate 20 mm nominal size)  ase of footing  4 1.20 1.20 0.100 = 0.576 or Grouting at base plate  4 0.20 0.20 0.050 = 0.008	6.260	M <sup>2</sup>	P/M <sup>2</sup>	Rs.253.80	Rs.1,588.79
1.2   c	Providing and laying in position cement concrete of specified grade exluding the cost of centring and shuttering-all work upto plinth level.  1.5:3(1 Cement :1.5 coarse sand:3 graded tone aggregate 20 mm nominal size) ase of footing  4	6.260	M <sup>2</sup>	P/M <sup>2</sup>	Rs.253.80	Rs.1,588.79
1.2   c	Providing and laying in position cement concrete of specified grade exluding the cost of centring and shuttering-all work upto plinth level.  1.5:3(1 Cement :1.5 coarse sand:3 graded tone aggregate 20 mm nominal size)  ase of footing  4 1.20 1.20 0.100 = 0.576 or Grouting at base plate  4 0.20 0.20 0.050 = 0.008	6.260	M <sup>2</sup>	P/M <sup>2</sup>	Rs.253.80	Rs.1,588.79
1.2   c	Providing and laying in position cement concrete of specified grade exluding the cost of centring and shuttering-all work upto plinth level.  1.5:3(1 Cement :1.5 coarse sand:3 graded tone aggregate 20 mm nominal size) ase of footing  4 1.20 1.20 0.100 = 0.576 or Grouting at base plate  4 0.20 0.20 0.050 = 0.008 anding Plateform  1 1.00 0.50 0.10 = 0.050	-				
1.2   c   e   e   e   e   e   e   e   e   e	Providing and laying in position cement concrete of specified grade exluding the cost of centring and shuttering-all work upto plinth level.  1.5:3(1 Cement :1.5 coarse sand:3 graded tone aggregate 20 mm nominal size)  ase of footing  4 1.20 1.20 0.100 = 0.576  or Grouting at base plate  4 0.20 0.20 0.050 = 0.008  anding Plateform  1 1.00 0.50 0.10 = 0.050  0.634	0.634		P/M <sup>2</sup>	Rs.253.80 Rs.4,373.20	Rs.1,588.79
1.2 c	Providing and laying in position cement concrete of specified grade exluding the cost of centring and shuttering-all work upto plinth level.  1.5:3(1 Cement :1.5 coarse sand:3 graded tone aggregate 20 mm nominal size) ase of footing  4 1.20 1.20 0.100 = 0.576 or Grouting at base plate  4 0.20 0.20 0.050 = 0.008 anding Plateform  1 1.00 0.50 0.10 = 0.050 0.634 roviding and laying in position specified grade	-				
1.2 c	Providing and laying in position cement concrete of specified grade exhuding the cost of centring and shuttering-all work upto plinth level.  1.5:3(1 Cement :1.5 coarse sand:3 graded tone aggregate 20 mm nominal size) ase of footing  4 1.20 1.20 0.100 = 0.576 or Grouting at base plate  4 0.20 0.20 0.050 = 0.008 anding Plateform  1 1.00 0.50 0.10 = 0.050 roviding and laying in position specified grade for reinforced cement concrete excluding the cost	-				
1.2 c a a a a a a a a a a a a a a a a a a	Providing and laying in position cement concrete of specified grade exluding the cost of centring and shuttering-all work upto plinth level.  1.5:3(1 Cement :1.5 coarse sand:3 graded tone aggregate 20 mm nominal size)  ase of footing  4	-				
1.2 c a a a a a a a a a a a a a a a a a a	Providing and laying in position cement concrete of specified grade exluding the cost of centring and shuttering-all work upto plinth level.  1.5:3(1 Cement :1.5 coarse sand:3 graded tone aggregate 20 mm nominal size)  ase of footing  4	-				
1.2 c	Providing and laying in position cement concrete of specified grade exluding the cost of centring and shuttering-all work upto plinth level.  1.5:3(1 Cement :1.5 coarse sand:3 graded tone aggregate 20 mm nominal size)  ase of footing  4	-				
1.2 c a a a a a a a a a a a a a a a a a a	Providing and laying in position cement concrete of specified grade exluding the cost of centring and shuttering-all work upto plinth level.  1.5:3(1 Cement :1.5 coarse sand:3 graded tone aggregate 20 mm nominal size)  ase of footing  4	-				
1.2 c a a a a a a a a a a a a a a a a a a	Providing and laying in position cement concrete of specified grade exluding the cost of centring and shuttering-all work upto plinth level.  1.5:3(1 Cement :1.5 coarse sand:3 graded tone aggregate 20 mm nominal size)  ase of footing  4	-				
1.2 c a a a a a a a a a a a a a a a a a a	Providing and laying in position cement concrete of specified grade exluding the cost of centring and shuttering-all work upto plinth level.  1.5:3(1 Cement: 1.5 coarse sand:3 graded tone aggregate 20 mm nominal size)  ase of footing  4	-				
1.2 c a a a a a a a a a a a a a a a a a a	Providing and laying in position cement concrete of specified grade exluding the cost of centring and shuttering-all work upto plinth level.  1.5:3(1 Cement :1.5 coarse sand:3 graded tone aggregate 20 mm nominal size)  ase of footing  4	-				
1.2 c a a a a a a a a a a a a a a a a a a	Providing and laying in position cement concrete of specified grade exluding the cost of centring and shuttering-all work upto plinth level.  1.5:3(1 Cement: 1.5 coarse sand:3 graded tone aggregate 20 mm nominal size)  ase of footing  4	-				

S.N.	Colum	n ob -	Pai	rticulars			Qu	anti	ty Un	it Rate	T A
		n above	¬						<del></del>	Nate	Ameount
	4	0.20	0.20	0.25		0.040	1 11 1			7 - 24 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	<del>                                     </del>
	-	L				1.376	1.3	76 N	1 <sup>3</sup> P/N	13 Po 4 520 0	
7- 5.9.1	Centri		and	shutteri	ng	including				Rs.4,530.3	0 Rs 6,233.6
3.9.1	Struttir	g,propp		and remov	al of	form for					
	16	1.00	0.30		=	4.800	<u> </u>	_			· <del> </del> ·
	16	0.20	0.85		=	2.720	<del></del>				
	16	0.20	0.25		=	<del></del> -					
					<del>-</del>  -	0.800 8.320			<u> </u>		
8-	Reinfo	rcement	for	R.C.C.	work	ب مان برانیم	8.3	20 M	P/M	Rs.169.00	Rs. 1,406.0
5.22	straigh	tening, c	utting, b	endina n	lacino	in position		ļ			
	latin hit	iumy an	∞molet	e	donig	iii posidon		ĺ			
	8 mm t	o 16 mm	tor stee	el	:-		<u> </u>	<b>-</b>  -			
	Total R	einforce	ment.		<del>-</del>	<u>-</u>		- + -	<u> </u>		
	@0.809	% of Val.	Of Con	crete	:	=	86.0	0 Kg	J. P/Kg	Rs.56.00	Rs.4,816.00
9	Filling a	ıvailable	excava	ted earth	(exclu	ding rock)		- 🕂	:		1.0.4,010.00
2.26	ин иепс	nes, pii	nin. sidi	es of our	ndatia	nn ni - i				,	
i	iayers	not e	xceedin	a 20 r	erra i	أبطلت مام			; i		į
j	and wat	raung ea	∃cn deb	osited lay	er by	ramming			!		ļ
10	Providir	enny lea or and f	ixing ar	nchor bolt			_2.08	6 M <sup>3</sup>	P/M <sup>3</sup>	Rs.74.50	Rs.155.43
10.19	and 0.60	0 Mtrien	oth emb	edded in	OT 12	mm dia	-			- <del>                                    </del>	1.3.100.43
- ''	an COM	piete as	s per d	firection (	T.U.U St. En	pedestal		ĺ	j		
!	onalye,	<b>WYXZXU</b>	. <b>၁</b> 328ka			i	4 202	4	; _		
11-	Painting	with re	adv m	ived poin	t of	3nnmyed:	4.262	+ Kg	P/kg	Rs.73.60	Rs.313.71
	nanu a	ia manu	facture	in all sha	des to	nive an		-			
	even sna	ace:				y give an			:	Market .	
	vew stee	el work (i	wo or m	ore coats		·		+		<u>. L</u>	
F	rame w	ork	i		<del>-</del> -						
			3.00		=	21.000		i	1		
	0.5	3.50	3.50		=	6.125		ļ	4		
12	<u></u>			·— ·	_ i	27.125	27.13	M <sup>2</sup>	.: . M <sup>2</sup>	Pe 63.00	· · · <u></u>
<u>12</u> C	ramage	of the fo	liowing	materials	from o	quarry to			- IĂĪ	Rs.63.60	Rs.1,725.15
	O. W. 311	C IIIQIUI	aina io	adina u	nloodi	~~1					]
j di	rection	of F/I	site a	is per s	pecific	ation &		:		•	į
(a	) Bricks	(7 Km.	Pucca A	§ 1 Km. K					· 		j
(b	) Coars	e Sand /	100 Km	2 1 (d)1. 1\	acrina	lead)		Nos.	%0 nos.	Rs.606.10	Rs. 123.04
	) Stone	China (4	CO 14	. lead)	-↓		0.860	$M^3$	P/M <sup>3</sup>	Rs.1,221.09	Rs.1,050.14
\/ \/	) Stone	Criips (1	OU KM.	iead)	_L		1.730		P/M <sup>3</sup>	Rs.1,746.29	
	, Local	Sano ( 2	rm. Pu	cca & 1 K	m. Ka	chha lea	0.720		P/ <b>M</b> <sup>3</sup>	Rs.217.23	Rs.3,021.08
		- <u>-</u> - i	1	· 1	:		!	-	. · · · · · · · ·		Rs.156.41 Rs.1,28,521.72
		14								· • · ^ L	

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### GOVERNMENT OF BHAR

PUBLIC HEALTH ENGINEERING DEPARTMENT

MODEL ESTIMATE

**FOR** 

CONSTRUCTION OF RURAL PIPED WATER SUPPLY SCHEME FOR A WARD HAVING 100 HOUSE HOLD S

ESTIMATED COST-- Rs. 8.675Lac

2017-18

#### **GOVERNMENT OF BIHAR**

#### **Public Health Engineering Department**

#### **ABSTRACT OF COST**

### NAME OF WORK:- CONSTRUCTION OF RURAL PIPED WATER SUPPLY SCHEME FOR VVARD HAVING 100 HOUSE HOLDS

S.N.	Description	
1	Construction of 125mm X75mmx 90m deep T/W etc. all complete and as per	Total Amount
ļ	direction of E/I.	
	(As per sub Estimate no 1)	Do 4 44 4 0 7 0 0
2	Constructing masonry Chamber 100x100x75 cm inside, in brick work in cement	Rs.1,11,1 37.68
	mortar 1:4 (1 cement : 4 coarse sand) for Tube Well, and RCC top slab 1:1.5:3 mix	
	(1 cement : 1.5 coarse sand : 3 graded stone aggregate 20mm nominal size )	
	necessary excavation, foundation concrete 1:2:4(1 cement : 2 fine sand : 4 graded	·
	stone aggregate 20 mm nominal size) and inside plastering with cement mortar 1:3	
lo	(1 cement : 3coarse sand) 12 mm thick with 5% cico fnished with a floating coat of	
r	neat cement, out side plastering with coment made, 4.4.44	
-	neat cement, out side plastering with cement mortar 1:4 (1 cement : 4coarse sand)	
1	12 mm thick complete as per standard specifications & direction of E/I.  (As per sub Estimate no 2)	
3 F	Providing and Laving Distribution not used of U D	Rs.13,210.00
į,	Providing and Laying Distribution network of High Density Polyethyene pipe (HDPE	
[*	pipe) including 5000 liter PVC tank installed at 3M high MS staging etc all complete	
4 5	as per direction of E/I. (As per sub Estimate no 3)	Rs.3,90,355.94
7	Supply Installation, commissioning and testing of single phase 2 H.P. submersible	
IP	runip sec indving discrizing capacity 2.5 lbs, at a total head of 35 motor(opprov) at	
lic	(SB/ Kirloskar or equivalent make with all accessories & fittings etc including	
re	pading unloading and transportation of the pump set to the work site with all	ĺ
D	equired labour, materials, tools and tackles installation, testing & commissioning as er standards specifications and direction of E/I.	ľ
i i	As per sub Estimate no 4)	_
5 P	Providing house connection for each house hold including supplying all materials,	Rs.64,403.00
la	abours, tools and making ferrule connection with 20 mm dia MDPE and 15mm	
C	PVC Pipes with all fittings etc all complete.	
(/	As per sub Estimate no 5)	Po 1 51 300 00
6 P	roviding and erecting 3 M high staging of suitably designed MS section of angle,	Rs.1,51,300.00
cl	hannel etc. as per drawing attached. (As per sub Estimate no 6)	Rs.1,28,500.00
	TOTAL	Rs.8,58,906.62
<u></u>	Add 1% Contingency	Rs.8,589.07
	G. TOTAL	Rs.8,67,495.69
	Say	Rs.8,67,500.00

(Rs. Eight Lakh Sixty seven Thousand five Hundred ) only

#### Note:

- i) This model estimate has been prepared in the light of Guidelines of PRD, Bihar memo no. 6278 dt.23.09.2016. This estimate may not ensure standard pressure in the distribution network. Hence on the spot change in staging of storage tank may be required.
- ii) Water quality testing of source should be done after construction of Tube well.
- iii) Road cutting cost may increase or decrease as per local condition.

Technical approval accorded for Rs.8,67,500.00 (Rs. Eight Lakh Sixty seven Thousand five Hundred)

only

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James of P.

Soano4

Chief Engineer (Design)
Public Reside Engineering Department

Binai, Patna

Sub Est. No. 1

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JUNE I RUCHOM OF	123MM X 75MM DIA & 90M DEE!	O THIOSE MARK
	COMMISSION OF SOME DEED	7 IUBE WEIL

The second second country states provide states and consider the second consideration and considerations and considerations and considerations are second considerations.

Boringdriffling bore well of required dia for casing/strainer pipe, by suitable method prescribed in IS-2800 (part I), including collecting samples from different strata, preparing and submitting strata chard bore log, including hire & numing charges of all equipments, tools, plants & machineries required for the job, all complete as per direction of Engineer -in-charge, upto 90 metre depth below ground level. (All types of sol)  24.1.1.1 (a) 300mm dia bore from GL to 900M  2 Supplying, assembling, loweng and fixing in vertical position in bore well. unplastizate PC (UPVC) medium well casing (CM) plipe of required dia, conforming to IS-12818, including required fine and labour charges, fittinos (b) 125 mm nominal size dia (c) 125 mm nominal size dia (c) 125 mm nominal size dia (c) 125 mm nominal size dia (c) 125 mm nominal size dia (c) 125 mm nominal size dia (c) 125 mm nominal size dia (c) 125 mm dia UP.V.C. strainer (c) 125 mm dia P.V.C. well cap (d) 125 mm dia P.V.C. well cap (e) 125 mm dia P.V.C. well cap (d) 125 mm dia P.V.C. well cap (e) 125 mm dia P.V.C. pipe shoe plug (e) 125 mm dia P.V.C. pipe shoe plug (e) 125 mm dia M.S.Clamp (e) 125 mm dia M.S.Clamp (e) 125 mm dia M.S.Clamp (e) 125 mm dia P.V.C. pipe shoe plug (e) 125 mm a surface Allows (e) 125 mm dia P.V.C. strainer (e) 125 mm dia M.S.Clamp (e) 125 mm dia M.S.C	S.No		Qty.	Unit	Rate	Amount
including collecting samples from different strata, preparing and submitting strata chart/ bore log, including hire & running charges of all equipments, tools, plants & machineries required for the job, all complete as per direction of Engineer -in-charge, upto 90 metre depth below ground level. (all types of sau] 24,11-1 (a) 300mm dia bore from G. L. to 90 0M.  2 Supplying, assembling, lowering and fixing in vertical position in bore well: unplasticated PVC (UPVC) medium well casing (CM) pipe of required die, conforming to 15 12818, including required his position in bore well. Unplasticated PVC (UPVC) medium well casing (CM) pipe of required die, conforming to 15 12818, including required his position in bore well. Unplasticated PVC (UPVC) medium well casing (CM) pipe of required die, conforming to 15 12818, including required his position and position in bore well. Unplasticated PVC (UPVC) medium well casing (CM) pipe of required die and position in bore well. PVC (UPVC) medium well casing (CM) pipe of required all borus charges of including and pipe frequired and labour charoes, fittinos (b) 128 mm dia PVC. V. cellicap (b) 125 mm dia environe guide (c) 75 mm dia environe guide (d) 75 mm dia PVC. Reducer (d) 125	1		<u> </u>			
prepairing and submitting strata chart/ bore tog, including hire & running charges of all equipments, tools, plants & machineries required for the job, all complete as per direction of Engineer -in-charge, upto 90 metre depth below ground lavel (All types of soil)  24.1.1.1 (a) 300mm dia bore from GL. to 90.0M  Supplying, assembling, lowering and fixing in vertical position in bore well: unpleaticate PVC (UPVC) medium well casing (CM) cipe of required dia, conforming to IS: 12816, including required brie and labour charroes. Fittings (b) 125 mm nominal size dia 30.0 M P/M Rs. 462.50 Rs. 1.1, 169.0 (2) 125 mm nominal size dia 30.0 M P/M Rs. 462.50 Rs. 1.1, 169.0 (2) 125 mm dia UP V.C. strainer 31 Providing all materials; tools & labours and fixing the direction of E/I.  (a) 125 mm dia P.V.C. well cap (b) 125 mm dia center guide (c) 75 mm dia P.V.C. pipe shoe plug (d) 75 mm dia P.V.C. pipe shoe plug (e) 125 mm dia P.V.C. pipe shoe plug (e) 125 mm dia P.V.C. pipe shoe plug (e) 125 mm dia P.V.C. pipe shoe plug (e) 125 mm dia P.V.C. pipe shoe plug (e) 125 mm as a suitable for strata including carriage washing, placing all materials, labours, & equipments for fixing tubewell with peagravel of Dalbhumigarh (taken av distance 400km.)  5 Development of fube well in accordance with IS: 2800 (part l) and IS: 11189, to establish maximum rate of usable water yield without sand content (beyond permissible limit), with required capacity air compressor, running the compressor for required time till well is fully develo ped, measuring yield of well by "V" notch method or any other approved method, measuring static level & draw down etc. by step draw down method, collecting water sampl & getting tested in approved laboratory, disinfection of tubewell, air complete including phile & labour charges of air compressor for any other approved method, consideratory, disinfection of tubewell, air complete including the same in position and water required during the drilling period for 40 Hrs & site clearance & leveling etc. And providin		pipe, by suitable method prescribed in IS: 2800 (part I),			,	
hire & running charges of all equipments, tools, plants & machineries required for the job, all complete as per direction of Engineer -in-charge, upto 90 metre depth below ground level. (All types of soil)  24.1.1.1 (a) 300mm dia bore from G. L. 690.0M  2 Supplying, assembling, lowering and fixing in vertical position in bore well, unplasticated PVC (UPVC) meditum well reasing (CM) ple of required dia, conforming to 15: 12918. Including required hire and labour charoes. fittinos (b) 125 mm nominal size dia  24.3.5 (b) 75 mm nominal size dia  24.4.5 (c) 75 mm dia UP.V.C. strainer  3 Providing all materials, tools & labours and fixing the following fittings etc. all complete as per specification & direction of E/I.  (a) 125 mm dia P.V.C. well cap  (b) 125 mm dia P.V.C. well cap  (c) 15 mm dia P.V.C. Reducer  (d) 75 mm dia P.V.C. Reducer  (d) 125 mm dia P.V.C. Reducer  (d) 125 mm dia P.V.C. Reducer  (d) 125 mm dia P.V.C. Reducer  (d) 125 mm dia P.V.C. Reducer  (d) 125 mm dia P.V.C. Reducer  (d) 125 mm dia P.V.C. Reducer  (d) 125 mm dia P.V.C. Reducer  (d) 125 mm dia P.V.C. Reducer  (d) 125 mm dia P.V.C. Reducer  (d) 125 mm dia P.V.C. reducer  (d) 125 mm dia P.V.C				ž.		•
machineries required for the job, all complete as per direction of Engineer -in-barge, upto 90 metre depth below ground level. (All types of soil)  24.1.1.1 (a) 300mm dia bore from G. L. 19 90 M.  Supplying, assembling, lowering and fixing in vertical position in bore well, unpleaticized PVC (UPVC) medium well cashing (CM) pipe of required dia, conforming to IS: 12818, inclusion required frie and labour charoes, fittings (b) 175 mm nominal size dia 30.0 M. P/M. Rs. 462.50 Rs. 13.875.00 (b) 75 mm nominal size dia 30.0 M. P/M. Rs. 420.30 Rs. 8.8.26.3 Providing all materials, tools & labours and fixing the following fittings etc. all complete as per specification & direction of E/I.  (a) 125 mm dia Center guide for State in County (c) 75 mm dia P.V.C. well cap (d) 75 mm dia enter guide for State in County (e) 125 mm dia P.V.C. pipe shee plug for State in County (e) 125 mm dia Ms. Clamp frow dia M. S. Clamp for Victing all materials, labours, & equipments for fixing tubewell with peagravel of Dalbhumigarh to size 4 mm to 8 mm approx. as cuitable for stata including carriage washing, placing and packing the same in position around the tubewell etc. all complete as per direction of E/I.  40 Carriage of Pea Gravel from Dhalbhumigarh to size 4 mm to 8 mm approx as cuitable for stata including carriage washing, placing and packing the same in position around the tubewell etc. all complete as per direction of E/I.  41 Carriage of Pea Gravel from Dhalbhumigarh (taken av distance 400km).  52 Development of tube well in accordance with IS: 2800 (ap. 1) minute compressor, running the compressor for required time till well is fully develo ped, measuring yield of well by "V" notch method or any other approved method, measuring static level & draw down etc. by step draw down method, collecting water sampl & getting tested in approved laboratory, disinfection of tubewell, all complete, including hire & labour charges of air compressor, tools & accessories etc., all as per requirement and direction of Engineer-in-charge.  5 Suppl						
direction of Engineer -in-charge, upte 90 metre depth below ground level. (All types of soil)  24 1.1.1 (a) 300mm dia bore from G.L to 90.0M Supplying, assembling, lowering and fixing in vertical position in bore well. unplasticated PVC (UPVC) medium well casing (CM) pipe of required dia conforming to 15: 12818, including required hire and labour charoes, fittings (b) 125 mm nominal size dia 30.0 M P/M Rs.482.50 Rs.13,875.02 (b) 125 mm nominal size dia 30.0 M P/M Rs.482.50 Rs.11,169.0 (c) 125 mm dia U.P.V.C. strainer Providing all materials; loots 8 abours and fixing the following fittings etc. all complete as per specification 8 direction of E/I.  (a) 125 mm dia P.V.C. well cap (b) 125 mm dia P.V.C. well cap (c) 75 mm dia enter guide (d) 75 mm dia enter guide (e) 125 mm x 75 mm dia P.V.C. Reducer (d) 125 mm x 75 mm dia P.V.C. Reducer (d) 125 mm x 75 mm dia P.V.C. Reducer (d) 125 mm x 75 mm dia P.V.C. Reducer (d) 125 mm x 75 mm dia P.V.C. Reducer (d) 125 mm x 75 mm dia P.V.C. Reducer (d) 125 mm x 75 mm dia P.V.C. Reducer (d) 125 mm x 75 mm dia P.V.C. Reducer (d) 125 mm approx as suitable for strata including carriage washing, placing and packing the same in position around the tubewell etc. all complete as per direction of E/I.  Carriage of Pea Gravel from Chalbhumigant (taken av distance 400km).  Development of tube well in accordance with IS: 2800 24.12 (part I) and IS: 11188, to establish maximum rate of usable water yield without sand content (beyond permissible limit), with required capacity air compressor, running the compressor for required ime till well is fully developed, measuring yield of well by "V" notch method or any other approved method, measuring static level 8 draw down etc. by step draw down method, collecting water sampl 8 getting tested in approved laboratory, disinfection of tubewell, all complete, including hire 8 labour charges of air compressor, tools & accessories etc., all as per requirement and direction of E/I.  Supplying all materials and labours for arrangement for additional wate						
below ground level. (All types of soil)  4. 1.1.1 (a) 300mm dia bore from G. L. to 90.0M  Supplying, assembling, lowering and fixing in vertical position in bore well, unplasticated PVC (LPVC) medium well casing (CM) pipe of required dia, conforming to 15: 12818. including required fixe and labour charoes. fittings (b) 75 mm normal size dia (b) 75 mm normal size dia (b) 75 mm normal size dia (b) 75 mm normal size dia (b) 75 mm normal size dia (b) 75 mm normal size dia (b) 75 mm dia P.V.C. strainer Providing all materials, tools & labours and fixing the following fittings etc. all complete as per specification & direction of Erl.  (a) 125 mm dia P.V.C. well cap (b) 125 mm dia P.V.C. Reducer (d) 75 mm dia P.V.C. Peducer (d) 75 mm dia P.V.C. Peducer (d) 125 mm dia P.V.C. Peducer (d) 125 mm dia P.V.C. Peducer (d) 125 mm dia P.V.C. Peducer (d) 125 mm dia P.V.C. Peducer (d) 125 mm dia P.V.C. Peducer (d) 125 mm dia P.V.C. pipe shoe plug (e) 15 mm dia P.V.C. plug shoe plug						
24.1.1.1 (a) 300mm dia bore from GL to 90.0M  2 Supplying, assembling, lowering and fixing in vertical position in bore well, unplasticized PVC (UPVC) medium well casing (CM) pipe of required dia conforming to 15' 12818, including recurred five and labour charoes, fittinos (b) 125 mm nominal size dia  24.3.5 (b) 75 mm nominal size dia  24.3.5 (c) 75 mm dia U.P.V.C. strainer  3 Providing all materials, tools & labours and fixing the following fittings etc. all complete as per specification & direction of £7!.  (a) 125 mm dia P.V.C. well cap (b) 125 mm dia enter guide (c) 75 mm dia enter guide (d) 75 mm dia enter guide (d) 75 mm dia P.V.C. pipe shoe plug (e) 125 mm dia P.V.C. pipe shoe plug (d) 75 mm dia P.V.C. pipe shoe plug (e) 125 mm dia P.V.C. pipe shoe plug (e) 125 mm dia P.V.C. pipe shoe plug (e) 125 mm dia P.V.C. Reducer (d) 125 mm dia P.V.C. Reducer (d) 125 mm dia P.V.C. Reducer (d) 125 mm dia P.V.C. strainer  4a Providing all materials, labours, & equipments for fixing tubewell with peagravel of Dalbhumigarh to size 4mm to 8mm approx as suitable for strata including carriage washing, placing and packing the same in position around the tubewell etc. all complete as per direction of £7.  5 Development of tube well in accordance with IS: 2800 24.12 (part 1) and IS: 11189, to establish maximum rate of usable water yield without sand content (beyond permissible limit), with required capacity air compressor running the compressor for required time till well is fully develo pet, measuring yield of well by "V" notch method or any other approved method, measuring static level & draw down etc. by step draw down method, collecting water sampl &getting tested in approved laboratory, disinfection of tubewell, all complete, including hire & labour charges of air compressor, tools & accessories etc., all as per requirement and direction of Engineer-incharge.  6 Supplying all materials and labours for arrangement for additional water required during the dilling period for 40 Hrs & site clearance & leveling etc. And prov						
2 Supplying, assembling, lowering and fixing in vertical position in bore well, unplasticed PVC (UPVC) medium well casing (CM) pipe of required dia, conforming to IS: 12818, including required the and labour charoes, fittinas (b): 125 mm mominal size dia 30.0 M P/M Rs. 328.50 Rs. 11, 169.0 (24.4.5) (c) 75 mm mominal size dia 30.0 M P/M Rs. 328.50 Rs. 11, 169.0 (24.4.5) (c) 75 mm mominal size dia 30.0 M P/M Rs. 420.30 Rs. 8, 826.3 Providing all materials, tools & labours and fixing the following fittings etc. all complete as per specification & direction of E/I.  (a): 15 mm dia center guide 4 Nos. Each Rs. 100.00 Rs. 450.00 (c): 75 mm dia center guide 4 Nos. Each Rs. 75.00 Rs. 450.00 (d): 75 mm dia P.V.C. well cap 1 No. Each Rs. 185.00 Rs. 450.00 (e): 125 mm dia P.V.C. pipe shoe plug 1 No. Each Rs. 185.00 Rs. 450.00 (e): 125 mm x 75 mm dia P.V.C. Reducer (d): 125 mm x 75 mm dia P.V.C. Reducer (d): 125 mm x 8. Clamp Providing all materials, labours, & equipments for fixing tubewell with peagravel of Dalbhumigarh to size 4mm to 8mm approx as suitable for strata including carriage washing, placing and packing the same in position around the tubewell etc. all complete as per direction of E/I.  40 Carriage of Pea Gravel from Dhalbhumigarh to size 4mm to 8mm approx as suitable for strata including carriage washing, placing and packing the same in position around the tubewell etc. all complete as per direction of E/I.  41 Carriage of Pea Gravel from Dhalbhumigarh (taken av distance 400km.)  42 Development of tube well in accordance with IS:: 2800 (part. 1) and IS:: 11189, to establish maximum rate of usable water yield without sand content (beyond permissible limit), with required capacity air compressor, running the compressor for required time till well is fully develo ped, measuring yield of well by "V" notch method or any other approved method, measuring static level & draw down etc. by step draw down method, collecting water sampl & getting tested in approved laboratory, disinfection of tubewell, all complete, inc	24 1 1	below ground level. (All types of soil)				
position in bore well, unplasticized PVC (UPVC) medium well casing (CM) pipe of required dia, conforming to IS: 12818. including rearured fire and labour charoes. fittings (b) 128 mm nominal size dia 34.0 M P/M Rs.42030 Rs.13,169.0 (c) 128 mm nominal size dia 34.0 M P/M Rs.42030 Rs.11,169.0 Rs.424.5 (c) 75 mm dia UPVC. strainer 21.0 M P/M Rs.42030 Rs.8,826.3 Providing all materials, tools & labours and fixing the following fittings etc. all complete as per specification & direction of E/I. (a) 125 mm dia P.V.C. well cap 1 No. Each Rs.166.60 Rs.400.0 (c) 75 mm dia P.V.C. pipe shoe plug 1 No. Each Rs.185.00 Rs.450.0 (d) 75 mm dia P.V.C. pipe shoe plug 1 No. Each Rs.185.00 Rs.450.0 (e) 125 mm dia P.V.C. pipe shoe plug 1 No. Each Rs.185.00 Rs.450.0 (e) 125 mm dia P.V.C. pipe shoe plug 1 No. Each Rs.185.00 Rs.450.0 (e) 125 mm dia P.V.C. pipe shoe plug 1 No. Each Rs.185.00 Rs.450.0 (e) 125 mm dia P.V.C. pipe shoe plug 1 No. Each Rs.185.00 Rs.450.0 Rs.450.0 (e) 125 mm dia P.V.C. pipe shoe plug 1 No. Each Rs.475.00 Rs.	2	Supplying, assembling, lowering and fixing in vertical	90.0 M	P/M	Rs.378.00	Rs.34,020.00
12818, including required thire and labour charoes, fittings 24.3.5 (b) 75 mm morninal size dia 24.3.5 (c) 75 mm dia P.V.C. strainer 3		position in bore well, unplasticized PVC (UPVC) medium				
24.3.5 (b) 75 mm nommal size dia 24.4.5 (c) 75 mm dia U.P.V.C. strainer 3		well casing (CM) pipe of required dia, conforming to IS:				
24.4.5 (c) /5 mm forminal size dia 21.0 M P/M Rs.328.50 Rs.11,169.0 Rs.8.826.3 Providing all materials, tools & labours and fixing the following fittings etc. all complete as per specification & direction of E/I.  (a) 125 mm dia P.V.C. well cap 1 No. Each Rs.166.60 Rs.400.0 Rs.400.0 (c) 75 mm dia center guide 6 Nos. Each Rs.75.00 Rs.450.0 Rs.450.0 (d) 75 mm dia enter guide 7 No. Each Rs.75.00 Rs.450.0 Rs.450.0 (e) 125 mm dia P.V.C. pipe shoe plug 7 No. Each Rs.75.00 Rs.450.0 Rs.450.0 Rs.450.0 Rs.450.0 Rs.450.0 Rs.450.0 Rs.450.0 Rs.450.0 Rs.450.0 Rs.450.0 Rs.450.0 Rs.475.00 Rs.450.0 Rs.450.0 Rs.450.0 Rs.450.0 Rs.450.0 Rs.450.0 Rs.450.0 Rs.450.0 Rs.450.0 Rs.450.0 Rs.450.0 Rs.450.0 Rs.450.0 Rs.475.00	04.5.5	(D) 125 mm nominal size dia	30.0 M	P/M	Rs 462 50	De 12 075 00
Providing all materials, tools & labours and fixing the following fittings etc. all complete as per specification & direction of E/I.  (a) 125 mm dia P.V.C. well cap (b) 125 mm dia center guide (c) 75 mm dia center guide (d) 75 mm dia ep.V.C. pipe shoe plug (e) 125 mm dia P.V.C. pipe shoe plug (e) 125 mm d		(b) 75 mm nominal size día		P/M		Rs.11,169.00
direction of E/I.  (a) 125 mm dia P.V.C. well cap (b) 125 mm dia center guide (c) 75 mm dia center guide (d) 75 mm dia erv.C. pipe shoe plug (e) 125 mm x 75 mm dia P.V.C. Reducer (d) 75 mm dia erv.C. pipe shoe plug (e) 125 mm x 75 mm dia P.V.C. Reducer (d) 125 mm dia M.S.Clamp (e) 125 mm dia P.V.C. Reducer (d) 125 mm dia P.V.C. Reduce		Providing all materials, tools & labours and fixing the	21.0 M	P/M	Rs.420.30	Rs. 8,826.30
(a) 125 mm dia P.V.C. well cap (b) 125 mm dia center guide (c) 75 mm dia center guide (d) 75 mm dia center guide (d) 75 mm dia P.V.C. pipe shoe plug (e) 125 mm x 75 mm dia P.V.C. Reducer (d) 125 mm dia P.V.C. Reducer (d) 125 mm dia P.V.C. Reducer (e) 125 mm x 75 mm dia P.V.C. Reducer (d) 125 mm dia M.S.Clamp  Providing all materials, labours, & equipments for fixing tubewell with peagravel of Dalbhumigarh to size 4mm to 8mm approx. as suitable for strata including carriage washing, placing and packing the same in position around the tubewell etc. all complete as per direction of E/I. Carriage of Pea Gravel from Dhalbhumigarh (taken av distance 400km.)  Development of tube well in accordance with IS: 2800 (part I) and IS: 11189, to establish maximum rate of usable water yield without sand content (beyond permissible limit), with required capacity air compressor, running the compressor for required time till well is fully develo ped, measuring yield of well by "V" notch method or any other approved method, measuring static level & draw down etc. by step draw down method, collecting water sampl &getting tested in approved laboratory, disinfection of tubewell, all complete, including hire & labour charges of air compressor, tools & accessories etc., all as per requirement and direction of Engineer-incharge.  Supplying all materials and labours for arrangement for additional water required during the drilling period for 40 Hrs & site clearance & leveling etc. And providing the soap duster etc. to staff engaged in drilling etc. all complete work as per specification & direction of E.I  1 No. Each Rs. 165.00  Rs. 475.00  Rs. 475.00  Rs. 5974.60  Rs. 974.60  Rs. 450.00  Rs. 450.00  Rs. 450.00  Rs. 450.00  Rs. 450.00  Rs. 450.00  Rs. 450.00  Rs. 450.00  Rs. 450.00  Rs. 450.00  Rs. 4		tollowing littings etc. all complete as per specification &				•
(b) 125 mm dia center guide (c) 75 mm dia center guide (d) 75 mm dia center guide (d) 75 mm dia P.V.C. pipe shoe plug (e) 125 mm dia P.V.C. pipe shoe plug (e) 125 mm dia P.V.C. Reducer (d) 125 mm dia P.V.C. Reducer (d) 125 mm dia P.V.C. Reducer (d) 125 mm dia P.V.C. Reducer (d) 125 mm dia M.S.Clamp Providing all materials, labours, & equipments for fixing tubewell with peagravel of Dalbhumigarh to size 4mm to 8mm approx as suitable for strata including carriage washing, placing and packing the same in position around the tubewell etc. all complete as per direction of E/I. Carriage of Pea Gravel from Dhalbhumigarh (taken av distance 400km h) Development of tube well in accordance with IS: 2800 (part I) and IS: 11189, to establish maximum rate of usable water yield without sand content (beyond permissible limit), with required capacity air compressor, running the compressor for required time till well is fully develo ped, measuring yield of well by "V" notch method or any other approved method, measuring static level & draw down etc. by step draw down method, collecting water sampl &getting tested in approved laboratory, disinfection of tubewell, all complete,including hire & labour charges of air compressor, tools & accessories etc., all as per requirement and direction of Engineer-in- charge.  8 Supplying all materials and labours for arrangement for additional water required during the drilling period for 40 Hrs & site clearance & leveling etc. And providing the soap duster etc. to staff engaged in drilling etc. all complete work as per specification & direction of E.I  1 No. Each Rs.150.00 Rs.450.00 Rs.47		·				
(c) 75 mm dia center guide (d) 75 mm dia P.V.C. pipe shoe plug (e) 125mm x 75 mm dia P.V.C. Reducer (d) 125mm x 75 mm dia P.V.C. Reducer (d) 125mm x 75 mm dia P.V.C. Reducer (d) 125mm dia M.S.Clamp  4a Providing all materials, labours, & equipments for fixing tubewell with peagravel of Dalbhumigarh to size 4mm to 8mm approx. as suitable for strata including carriage washing, placing and packing the same in position around the tubewell etc. all complete as per direction of E/I.  4b Carriage of Pea Gravel from Dhalbhumigarh (taken av distance 400km.) Development of tube well in accordance with IS: 2800 24.12 (part I) and IS: 11189, to establish maximum rate of usable water yield without sand content (beyond permissible limit), with required capacity air compressor, running the compressor for required time till well is fully develo ped, measuring yield of well by "V" notch method or any other approved method, measuring static level & draw down etc. by step draw down method, collecting water sampl &getting tested in approved laboratory, disinfection of tubewell, all complete,including hire & labour charges of air compressor, tools & accessories etc., all as per requirement and direction of Engineer-incharge.  6 Supplying all materials and labours for arrangement for additional water required during the drilling period for 40 Hrs & site clearance & leveling etc. And providing the soap duster etc. to staff engaged in drilling etc. all complete work as per specification & direction of E.I  1 No. Each Rs.4500.00  Rs.4500.00						Rs. 166.60
(d) 75 mm dia P.V.C. pipe shoe plug  1 No. Each Rs.185.00 Rs.485.00  (e) 125mm x 75 mm dia P.V.C. Reducer  (d) 125mm dia M.S.Clamp  Providing all materials, labours, & equipments for fixing tubewell with peagravel of Dalbhumigarh to size 4mm to 8mm approx. as suitable for strata including carriage washing, placing and packing the same in position around the tubewell etc. all complete as per direction of E/I.  Carriage of Pea Gravel from Dhalbhumigarh (taken av distance 400km.)  Development of tube well in accordance with IS: 2800  24.12 (part I) and IS: 11189, to establish maximum rate of usable water yield without sand content (beyond permissible limit), with required capacity air compressor, running the compressor for required time till well is fully developed, measuring yield of well by "V" notch method or any other approved method, measuring static level & draw down etc. by step draw down method, collecting water sampl &getting tested in approved laboratory, disinfection of tubewell, all complete,including hire & labour charges of air compressor, tools & accessories etc., all as per requirement and direction of Engineer-incharge.  6 Supplying all materials and labours for arrangement for additional water required during the drilling period for 40  Hrs & site clearance & leveling etc. And providing the soap duster etc. to staff engaged in drilling etc. all complete work as per specification & direction of E.I  1 No. Each Rs.1500.00  Rs.450.00  R						Rs.400.00
(e)125mm x 75 mm dia P.V.C. Reducer (d)125mm dia M.S. Clamp 1 No. Each Rs.475.00 Rs.475.00 Rs.974.60 Rs.97		-				
(d)125mm dia M.S.Clamp  4a Providing all materials, labours, & equipments for fixing tubewell with peagravel of Dalbhumigarh to size 4mm to 8mm approx. as suitable for strata including carriage washing, placing and packing the same in position around the tubewell etc. all complete as per direction of E/I.  4b Carriage of Pea Gravel from Dhalbhumigarh (taken av distance 400km.)  5 Development of tube well in accordance with IS: 2800 24.12 (part.) and IS: 11189, to establish maximum rate of usable water yield without sand content (beyond permissible limit), with required capacity air compressor, running the compressor for required time till well is fully develo ped, measuring yield of well by "V" notch method or any other approved method, measuring static level & draw down etc. by step draw down method, collecting water sampl &getting tested in approved laboratory, disinfection of tubewell, all complete,including hire & labour charges of air compressor, tools & accessories etc., all as per requirement and direction of Engineer-incharge.  6 Supplying all materials and labours for arrangement for additional water required during the drilling period for 40 Hrs & site clearance & leveling etc. And providing the soap duster etc. to staff engaged in drilling etc. all complete work as per specification & direction of E.I.  1 No. Each Rs.974.60  Rs.974		_				
Providing all materials, labours, & equipments for fixing tubewell with peagravel of Dalbhumigarh to size 4mm to 8mm approx as suitable for strata including carriage washing, placing and packing the same in position around the tubewell etc. all complete as per direction of E/I.  4b Carriage of Pea Gravel from Dhalbhumigarh (taken av distance 400km.)  5 Development of tube well in accordance with IS: 2800  24.12 (part I) and IS: 11189, to establish maximum rate of usable water yield without sand content (beyond permissible limit), with required capacity air compressor, running the compressor for required time till well is fully develo ped, measuring yield of well by "V" notch method or any other approved method, measuring static level & draw down etc. by step draw down method, collecting water sampl &getting tested in approved laboratory, disinfection of tubewell, all complete, including hire & labour charges of air compressor, tools & accessories etc., all as per requirement and direction of Engineer-incharge.  6 Supplying all materials and labours for arrangement for additional water required during the drilling period for 40 Hrs & site clearance & leveling etc. And providing the soap duster etc. to staff engaged in drilling etc. all complete work as per specification & direction of E.I  1 No. Each Rs.4,500.00		(d)125mm dia M.S.Clamp				
tubewell with peagravel of Dalbhumigarh to size 4mm to 8mm approx as suitable for strata including carriage washing, placing and packing the same in position around the tubewell etc. all complete as per direction of E/I.  4b Carriage of Pea Gravel from Dhalbhumigarh (taken av distance 400km.)  5 Development of tube well in accordance with IS: 2800 (part I) and IS: 11189, to establish maximum rate of usable water yield without sand content (beyond permissible limit), with required capacity air compressor, running the compressor for required time till well is fully develo ped, measuring yield of well by "V" notch method or any other approved method, measuring static level & draw down etc. by step draw down method, collecting water sampl &getting tested in approved laboratory, disinfection of tubewell, all complete,including hire & labour charges of air compressor, tools & accessories etc., all as per requirement and direction of Engineer-incharge.  6 Supplying all materials and labours for arrangement for additional water required during the drilling period for 40 Hrs & site clearance & leveling etc. And providing the soap duster etc. to staff engaged in drilling etc. all complete work as per specification & direction of E.I.  1 No. Each Rs.4,500.00		Providing all materials, labours, & equipments for fixing		Lacii	113.374.00	RS.974.60
8mm approx as suitable for strata including carriage washing, placing and packing the same in position around the tubewell etc. all complete as per direction of E/I.  4b Carriage of Pea Gravel from Dhalbhumigarh (taken av distance 400km.)  5 Development of tube well in accordance with IS: 2800 (part I) and IS: 11189, to establish maximum rate of usable water yield without sand content (beyond permissible limit), with required capacity air compressor, running the compressor for required time till well is fully developed, measuring yield of well by "V" notch method or any other approved method, measuring static level & draw down etc. by step draw down method, collecting water sampl &getting tested in approved laboratory, disinfection of tubewell, all complete,including hire & labour charges of air compressor, tools & accessories etc., all as per requirement and direction of Engineer-incharge.  6 Supplying all materials and labours for arrangement for additional water required during the drilling period for 40 Hrs & site clearance & leveling etc. And providing the soap duster etc. to staff engaged in drilling etc. all complete work as per specification & direction of E.I  1 No. Each Rs.4,500.00	24.6					•
the tubewell etc. all complete as per direction of E/I.  4b Carriage of Pea Gravel from Dhalbhumigarh (taken av distance 400km.)  5 Development of tube well in accordance with IS: 2800 (part I) and IS: 11189, to establish maximum rate of usable water yield without sand content (beyond permissible limit), with required capacity air compressor, running the compressor for required time till well is fully develo ped, measuring yield of well by "V" notch method or any other approved method, measuring static level & draw down etc. by step draw down method, collecting water sampl &getting tested in approved laboratory, disinfection of tubewell, all complete,including hire & labour charges of air compressor, toals & accessories etc., all as per requirement and direction of Engineer-incharge.  6 Supplying all materials and labours for arrangement for additional water required during the drilling period for 40 Hrs & site clearance & leveling etc. And providing the soap duster etc. to staff engaged in drilling etc. all complete work as per specification & direction of E.I  6 Supplying all materials and labours for arrangement for additional water required during the drilling period for 40 Hrs & site clearance & leveling etc. And providing the soap duster etc. to staff engaged in drilling etc. all complete work as per specification & direction of E.I  1 No. Each Rs.4,500.00 Rs.4,500.00		8mm approx. as suitable for strata including carriage				
Carriage of Pea Gravel from Dhalbhumigarh (taken av distance 400km.)  Development of tube well in accordance with IS: 2800 (part I) and IS: 11189, to establish maximum rate of usable water yield without sand content (beyond permissible limit), with required capacity air compressor, running the compressor for required time till well is fully develo ped, measuring yield of well by "V" notch method or any other approved method, measuring static level & draw down etc. by step draw down method, collecting water sampl &getting tested in approved laboratory, disinfection of tubewell, all complete, including hire & labour charges of air compressor, tools & accessories etc., all as per requirement and direction of Engineer-incharge.  Supplying all materials and labours for arrangement for additional water required during the drilling period for 40 Hrs & site clearance & leveling etc. And providing the soap duster etc. to staff engaged in drilling etc. all complete work as per specification & direction of E.I  1 No. Each Rs.4,500.00		washing, placing and packing the same in position around				
distance 400km.)  Development of tube well in accordance with IS: 2800  (part I) and IS: 11189, to establish maximum rate of usable water yield without sand content (beyond permissible limit), with required capacity air compressor, running the compressor for required time till well is fully develo ped, measuring yield of well by "V" notch method or any other approved method, measuring static level & draw down etc. by step draw down method, collecting water sampl &getting tested in approved laboratory, disinfection of tubewell, all complete,including hire & labour charges of air compressor, tools & accessories etc., all as per requirement and direction of Engineer-incharge.  Bupplying all materials and labours for arrangement for additional water required during the drilling period for 40  Hrs & site clearance & leveling etc. And providing the soap duster etc. to staff engaged in drilling etc. all complete work as per specification & direction of E.I  1 No. Each Rs.4,336.54  Rs.28,187.48  6.5 M³ P/M³ Rs.4,336.54  Rs.28,187.48	4h	the tubewell etc. all complete as per direction of E/I.	6.5 M <sup>3</sup>	P/M <sup>3</sup>	Rs.917.00	Rs.5.960.50
Development of tube well in accordance with IS: 2800  24.12 (part I) and IS: 11189, to establish maximum rate of usable water yield without sand content (beyond permissible limit), with required capacity air compressor, running the compressor for required time till well is fully developed, measuring yield of well by "V" notch method or any other approved method, measuring static level & draw down etc. by step draw down method, collecting water sampl &getting tested in approved laboratory, disinfection of tubewell, all complete,including hire & labour charges of air compressor, tools & accessories etc., all as per requirement and direction of Engineer-incharge.  6 Supplying all materials and labours for arrangement for additional water required during the drilling period for 40 Hrs & site clearance & leveling etc. And providing the soap duster etc. to staff engaged in drilling etc. all complete work as per specification & direction of E.I  1 No. Each Rs.4,500.00	40	distance 400km.)	65 M <sup>3</sup>	D/M/3	Do 4 220 54	
usable water yield without sand content (beyond permissible limit), with required capacity air compressor, running the compressor for required time till well is fully develo ped, measuring yield of well by "V" notch method or any other approved method, measuring static level & draw down etc. by step draw down method, collecting water sampl &getting tested in approved laboratory, disinfection of tubewell, all complete,including hire & labour charges of air compressor, tools & accessories etc., all as per requirement and direction of Engineer-in-charge.  6 Supplying all materials and labours for arrangement for additional water required during the drilling period for 40 Hrs & site clearance & leveling etc. And providing the soap duster etc. to staff engaged in drilling etc. all complete work as per specification & direction of E.I  1 No. Each Rs.4,500.00		Development of tube well in accordance with IS: 2800	0.0 111	1 7101	115.4,330.34	R\$.28,187.48
permissible limit), with required capacity air compressor, running the compressor for required time till well is fully develo ped, measuring yield of well by "V" notch method or any other approved method, measuring static level & draw down etc. by step draw down method, collecting water sampl &getting tested in approved laboratory, disinfection of tubewell, all complete including hire & labour charges of air compressor, tools & accessories etc., all as per requirement and direction of Engineer-incharge.  Supplying all materials and labours for arrangement for additional water required during the drilling period for 40 Hrs & site clearance & leveling etc. And providing the soap duster etc. to staff engaged in drilling etc. all complete work as per specification & direction of E.I  1 No. Each Rs.4,500.00	24.12	(part I) and IS: 11189, to establish maximum rate of				
running the compressor for required time till well is fully develo ped, measuring yield of well by "V" notch method or any other approved method, measuring static level & draw down etc. by step draw down method, collecting water sampl &getting tested in approved laboratory, disinfection of tubewell, all complete,including hire & labour charges of air compressor, tools & accessories etc., all as per requirement and direction of Engineer-incharge.  3 Hrs. Each Rs.649.40 Rs.1,948.20 Supplying all materials and labours for arrangement for additional water required during the drilling period for 40 Hrs & site clearance & leveling etc. And providing the soap duster etc. to staff engaged in drilling etc. all complete work as per specification & direction of E.I  1 No. Each Rs.4,500.00		permissible limit), with required canacity air compressor				
develo ped, measuring yield of well by "V" notch method or any other approved method, measuring static level & draw down etc. by step draw down method, collecting water sampl &getting tested in approved laboratory, disinfection of tubewell, all complete,including hire & labour charges of air compressor, tools & accessories etc., all as per requirement and direction of Engineer-incharge.  8 Supplying all materials and labours for arrangement for additional water required during the drilling period for 40 Hrs & site clearance & leveling etc. And providing the soap duster etc. to staff engaged in drilling etc. all complete work as per specification & direction of E.I  1 No. Each Rs.4,500.00		running the compressor for required time till well is fully				
draw down etc. by step draw down method, collecting water sampl &getting tested in approved laboratory, disinfection of tubewell, all complete,including hire & labour charges of air compressor, tools & accessories etc., all as per requirement and direction of Engineer-incharge.  6 Supplying all materials and labours for arrangement for additional water required during the drilling period for 40 Hrs & site clearance & leveling etc. And providing the soap duster etc. to staff engaged in drilling etc. all complete work as per specification & direction of E.I  1 No. Each Rs.4,500.00  Rs.4,500.00		develo ped, measuring yield of well by "V" notch method				
water sampl &getting tested in approved laboratory, disinfection of tubewell, all complete,including hire & labour charges of air compressor, tools & accessories etc., all as per requirement and direction of Engineer-incharge.  3 Hrs. Each Rs.649.40 Rs.1,948.20 Supplying all materials and labours for arrangement for additional water required during the drilling period for 40 Hrs & site clearance & leveling etc. And providing the soap duster etc. to staff engaged in drilling etc. all complete work as per specification & direction of E.I  1 No. Each Rs.4,500.00		or any other approved method, measuring static level &				
disinfection of tubewell, all complete,including hire & labour charges of air compressor, tools & accessories etc., all as per requirement and direction of Engineer-incharge.  3 Hrs. Each Rs.649.40 Rs.1,948.20 Supplying all materials and labours for arrangement for additional water required during the drilling period for 40 Hrs & site clearance & leveling etc. And providing the soap duster etc. to staff engaged in drilling etc. all complete work as per specification & direction of E.I  1 No. Each Rs.4,500.00 Rs.4,500.00		water sampl &getting tested in approved laborates				
labour charges of air compressor, tools & accessories etc., all as per requirement and direction of Engineer-in-charge.  3 Hrs. Each Rs.649.40 Rs.1,948.20 Supplying all materials and labours for arrangement for additional water required during the drilling period for 40 Hrs & site clearance & leveling etc. And providing the soap duster etc. to staff engaged in drilling etc. all complete work as per specification & direction of E.I  1 No. Each Rs.4,500.00 Rs.4,500.00		disinfection of tubewell, all complete including hire &				
charge.  Supplying all materials and labours for arrangement for additional water required during the drilling period for 40  Hrs & site clearance & leveling etc. And providing the soap duster etc. to staff engaged in drilling etc. all complete work as per specification & direction of E.I  3 Hrs. Each Rs.649.40 Rs.1,948.20  Rs.1,948.20		labour charges of air compressor, tools & accessories				
Supplying all materials and labours for arrangement for additional water required during the drilling period for 40  Hrs & site clearance & leveling etc. And providing the soap duster etc. to staff engaged in drilling etc. all complete work as per specification & direction of E.I  1 No. Each Rs.649.40 Rs.1,948.20  Rs.1,948.20		etc., all as per requirement and direction of Engineer-in-				
additional water required during the drilling period for 40  Hrs & site clearance & leveling etc. And providing the soap duster etc. to staff engaged in drilling etc. all complete work as per specification & direction of E.I  1 No. Each Rs.4,500.00  Rs.4,500.00	6		3 Hrs.	Each	Rs.649.40	Rs.1,948.20
Hrs & site clearance & leveling etc. And providing the soap duster etc. to staff engaged in drilling etc. all complete work as per specification & direction of E.I 1 No. Each Rs.4,500.00 Rs.4,500.00						
soap duster etc. to staff engaged in drilling etc. all complete work as per specification & direction of E.I 1 No. Each Rs.4,500.00 Rs.4,500.00						
complete work as per specification & direction of E.I 1 No. Each Rs.4,500.00 Rs.4,500.00						
707.1			1 No.	Each	Rs.4,500.00	Rs 4 500 00
00.16111100						Rs.1,11,137.68

#### (Sub Estimate - 2) Analysis of Chamber for TW

Supplying materials, labours and constructing chamber of following dimension having 250mm thick wall in C.M. (1:4) in cluding 12mm C.P. (1:3) with punning inside, R.C.C. cover slab with C.I. Surface box, 20mm dia foot rest at 150mm interval 10mm dia lifting ring etc. all complete.

	SIZE	1.00 M x 1.00 M x 0.75			M deep	'			
SOB	T								
S.O.R. No.	<u>Particulars</u>	No.	Ŀ	W	<u>H</u>	Qty.	<u>Unit</u>	<u>Rate</u>	<u>Amount</u>
<u>1</u>	Earth work in excavation	1	1.75	1.75	1.0	3.063 M <sup>3</sup>	P/M <sup>3</sup>	Rs.230.50	Rs.705.91
S.O.R. N	lo. 2.8						1 3141	143.250.50	145.705.81
<u>2</u>	Sand filling	1	1.75	1.75	0.075	0.230 <sub>M</sub> ³	P/M <sup>3</sup>	Rs.204,40	D- 40.05
S.O.R. N	lo. 2.28				0.0.0	0.200 N	PAVI	NS.204,40	Rs.46.95
<u>3</u>	Brick flat soling	1	1.75	1.75		3.063 M²	P/M²	Rs.253,80	D- 777.00
\$.O.R. 1	1.72					C.OCO IVI	P/IVi	13.255,00	Rs.777.26
<u>4</u>	P.C.C. (1:2:4) in foundation	1	1.75	1.75	0.10	0.306 M <sup>3</sup>			-
S.O.O. 4	.1.3					5.000 Jyl			
						0.306 M <sup>3</sup>	P/M <sup>3</sup>	Rs.3,850.50	Do 1 170 00
<u>5</u>	B/Work in (1:4) C.M.	2	2.50	0.25	0.75	0.938 M <sup>3</sup>	P/M <sup>3</sup>		Rs.1,179.22
S.O.R. N	0. 6.1.12/1		_		0.,0	0.000 IVI	P/IVI	Rs.4,724.40	Rs.4,429.13
<u>6</u>	R.C.C. Cover slab(1:1.5:3)	1	1.50	1.50	0.15	0.338 M <sup>3</sup>	P/ <b>M</b> <sup>3</sup>	Rs.5,139.70	Da 4 704 05
\$.O.R. N	0. 5.2.2 & 5.9.3					0.000 [0]	F/IV(	175.5, 159.70	Rs.1,734.65
	shuttering	2	1.50	1.50	0.15	3.15 M <sup>2</sup>	P/ <b>M</b> ²	Rs.291.00	Da 040 05
7	C.P. (1:3) with 5% Cico & neat cement				••	5. 10 IM	P/IVI	175.291.00	Rs.916.65
S.O.R.	Internal face	2	1.00	4 00	4.00				
No.	internal race	2	1.00	1.00	1.00	$4.00 \text{ M}^2$			
13.17.1	Bed surface	1	1.00	1.00		1.00 M <sup>2</sup>			
+13.36.1						5.00 M <sup>2</sup>	P/M²	Rs.166,30	Rs.831.50
_							. / 141	7.00.00	113.001,00
8	C.P. (1:4) out side of wall	2	1.50	1.50	0.75	4.5 M <sup>2</sup>	P/ <b>M</b> <sup>2</sup>	Rs.114.70	Rs.516.15
\$.O.R. No						•••			110.010.10
9	8mm dia T.S. Rod								
S.O.R. No	D. 5.22.7A								
		0.338	M <sup>3 x</sup>	70 1	Ka/ M3	23.625 Kg.	P/Kg	Rs.56.00	De 1 202 02
	Lifting Ring of 10mm dia					_0.020 rtg.	i my	r\\$.50.00	Rs.1,323.00
	Rod					4 No.	Each	Rs.30.00	Rs.120.00
						. ,			
<u>11</u>	Carriage of materials 5%							Total	Rs.12,580.41
_	go v. materials 0 70								Rs.629.02
						_			Rs.13,209.43

	Sub Est. No	<u> </u>		•	± + + + × 1+ +	Harris Company
	WATER SUPPLY DISTRIE	BUTION	SYS	TEM		
S.N	- articulars	Quai	ntity	Uni	t Rate	Ann
1A	Earthwork in excavation over areas (exceeding 30 cm in		寸		7,440	Amiount
	depth 1.5 in width as well as 10 sqm on plan) including		İ			
	disposal of excavated earth lead upto 50m and lift upto			i		
	1.5m, disposal earth to be levelled and neatly dressed.					
	75mm dia Pipe 150.00 0.30 1.10 =	40.	-		<del>-</del>	
	63mm dia Pine	49.5			<u> </u>	
	50mm dia Pina	49.5	50		<u> </u>	
	140	99.0	00 -			
	400.00 0.30 1.10 =	132.0		- :		
	Add 5% extra for fittings =	330.0			+	
	- 1.52 0.10 CAUZI TOF HILLINGS 2		0 M	<u> </u>	·	
1B	Provision for PCC road cutting and its restoration	346.5			, · · · · · · · · · · · · · · · · · · ·	
2	Filling available excavated earth (excluding rock) in	11.2	ુ M	° P/ <b>M</b>	Rs.4,428.80	Rs.49,824.0
	trenches, plinth, sides of foundations etc. in layers not			-		
	exceeding 20cm in depth, consolidating each deposited			!		
	layer by ramming and watering, lead up to 50 m and lift		: 	1	: : I	
	upto 1.5 m.	220.5	_	33		
3	Providing and laying High Density Polyethyene pipe	339.5	/ M	<sup>3</sup> P/M <sup>3</sup>	Rs.74.50	Rs.25,297.9
	(HDPE pipe) of 20 mm to 225 mm OD and pressure 6.0				:	
	Kg/cm2 and 10 Kg/cm2 sutable for water supply which is				:	
:	available in all standard, like ISI-4984/1995, and various		·			
i	grades like PE-80, PE-100 including required specials			:	:	
	Rates are inclusive of , all taxes and duties (Exise duty					
ŗ	@12.50% &CST @2% against Form 'C'), labour cess				:	
	contractor profit and overhead charges all complete as					
Α	per direction of Engineer-in-charge.				į	
^	HDPE pipe of materials grade PE100-PN10 (dia in mm)					
	75mm dia Pipe from PVC Tank to Distribution main	_:	<del> </del>	·		
	75mm dia Pipe	10.00	M	P/M	Rs.239.81	Rs.2,398.10
		150.00	M	P/M	Rs.239.81	Rs.35,971.50
.止 3 上	63mm dia Pipe	150.00	M	P/M	Rs.168.77	Rs.25,315.50
1	HDPE pipe of materials grade PE100- PN8 (dia in mm)	•				
	50mm dia Pipe		;	,		
	10mm dia Pipe	300.00	÷	P/M	Rs.89.99	Rs.26,997.00
+-		400.00	M	P/M	Rs.59.78	Rs.23,912.00
F	Omm dia Pipe from T/well to PVC Tank	12.00	M	P/M	Rs.59.78	Rs.717.36
'_	Providing and fixing brass gate valve with C.I. wheel of		[			
- 1	pproved quality (screwed end).		<u> </u>			
1	5mm dia Pipe	3	Nos	Each	Rs.1,351. <b>6</b> 0	Rs.4,054.80
6	3mm dia Pipe	2	Nos	Each	Rs.1,351.60	Rs.2,703.20
5	0mm dia Pipe			Each		
4	0mm dia Pipe				Rs.811.40	Rs.1,622.80
		4	Nos	Each	Rs.613.90	Rs.2,455.60

•

S.N.		Particula	ire .		<del></del> 1				
5	Constructing masonry			75. om	  -: -bia-	Quant	ity	Unit	Rate
18.33	brick work in cement	mortar 1	4 (1 ca	nont:	inside, in				
	sand) for sluice valve	with CI		hov 10	4 coarse	+ r			
	diameter, 160 mm bot	tom diam	oter and	100	Umm top				
	inside) with chained li	d and BC	eter and	IBU MI	n deep (				
	cement : 2 coarse s	and A	cop s	ab 1:2:	4 mix (1				
	20mm nominal size \	anu , 4 (	graded s	stone a	ggregate		İ		
	20mm nominal size ) ,	necessar	y excava	ation, fo	undation				
	concrete 1:5:10(1 ceme	ent : 5 mme	e sand :	10 grad	ed stone				
	aggregate 40 mm nom	inaisize) a	and inside	e plaste	ring with				
	cement mortar 1:3 (1	cement	3coarse	sand)	12 mm				
	thick, finished with a	tioating	coat o	f neat	cement				
	complete as per standa Work for additional dep	ra specific	cations &	directic	on of E/i.	9	No	Each	Rs.5,807.50
	<u>i</u>		·						
	Brick work (1:4) in found	dation					T	<del> +</del>	
	2	1.10	0.25	0.35	0.193		Ī	T - T	
<u> </u>	2	0.60	0.25	0.35	0.105				
	DI- ( ( )		<u>-</u>		0.298	2.678	Cut	CuM	Rs.4,724.40
	Plaster (1:3)						<u> </u>		113.4,724.40
	8	1.10		0.35	3.08	27 72	Sal	SqM	Po 129 20
6	Carriage 10% of item 5						Oqi	Sqivi	Rs. 128.20
7	Providing and placing	on terra	ce (at a	II floor	levels)	<del></del>	<del> </del>	<del> </del>	
8.48	polyethylene water stora	ige tank. I	SI : 1270	)1 mark	ed with:		!		
l	cover and suitable loo	cking or			CO, WILLI,			:	
	101 Oddania	oning after	ıngemen	ı and	making	i			
	necessary holes for inle	et, outlet :	and over	flow pi	pes but				
۷!	without fittings and the b	ase suppo	rt for tar	ık.	•	5000	Ltrs	P/Ltr	Rs.6.60
<u>8</u>   F	Providing and fixing PTM	fT extensi	on nipple	for was	ter tank	<del></del>			113.0.00
	pipe, fittings of approved	quality ar	id colour						!
- <del> i</del> -	10mm dia					2	Nos	each	Rs.250.00
7	75mm dia	·		· —			···	each	Rs.400.00
	<u></u> -	<del>-</del>				· ·	. 40.  \ 		TS.400.00

Annount

Rs.52,267.50

Rs.12,649.58

Rs. 3,553.70 Rs. 6,847.08

Rs.33,000.00

Rs.500.00 Rs.400.00

Rs.3,90,355.94

TOTAL

Sub Est. No. 4

Model estimate for supply, installation & commissioning of single phase 2 H.P submersible motor pump set with all accessories including extension of L.T. line from nearest source up-to

SI. No.	Particulars	Quantity	Unit		Amount
1	2	3	4	5	6
(	Supply Installation, commissioning and testing of single phase 2 H.P. submersible pump set having discharging capacity 2.5 lps at a total head of 35 meter (approx) of KSB/Kirloskar or equivalent make with all accessories & fittings etc including loading unloading and transportation of the pump set to the work site with all required labour, materials, tools and tackles installation, testing & commissioning as per standards specifications and direction of E/I.  (i) 40 mm dia x 3 mtrs long medium class G.I column pipe both end threaded and one end socketed- 6(six)nos  (ii) 1x3x1.5 mm² flat copper conductor submersible cable -40 (forty) mtrs.  (iii) 40 mm dia union socket- 1(one) no.  (iv) 50 mm dia x 250 mm long G.I. nipple- 1 (one) no.  (vi) 40 mm dia G.I Elbow—1(One) no.  (vii) 40 mm dia M.S. clamps—2(Two) rairs.  (viii) 40 mmx 250 mm long G.I nipple- (One) no.  (viii) Tube well cap for 125 mm dia (Well — 1(one) no.  (viii) Tube well cap for 125 mm dia (Well — 1(one) no.  (viii) Tube well cap for 125 mm dia (Well — 1(one) no.	1 ( <b>o</b> ne) job	p/job	Rs.30,500,00	Rs.30,500.00

<u></u>						
îc.					Y	
L W						
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1				- 19 17 S. J. P	en de la companya de	tala en 'Calle
ž.						
<u> </u>						
						•
	[B]	Supply Installation, commissioning			]	.
<b>`</b>		and testing of floor mounted outdoor	<b>\</b>			
on the state of th		type L.T feeder pillar single phase				
<u>,</u>		starter controll pannel operated on			]	f
(		220 V, 3 phase , 50 c/s for 2 HP			ļ	
		Submersible pump set made of MS			ļ	
)		sheet (minimum 2 mm thick) duly				
		spray power coated painting with				
`		following accessories made of M.S				
		sheet ( minimum 2mm thick) duly				
_		spray powder coated painting with				
		following accessories	1 (one) job	p/job	Rs.28,500.00	Rs.28,500.00
~		(i) 95-272 V range single phase 5 KVA				
		automatic voltage stabilizer make-	]			
		Sen & Pandit/ Vertex/ISI marked If			:	
_ •		any. 1 No.			·	•
·		(ii) Suitable single phase starter control				
^		panel for above motor of BCH /L&Tmake				
		l– 1(one) no.				
	[C]	Supplying & fitting 2.5 mm <sup>2</sup> copper				
~		service cable from power point from				•
		nearest source up-to pumping		:		
		station	20 mtrs	P/Mt	Rs.130.00	Rs.2,600.00
_	[D]	Providing all materials and labour				
		required for doing earthing station				
~		with G.I earth pipe of 40 mm dia x 4.5		İ		
		mtrs 20fts. long G.I pipe including				
		accessories excavation of earth,				
_		providing masonry enclosure with				
		cover plate having locking				
^ -		arrangement and watering pipe				
		etc.with salt, charcoal,etc.as per IE &				
, [		IS specification.	1 job	p/job	Rs.2,803.00	Rs.2,803.00
$\hat{}$					Total Rs.	Rs.64,403.00

Sub Est. No. 5

<del></del> -	Estimate for the work - House service connection  SUB-ESTIMATE												
S.No.	Description SUB-ESTIMAT		. 1 11-2	. 1									
<b>1</b> A	Providing and fixing MDPE (PE 80	Qty	' Unit	Rate	Amount								
	GradeCompound) pipes PN-12.5 (12.5kg/Sqcm)	\\											
	as per ISO 4427 and specification for		j										
	waterapplication rates are inclusive of, taxes and	<u>'</u>											
	duties (Exise duty @12.50% &CST @2% against	<u>,</u>											
	Form 'C'), labour cess, contractor profit and				<u> </u>								
	overhead charges all complete asper direction of	L											
	Engineer-in-charge.complete.												
<del></del>	MDPE Pipe 20mm dia nominal bore	-											
1B		6.00	PM	Rs.19.97	Rs.119.8								
10	Providing and fixing Chlorinated Polyvinyl												
	Chloride (CPVC) pipes, having thermal stability		1										
	for hot & cold water supply, including all CPVC												
	plain & brass threaded fittings, including fixing												
	the pipe with clamps at 1.00 m spacing. This	1											
	includes jointing of pipes & fittings with one step	ĺ	i	1									
	CPVC solvent cement and testing of joints												
	complete as per direction of Engineer in Charge. Internal work - Exposed on wall			-									
	internal work - Exposed on Wall												
18.7.1	15 mm nomonal bore	1.0	PM	Rs.138.70	Rs.138.70								
2	Earth work in excavation in foundation trenches		+	1.0.100.70	13.130,70								
	or drains(not exceeding 1.5 m in width or 10 sam												
	on plan) including dressing of sides and amming												
	of bottoms, lift upto 1.5 m. including getting out			•									
	the excavated soil and disposal of surplus		}	İ									
	excavated soil as directed, within a lead of 50 m.			1									
	All kinds of soil												
2.8.1	6.00 0.30 0.60 1.08	1.08	CuM	Rs.230.50	Rs.248.94								
3	Filling available excavated earth (excluding rock)												
<b>2</b> .26	in trenches, plinth, sides of foundations etc. in												
	layers not exceeding 20 cm in depth:			Rs.74.50	Rs.78.85								
	consolidating each deposited layer by ramming												
	and watering lead	1.06	CuM										
4	Providing and fixing brass ferrule with Cl mouth												
	cover incuding boring and tapping the main:		<u> </u>										
18.20.1	15mm nominal bore	1	Each	Rs.254.10	Rs.254.10								
	Providing and fixing P.P. Black service Saddle												
	(Brass threaded)	1	Each	Rs.400.00	Rs.400.00								
5	Providing and fixing brass bib cock of approved												
0 15 1	quality :												
8.15.1	15mm nominal bore	1	Each	Rs.273.00	Rs.273.00								
	Total Say				Rs.1,513.41								
	Total Nos. of House Holds= 100 N	los	<u> </u>	Rs.1,513.00	Rs.1,513.00 Rs.1,51,300.00								

	Sub Es 3 M HIGH STEEL STRUCTURE STA	GING I	OR 50	000 LITER	R PVC TANK	
S.N.	;	Cit	antity	Unit		Am ount
1	Structural steel work riveted or bolted in built up	)	7		- Tues	AirOunt
<u>10.3</u>	sections, trusess and framed work, including	)		1		
	cutting, hoisting, fixing in position and applying a	1	İ			
·	priming coat of approved primer all complete	i	1			
•	8M high staging with GI enclosure to house	3	7		<del>-</del>	† ·
	electric switch panel of suitably designed MS	<b>;</b>				:
	section of angle, channel, etc. as per drawing		ļ	:	!	
2	attached.	14	90 Kg	P/Kg	Rs.69.20	Rs.1,03,108.00
2.8.1	Earth work in excavation in foundation trenches		1			100.00
2.0.1	or drains(not exceeding 1.5 m in width or 10 sqm	ŀ	i		•	
	on plan) including ressing of sides and ramming	ļ	ļ		:	
	of bottoms, lift upto 1.5 m . including getting out					
	the excavated soil and disposal of surplus	:	:			
	excavated soil as directed, within a lead of 50 m.	į			•	
	All Kinds of soil	:	:			
	base of footing		:	•	* ***	
	<u>4</u> <u>1.20</u> <u>1.20</u> <u>1.425</u> = <u>8.208</u>		:			
	For fixing Ladder		1			
i	1 1.00 0.50 0.275 = 0.138				:	*** * ** *** ***
	8.346	8.34	6 M <sup>3</sup>	P/M <sup>3</sup>	Rs.230.50	Po 1 000 04
3-	Supplying and filling in plinth with local sand and		- 141	CAIM		Rs. 1,923.64
2.28	under floors including watering, ramming		:			
İ	consolidating and dressing complete.		:			
	base of footing	-			· · · · · · · · · · · ·	<u></u>
	4 4 00 4 00		<del>-</del>		· • • · · · · · · · · · · · · · · · · ·	
	4   1.20   1.20   0.10   = 0.576 anding Plateform		<u> </u>	<del></del>		
	4 400 0.50		<u></u>			
	0.000	:	. :			
4-	O.626	0.62	6 M <sup>3</sup>	P/M <sup>3</sup>	Rs.204.40	Rs.127.95
1.72 i	Providing designation of 100A Brick flat Soling		!			
را - ۰۰۰	oints filled with local sand including cost of				1	
i	vatering, taxes & royalty all complete as per specification & direction of E/I.					i
<u> </u>	pase of footing					1
_ :	4 00 1 4 00				•	
- :	3.700				•	
· — ·   •	anding Plateform  1 1.00 0.50 = 0.500					
5 P	Foulding and leving in the second sec	6.260	) M <sup>2</sup>	P/M <sup>2</sup>	Rs.253.80	Rs.1,588.79
.1.2	roviding and laying in position cement concrete			,		1,0000
o	f specified grade extuding the cost of centring					1
!	·					
ia	nd shuttering-all work upto plinth level.					
⊹1	1.5:3(1 Cement :1.5 coarse sand:3 graded			•	•	4 44 4
s	one aggregate 20 mm nominal size)				•	İ
b	ase of footing				i ,	
j	4 1.20 1.20 0.100 = 0.576		-	· · · · · · · · · · · · · · · · · · ·	ļ <u></u>	
F	or Grouting at base plate					}
		ě				• • • • • • • • • • • • • • • • • • • •
	0.008					
L8	anding Plateform		i .			···
	1 1.00 0.50 0.10 = 0.050					· · ·
7	<u> </u>		ļ <u>.</u>			
6 Pr	Oviding and loving in marking in	0.634	M	P/M <sup>3</sup>	Rs.4,373.20	Rs.2,772.61
	oviding and laying in position specified grade					
of	reinforced cement concrete excluding the cost		i .			
<b> </b>	entring, shuttering, finishing and reinforcement- work puto plinth level	i				
1	15:3/1 compet 1.5			.	:	
l.	1:5:3(1 cement: 1.5 coarse sand:3 graded					·
SIC	one aggregate 20 mm nominal size)	1	:	į	•	1
}	se of footing			į		
	4 1.00 1.00 0.30 = 1.200					···
Co	lumn below GL					
		i		į	i	L
	4 0.20 0.20 0.85 = 0.136				····	

S.N.			Par	ticulars			Quan	tity	Unit	Rate	Am ount	
	Colun	nn above								11440	AntOunt	
	4	0.20	0.20	0.25	=	0.040			general de la companya de la company		the state of the winds	
				1		1.376	1.376	$M^3$	P/M <sup>3</sup>	Rs.4,530.30	Rs. 6,233.69	
7-	Centri		and	shutteri		including					1.0.0,200.03	
5.9.1	struttii	ng,proppi	ng etc. a	and remov	val of	form for.		!				
	16	1.00	0.30		=	4.800						
	16	0.20	0.85		=	2.720				T		
	16	0.20	0.25		=	0.800		<u>;</u>		<u> </u>		
						8.320	8.320	M <sup>2</sup>	P/M <sup>2</sup>	Rs.169.00	Rs. 1,406.08	
8- 5.22	straigh and bi	proement ntening, on nding all to 16 mm	cutting, b	ending, p e.	work	including in position					1.400.08	
		Reinforce		<del></del>		<u></u>		<u> </u>	·	<del>.</del>		
	1.5	% of Vol		crete		=	86.00	Kg.	P/Kg.	Rs.56.00	Rs.4,816.00	
9 <b>2</b> .26	in trer layers	les of oung 19	undati cm	uding rock) ons etc. in in depth: y ramming	2.086	M <sup>3</sup>	P/M <sup>3</sup>	Rs.74.50	Rs.155.43			
<u>10</u> 10.19	Provid and 0. all co	ing and 60 <b>Mt</b> rle	fixing a ngth em as per	bedded ir direction	ı R.C.	12 mm dia C pedestal ngineer in					1/5.100,45	
11-	Paintin	a with	ready n	y nived nai	int of	approved	4.2624	Kg	P/kg	Rs.73.60	Rs.313.71	
	brand even s	and man hade:	ufacture	e in all sh	ades	to give an		-				
	Frame		(two or	more coa	IS)	<del></del>	:		<u></u>	· •		
	0.5	14.00	3.00			21.000			<u> </u>	: <del>!</del>		
	0.5	3.50	3.50		=	6.125			·	L		
						27.125	27.13	M <sup>2</sup>	M <sup>2</sup>	Rs.63.60	Rs.1,725.15	
<u>12</u>	work staking direction	site incl at wor <u>n of E/I.</u>	luding rk site	loading, as per	unloa speci	quarry to ding and fication &			:	:	3,123.10	
	i			a & 1 Km.	Kach	ha lead)	203	Nos.	%0 nos.	Rs.606.10	Rs.123.04	
	(b) Coa	arse Sand	1 (100 K	m. lead)			0.860	M <sup>3</sup>	P/M <sup>3</sup>	Rs.1,221.09	Rs.1,050.14	
		ne Chips					1.730	M <sup>3</sup> .	P/ <b>M</b> <sup>3</sup>	Rs.1,746.29	Rs.3,021.08	
	(d) Loc	al Sand (	2 Km. F	oucca & 1	Km.	Kachha lea	0.720		P/M <sup>3</sup>	Rs.217.23	Rs.156.41	
										TOTAL say	Rs.1,28,521.72 Rs.1,28,500.00	
									•	,	,20,000.00	

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### GOVERNMENT OF BIHAR

PUBLIC HEALTH ENGINEERING DEPARTMENT

MODEL ESTIMATE

FOR

CONSTRUCTION OF RURAL PIPED WATER SUPPLY SCHEME FOR A WARD HAVING 100 HOUSE HOLD S

ESTIMATED COST-- Rs. 9.089 Lac

2017-18

## GOVERNMENT OF BIHAR Fublic Health Engineering Department ABSTRACT OF COST

### NAME OF WORK:- CONSTRUCTION OF RURAL PIPED WATER SUPPLY SCHEME FOR WARD HAVING 100 HOUSE HOLDS

S.N	Description	T =
1	Construction of 125mm X75mmx 90m deep T/W for rocky strata etc. al	Total Amount
	complete and as per direction of E/I.	<b>!</b>
	(As per sub Estimate no1)	D= 1.50.000 ===
2	Constructing masonry Chamber 100x100x75 cm inside, in brick work in	Rs.1,52,096.68
	Certient mortar 1:4 (1 cement : 4 coarse sand) for Tube Well and BCC too	.]
	Islab 1.1.5.3 mix (1 cement : 1.5 coarse sand : 3 graded stone aggregate	
	[20th Horning size], necessary excavation foundation concrete 1:2:4/4	Ì
	cement: 2 fine sand: 4 graded stone aggregate 20 mm nominal size) and	
	Initiate plastering with cement mortar 1:3 (1 cement : 3 charse sand) 12 mm	
	thick with 5% cico fnished with a floating coat of neat cement, out side	
	plastering with cement mortar 1:4 (1 cement : 4coarse sand) 12 mm thick	
	complete as per standard specifications & direction of E/I.	
	(As per sub Estimate no2)	
3	Providing and Laying Distribution network of High Density Polyethyone pine	Rs.13,210.00
	(HDFC pipe) including 5000 liter PVC tank installed at 3M high MS stocked	
	etc all complete as per direction of F/I (As per sub Estimate as 2)	1
4	Cupply installation, commissioning and testing of single phase 2 HD	Rs.3,90,355.94
	submersible pump set having discharging capacity 2.5 lps at a total head of	
	35 meter(approx) of KSB/ Kirloskar or equivalent make with all accessories &	
	intuings etc including loading unloading and transportation of the numb set to	į
	the work site with all required labour, materials, tools, and tackles installation	
	testing & commissioning as per standards specifications and direction of E/I	
	(vis per sub estimate no 4)	Rs.64,403.00
5	Providing house connection for each house hold including supplying all	110.04,400.00
- [	materials, labours, looks and making terrule connection with 20 mm dist	}
ĺ	With L and 15mm CPVC Pipes with all fittings etc all complete	
6	(As per sub Estimate no 5)	Rs.1,51,300.00
1	Providing and erecting 3 M high staging of suitably designed MS section of	
1	angle, channel etc. as per drawing attached. (As per sub Estimate no 6)	Rs.1,28,500.00
	TOTAL	Rs.8,99,865.62
	Add 1% Contingency	Rs.8,998.66
	G. TOTAL	Rs.9,08,864.28
	Rs. Nine Lakh Fight Thousand Ni	Rs.9,08,900.00

(Rs. Nine Lakh Eight Thousand Nine Hundred) only

#### Note:

i) This model estimate has been prepared in the light of Guidelines of PRD, Bihar memo no. 6278 dt.23.09.2016. This estimate may not ensure standard pressure in the distribution network. Hence on the spot change in staging of storage tank may be required.

ii) Water quality testing of source should be done after construction of Tube well.

iii) Road cutting cost may increase or decrease as per local condition.

Technical approval accorded for Rs.9,08,900.00 (Rs. Nine Lakh Eight Thousand Nine Hundred)

only

M

Montany Source

Surishire Surishire

Chief Engineer (Design)

Public Health Engineering Department

Bihar, Patna

Sub Est. No. 1

CONSTRUCTION OF 125MM X 75MM DIA & 90M DEEP TUBE WELL

(For Rocky strata including Boulders)

S.No.	Description	Qty.	Unit	Rate	Am <b>©</b> unt
1	Boring/drilling bore well of required dia for casing/strainer	<del></del>		<u> </u>	
	pipe, by suitable method prescribed in IS: 2800 (part i),				
	including collecting samples from different strata,			•	
	preparing and submitting strata chart/ bore log, including				
	hire & running charges of all equipments, tools, plants &				
	machinenes required for the job, all complete as per	g			
	direction of Engineer -in-charge upto 90 metre depth				
	below ground level. (Rocky strata including Boulders)				
1.1.1	(a) 300mm dia bore from G.L. to 90.0M	<b>90</b> .0 M	P/M	Rs.833.10	Rs.7 <b>4,97</b> 9.00
2	Supplying, assembling, lowering and fixing in vertical position in bore well, unplasticized PVC (UPVC) medium well casing (CM) pipe of required dia, conforming to IS: 12818, including required hire and labour charges, fittings & accessories etc. all complete, for all depths, as per direction of Engineer -in-charge.				
	(b) 125 mm nominal size dia	30.0 M	P/M	Rs.462.50	Rs.13,875.00
4.3.5	(b) 75 mm nominał size dia	34.0 M	P/M	Rs.328.50	Rs.1 1,169.00
1.4.5	(c) 75 mm dia U.P.V.C. strainer	21.0 M			•
3	Providing all materials, tools & labours and fixing the following fittings etc. all complete as per specification & direction of E/I.	21.0 14	P/M	Rs.420.30	Rs.8,826.30
	(a) 125 mm dia P.V.C. well cap	1 No.	Each	Rs.166.60	Rs.166.60
	(b) 125 mm dia center guide	4 Nos.	Each	Rs.100.00	Rs.400.00
	(c) 75 mm dia center guide	6 Nos.	Each	Rs.75.00	Rs.450.00
	(d) 75 mm dia P.V.C. pipe shoe plug	1 No.	Each	Rs.185.00	Rs.185.00
	(e)125mm x 75 mrn dia P.V.C. Reducer	1 No.	Each	Rs.475.00	Rs.475.00
	(d)125 mm dia M.S.Clamp	1 No.	Each	Rs.974.60	Rs.974.60
а	Providing all materials, labours, & equipments for fixing				
4.6	tubewell with peagravel of Dalbhumigarh to size 4mm to				
	8mm approx. as suitable for strata including carriage				
	washing, placing and packing the same in position around				
4b	the tubewell etc. all complete as per direction of E/I. Camage of Pea Gravel from Dhalbhumigarh (taken av	6.5 M <sup>3</sup>	P/M³	Rs.917.00	Rs.5,960.50
5 .12	distance 400km.) Development of tube well in accordance with IS: 2800 (part I) and IS: 11189, to establish maximum rate of usable water yield without sand content (beyond permissible limit), with required capacity air compressor, running the compressor for required time till well is fully developed, measuring yield of well by "V" notch method or any other approved method, measuring static level & draw down etc. by step draw down method, collecting water sampl &getting tested in approved laboratory, disinfection of tubewell, all complete, including hire & abour charges of air compressor, tools & accessories etc., all as per requirement and direction of Engineer-incharge. Supplying all materials and labours for arrangement for additional water required during the drilling period for 40 drs & site clearance & leveling atc. And providing the	6.5 M <sup>3</sup>	P/M³	Rs.4,336.54	Rs.28,187.48
	Hrs & site clearance & leveling etc. And providing the				
	coap duster etc. to staff engaged in drilling etc. all		_		
C	complete work as per specification & direction of E.I	1 No.	Each	Rs.4,500.00	Rs.4,500.00

(Sub Estimate - 2)
Analysis of Chamber for TW

0

Supplying materials, labours and constructing chamber of following dimension having 250mm thick wall in C.M. (1:4) in cluding 12mm C.P. (1:3) with punning inside, R.C.C. cover slab with C.I. Surface box, 20mm dia foot rest at 150mm interval SIZF.

	SIZE		1.00 M		x 1.00 M		0.75	M deep	
S.O.R.	T	<del></del>				<u>ом х</u>	0.10	w deep	
No.	<u>Particulars</u>	<u>No.</u>	<u> </u>	<u>w</u>	H H	Qty.	Unit	Rate	Amount
<u>1</u>	Earth work in excavation	1	1.75	1.75	1.0	3.063 M <sup>3</sup>	P/M <sup>3</sup>		
S.O.R. N	o. 2.8		_			3.003 10	P/M²	Rs.230.50	Rs.705. <b>91</b>
<u>2</u> S.O.R. N	Sand filling o. 2.28	1	1.75	1.75	0.075	5 0.230 M <sup>3</sup>	P/M <sup>3</sup>	Rs.204.40	Rs.46. <b>95</b>
· <u>3</u> S.O.R. 11	Brick flat soling	1	1.75	1.75		3.063 M <sup>2</sup>	P/M <sup>2</sup>	Rs.253.80	Rs.777.26
<u>4</u> S.O.O. 4.	P.C.C. (1:2:4) in foundation 1.3	1	1.75	1.75	0.10	0.306 M <sup>3</sup>			
5	B/Work in (1:4) C.M.	2	0.55			0.306 M <sup>3</sup>	P/M <sup>3</sup>	Rs.3,850.50	Rs.1,179.2 <b>2</b>
\$.O.R. No	0. 6.1.12/1	2	2.50	0.25	0.75	0.938 M <sup>3</sup>	P/ <b>M</b> <sup>3</sup>	Rs.4,724.40	Rs.4,429.13
. <u>6</u>	R.C.C. Cover slab(1:1.5:3) 5.5.2.2 & 5.9.3	1	1.50	1.50	0.15	0.338 M <sup>3</sup>	₽ <b>/M</b> ³	Rs.5,139.70	Rs.1,734.65
-	shuttering C.P. (1:3) with 5% Cico & neat cement	2	1.50	1.50	0.15	3.15 M <sup>2</sup>	P <b>/M</b> <sup>2</sup>	Rs.291,00	Rs.916.65
140.	Internal face	2	1.00	1.00	1.00	4.00 M <sup>2</sup>			
13.17.1 <sub> </sub> +13.36.1	Bed surface	1	1.00	1.00		1.00 M <sup>2</sup>			
	25.4					5.00 M <sup>2</sup>	P/M <sup>2</sup>	Rs.166.30	Rs.831.50
S.O.R. No.		2	1.50	1.50	0.75	4.5 M <sup>2</sup>	P/M²	Rs.114.70	Rs.516.15
9 8 S.O.R. No.	8mm dia T.S. Rod 5.22.7A								
10 L	ifting Ring of 10mm dia	0.338	M³ ×	70 M	<g <br="">∕/3</g>	23.625 Kg.	P/Kg	Rs.56.00	Rs.1, <b>3</b> 23.00
<u></u> ⊬	Rod					4 No.	Each	Rs.30.00	Rs.120.00
<u>11</u> 0	аптаде of materials 5%							Total	Rs.12,580.41 Rs.629.02
									Rs.13,209.43
						Say	Rs.13,2	10.00	

· .	·	* .b'		Sub Est.	<u>No. 3</u>			wega janaa	v operate act of
			WATER	SUPPLY DIST	RIBUTIO	N SYS	TEM		<del></del>
S.N.		Particul	-		Qua	ntity	Unit	Rate	Annount
1A	Earthwork in excav				1				
	depth 1.5 in width	as well as	10 sqm o	n plan) including	3				
	disposal of excava	ted earth lea	ad upto s	50m and lift upto	)			-	
·	1.5m, disposal eartl	The second secon							
	75mm dia Pipe	150.00	0.30	1.10 =	49.5	50			· · · · · · · · · · · · · · · · · · ·
	63mm dia Pipe	150.00	0.30	1.10 =	49.		<u> </u>	<del></del>	
	50mm dia Pipe	300.00	0.30	1.10 =	99.0		_	<del>-</del>	
	40mm dia Pipe	400.00	0.30	1.10 =	132.0	<del>!</del>	· · ·	· · · — · · · · · · · · · · · ·	
	<del>;</del>		0.00		-	00 M <sup>3</sup>			
	Add	5% extra fo	r fittings	± =	Ť ····	0 M <sup>3</sup>	- : :	— ·— · · · · · · ·	
10	D					0 M3	P/M <sup>3</sup>	Rs.230.50	Rs.79,868.2
1B 2	Provision for PCC ro	pad cutting a	nd its res	toration	11.2	25 M <sub>3</sub>	P/M <sup>3</sup>	Rs.4,428.80	Rs.49,824.(
	Filling available ex								
	trenches, plinth, sid							1	
	exceeding 20cm in	nd watering	olidating	each deposited					
	layer by ramming ar upto 1.5 m.	nu watering,	iead up	to 50 m and lift					
	Providing and laying	ng High De	ensity Po	olvethvene nine	<b>33</b> 9.5	7  <b>M</b> 3	P/M <sup>3</sup>	Rs.74.50	Rs.25,297.9
	(HDPE pipe) of 20 r	nm to 225 n	nm OD a	nd pressure 6.0		i		:	
	Kg/cm2 and 10 Kg/c	m2 sutable	for water	supply which is		:			
ŀ	available in all stand	lard, like ISI	-4984/19	95 and various.		:			
[9	grades like PE-80,	PE-100 inc	luding re	quired specials.				<u>:</u>	`
	Rates are inclusive	of , all taxe:	s and du	ties (Exise duty		•			
	@12.50% &CST @	2% against	Form 'C	'), labour cess,		•	•		
ľ	contractor profit and per direction of Engir	overnead (	cnarges	all complete as		į		į	
BA I	HDPE pipe of materia	als grade PE	100- PN	10 (dia in mm)				<u> </u>	·
		_				i		<u> </u>	
_   7	75mm dia Pipe from	PVC Tank to	Distribu	tion main	10.00	M	P/M	Rs.239.81	Rs.2,398.10
7	75mm dia Pipe				150.00	) M	P/M	Rs.239.81	Rs.35,971.50
€	3mm dia Pipe			·· ····· <u></u>	150.00		P/M	Rs.168.77	
В	HDPE pipe of materia	ole grade DE	400 DN		,00.00	;	1 7141	NS. 100,77	Rs.25,315.50
—· ∔-		s grade Pc	100- PN	(dia in mm)		:			
	0mm dia Pipe				300.00	M	P/M	Rs.89.99	Rs.26,997.00
	l0mm dia Pipe				400.00	М	P/M	Rs.59.78	Rs.23,912.00
4	0mm dia Pipe from 1	/well to PVC	Tank		12.00	М	P/M	Rs.59.78	Rs.717.36
	Providing and fixing t		alve with	C.I. wheel of					
	pproved quality (scre	ewed end).	<del></del>	· · · · · · · · · · · · · · · · · · ·			<u> </u>		
7	5mm dia Pipe				3	Nos.	Each	Rs.1,351.60	Rs.4,054.80
6	3mm dia Pipe				າ	Nos.	Each		
50	0mm dia Pipe				· · · ·	ļ	<del> </del>	Rs.1,351.60	Rs.2,703.20
		<del> </del>			2	Nos.	Each	Rs.811.40	Rs.1,622.80

40mm dia Pipe

Each

4 Nos.

Rs.613.90

Rs.2,455.60

S.N.	<u> </u>	Particular Particular				Quar	ntity	Unit	Rate	
5	Constructing masonry	Chamber	60x60x7	5 cm i	nside, in		1	S COURT	:Xate	Atriount
18.33	brick work in cement	t mortar 1:4	4 (1 cem	nent : 4	4 coarse		1			
Ì	sand) for sluice valve	e,with C.I. s	surface b	ox 100	Omm top		i	1		l v
	diameter, 160 mm bot	ttom diame	eter and 1	180 mn	n deep (					
	inside) with chained li	lid and RC0	C top sla	ab 1:2:4	4 mix (1		1		İ	
	cement : 2 coarse s	sand: 4 gr	raded sta	tone ac	garegate		ļ			
	20mm nominal size),	, necessary	excavati	tion, for	undation				!	
	concrete 1:5:10(1 ceme	nent: 5 fine	sand : 10	0 grade	ed stone				: !	
,	aggregate 40 mm nom	iinalsize) ar	nd inside	plaste	ring with					
ļ	cement mortar 1:3 (1	cement :	3coarse	sand)	12 mm			1		
	thick, finished with a	a floating	coat of	neat	cement					
	complete as per standa Work for additional dep	ard specificate oth	ations & c	directio	n of E/I.	9	Nos.	Each	Rs.5,807.50	Rs.52,267.5
	Brick work (1:4) in found	dation					1	· 	· - — —	
		1.10	0.25	0.35	0.193		Ť			
		0.60	0.25	0.35	0.105		<del>!</del> •			
_					0.298	 2.678	CuM	CuM	D- 4 70 4 40	· · <u> </u>
	Plaster (1:3)					<del></del>	Cuiti	Culvi	Rs.4,724.40	Rs.12,649.58
	8	1.10		0.35	3.08	 27 72	SqM	i-	3 400 00	
	Carriage 10% of item 5		_				Sqivi	SdM	Rs.128.20	Rs. 3,553.70
<u>7</u> 8.48	Providing and placing	on terrac	e (at all	floor	levels)	<del></del>	<u> </u>	<del> </del>	<del></del>	Rs. 6,847.08
0.40 F	polyethylene water stora	a <b>g</b> e tank, IS	3I : 12701	1 marke	ed with		:		·	
c	cover and suitable loo	cking arra	naement	and	makina	:	:			
r	necessary holes for inle	et outlet a	and overf	. ساده	naking		:			
v	without fittings and the b	au-	UG OVER	CW pip	es but		!	:	:	
<u>8</u> P	without fittings and the b Providing and fixing P	TMT exter	t for tank	i. Signifor	· ··· <b>_4_</b> _	5000	Ltrs	P/Ltr.	Rs.6.60	Rs.33,000.00
ta	ank pipe, fittings of appr	roved qualif	tv and co	Die ioi Jour	water					
4	10mm dia		<u></u>		• • •					
7	75mm dia				·	:.	Nos.	each	Rs.250.00	Rs.500.00
				1		1 j	No.	each	Rs.400.00	Rs.400.00
						<del></del> :			F	Rs.3,90,355.94

Sub Est. No. 4

Model estimate for supply, installation & commissioning of single phase 2 H.P submersible motor pump set with all accessories including extension of L.T. line from nearest source up-to

Si. No.	Particulars	Quantity	Unit		Amount
1		}			
	2	3	4	5	6
(i s (i n (i n (v (v 1) (v T/	Supply Installation, commissioning and testing of single phase 2 H.P. submersible pump set having discharging capacity 2.5 lps at a total head of 35 meter(approx) of KSB/Kirloskar or equivalent make with all accessories & fittings etc including loading unloading and transportation of the pump set to the work site with all required labour, materials, tools and tackles installation, testing & commissioning as per standards specifications and direction of E/I.  i) 40 mm dia x 3 mtrs long medium class of Loclumn pipe both end threaded and one end socketed-6(six)nos  ii) 1x3x1.5 mm² flat copper conductor submersible cable -40 (forty) mtrs.  iii) 40 mm dia union socket- 1(one) oo.  iv) 50 mm dia x 250 mm long G.I.  ipple- 1 (one) no.  iv) 40 mm dia M.S. clamps—2(Two) airs.  iii) 40 mm z 250 mm long G.I nipple-One) no.  iii) 40 mmx 250 mm long G.I nipple-One) no.  iiii) Tube well cap for 125 mm dia Well — 1(one) no.  iv) 40 mm dia x 50 mm dia reducer cket —1(one) no.		p/job	Rs.30,500.00	

[B]	Supply Installation, commissioning		T	7	1
	and testing of floor mounted outdoor				İ
	type L.T feeder pillar single phase				
	starter controll pannel operated on	1	1		
	220 V, 3 phase, 50 c/s for 2 HP				
	Submersible pump set made of MS	j			
	sheet (minimum 2 mm thick) duly				
	spray power coated painting with				
į	following accessories made of M.S				
į	sheet ( minimum 2mm thick) duly				
	spray powder coated painting with				
	following accessories (i) 95-272 V range single phase 5 KVA	1 (one) job	p/job	Rs.28,500.00	Rs.28,500.00
	automatic voltage stabilizer make-	1			
	Sen & Pandit/Vertex/ISI marked If				
	any. 1 No.	İ	1		ļ
	(ii) Suitable single phase starter control		ļ		
İ	panel for above motor of BCH /L&Tmake			1	
[6]	- 1(one) no.		<u> </u>		
[C]	Supplying & fitting 2.5 mm <sup>2</sup> copper				
	service cable from power point from				
ļ	nearest source up-to pumping		İ		
(D)	station	20 mtrs	P/Mt	Rs.130.00	Rs.2,600.00
[D]	Providing all materials and labour				
	required for doing earthing station				
	with G.I earth pipe of 40 mm dia x 4.5				
	mtrs 20fts. long G.I pipe including				
	accessories excavation of earth,				
	providing masonry enclosure with				
	cover plate having locking		,		
	arrangement and watering pipe	İ			i
	etc.with salt, charcoal,etc.as per IE & IS specification.			İ	
	TO SPOOTHCAHOII.	l job	p/job	Rs.2,803.00	Rs.2,803.00
				Total Rs.	Rs.64,403.00

· 📆

Sub Est. No. 5

	Estimate for the work - Hous		ice conn	ection	
S.No.	SUB-ESTIMA  Description		<del>- ,</del>	<del></del>	
1A	Describing	Qt	y Uni	Rate	Amount
	GradeCompound) pipes PN-12.5 (12.5kg/Sqcr	80		1	
	as per ISO 4427 and specification f	n)		ļ	İ
	waterapplication rates are in-1-	or	İ	-	1
	waterapplication rates are inclusive of, taxes and	nd			
	duties (Exise duty @12.50% &CST @2% again	st		1	İ
	Form 'C'), labour cess, contractor profit ar	ıd	ĺ		1
	overhead charges all complete asper direction	of]	-		
	Engineer-in-charge.complete.	Ì	-		
<del></del>					
1B	MDPE Pipe 20mm dia nominal bore	6.00	0 PM	Rs.19.97	Rs.119.
10	Providing and fixing Chlorinated Polyving	/1			
	Chloride (CPVC) pipes, having thermal stabilit	у			<b>}</b> -
	for hot & cold water supply, including all CPV		İ		ļ
	plain & brass threaded fittings, including fixin	g			1
	the pipe with clamps at 1.00 m spacing. This	c			
	includes jointing of pipes & fittings with one ste	n	-		
	CPVC solvent cement and testing of joint	c			
	complete as per direction of Engineer in Charge				
	Internal work - Exposed on wail		1		
18.7.1	15 mm nomonal bore	1.0	PM	Rs.138.70	Do 12D 7
2	Earth work in excavation in foundation trenches		+	1.0.100.70	Rs.138.7
	or drains(not exceeding 1.5 m in width or 10 same	, I	-	[	
	on plan) including dressing of sides and amming	,		1	
	of bottoms, lift upto 1.5 m. including getting out	.]		[ }	
	the excavated soil and disposal of surplus	ĺ	1	]	
	excavated soil as directed, within a lead of 50 m	1			
	All kinds of soil			[	
2.8.1	6.00 0.30 0.60 1.08	1.08	CuM	Pa 220 50	
3	Filling available excavated earth (excluding rock)	1.00	Culvi	Rs.230.50	Rs.248.94
2.26	in trenches, plinth, sides of foundations etc. in	ł	1 1	į.	
	layers not exceeding 20 cm in depth:			1	
	consolidating each deposited layer by ramming			Rs.74.50	Rs.78.85
	and watering lead			1	
	Providing and fixing brass ferrule with CI mouth	1.06	CuM		
1	cover incuding boring and tapping the main:		]	ļ	
	and tapping the main:		[		
8.20.1	15mm nominal bore	1	Each	Do 054 40	
T	Providing and fixing P.P. Black service Saddle	<del></del>	Each	Rs.254.10	Rs.254.10
	(Brass threaded)	1	Each	Rs.400.00	Rs.400.00
5 []	Providing and fixing brass bib cock of approved		-001		
	quality:			<b>j</b>	
3.15.1	15mm nominal bore	1	Each	Be 272.00	
	Totai	<u> </u>	Lacii	Rs.273.00	Rs.273.00 Rs.1,513.41
	Say				Rs.1,513.00
'	Total Nos. of House Holds= 100 I	los.	@	Rs.1,513.00	Rs.1,51,300.00

		M HIGH	STEEL	TPHOT	Sub Est.	NO. 6	D 50	00 LITED	DVO TANK	
S.N.		Pa Pa	rticulars	IKUCI	UKE STAC	SING FO		00 LITER	PVC TANK	A
1	Structural st			bolted	in built up	- Wusi	lucy	Unit	Rate	Amount
<u>10.3</u>	sections, to	usess an	d framed	d work,	including		i			
	cutting, hoist	ing,fixing	in positio	on and a	applying a					
	priming coat	of approv	ved prime	er all con	nplete.					
	8M high st	aging wit	th GI en	closure	to house				T	-· <del></del>
	electric swit	ch panel	of suita	bly desi	igned MS		1			•
	section of a	ingle, cha	annel, etc	c. as pe	r drawing			i		
·	attached.	<u> </u>				1490	) Kg	P/Kg	Rs.69.20	Rs.1,03,108.00
2 2.8.1	Earth work						i			
2.0.1	or drains(not	exceedii	ng 1.5 m i	in width (	or 10 sqm					
	on plan) incl	uding res lift upto 1	ssing or s	ides and	ramming					
	of bottoms, the excava-	eur abro i	ont in G.	nuaing g	jetting out				i .	
	excavated s	oil ac dìra	and disp	posal o	surplus				!	
	All Kinds of		cieu, with	ш а теас	u oi su <b>m</b> .				:	
	base of footi		•	-	إ				···	···
	4 1.20		1.425	=	8.208		:	<del>!</del>	+	
	For fixing La		1	+ +	0.200	<del></del>	:	<del> </del>		
	1 1.00		0.275	= -	0.138				<del>-</del>	
		3.00		: <u> </u>	8.346	8.346		. D# 43	Rs.230.50	— <u> </u>
3-	Supplying ar	nd filling in	n nlipth w	ith local		0.540	: <u>M</u>	P/M <sup>3</sup>	KS.230.50	Rs. 1,923.64
2.28	under floor	s includ		tering,	ramming		:			•
	consolidating				raniming				1	
	base of footi		sang com	piete.	<u>-</u>		·	<del>-</del>		··
	4 1.20		0.40	+	0.570		<del>-</del>	4	<u> </u>	
	Landing Plate		0.10	-	0.576	<del></del>		<del> </del>		
	1 1.00							<u> </u>	<u> </u>	
		0.50	0.10	. =:	0.050				· · · · · · · · · · · · · · · · · · ·	
4-	Droviding de	oignoti-	of 4004	<u> </u>	0.626	0.626	M°	.,P/ <b>M</b> ³	Rs.204.40	Rs.127.95
1.72	Providing de	aignation	אטטווט A	DITICK T	iat Soling			•		
	joints filled watering, ta	#100 2 res	ualtu all ualtu all	nciuaing	cost of			÷		
1	specification	R directio	yaity alli nof⊑#	complete	e as per					
	base of footing		TO CI.						· · · · · · · · · · · · · · · · · · ·	
<del>-</del>	4 1.20		;		5.760					
:	Landing Plate		4	. <del>-</del>	3.760				•	
	1 1.00		<del>-</del>	====	0.500				†	
Ť	. 1.50	5.55	<u>+</u>		6.260	6.260	14 <sup>2</sup>		 	·
5	Providing and	l laving in	position	cement	concreto	0.200	IVI	P/M²	Rs.253.80	Rs.1,588.79
12 i					!					
ļ	of specified (	grade exi	uding the	cost of	centring			:		
;					!					İ
i e	and shuttering	r-all work	unto pliet	th love!	:			•		
1	and shuttering	g-all work	upto plint	th level.	: :			:		
	1:1.5:3(1 Ce	ment :1.	5 coarse	sand:3	graded			:		
] <u>.</u>	1:1.5:3(1 Ce stone aggrega	ment :1. ate 20 mm	5 coarse	sand:3	3 graded			:		
] <u>.</u>	1:1.5:3(1 Ce stone aggregations base of footing	ment :1. ate 20 mm	5 coarse n nominal	sand:3	3 graded			:		
<u> </u>	1:1.5:3(1 Ce stone aggregations of footin 4 1.20	ment :1. ate 20 mr g 1.20	5 coarse n nominal 0.100	sand:3	3 graded 0.576			:		
<u> </u>	1:1.5:3(1 Ce stone aggregates base of footin 4 1.20 For Grouting	ment :1, ate 20 mr g 1.20 at base pl	5 coarse n nominal 0.100 late	sand:3	: 		<u></u>	:		
1	1:1.5:3(1 Ce stone aggregates base of footin 4 1.20 or Grouting 4 0.20	ment :1. ate 20 mr g 1.20 at base pl 0.20	5 coarse n nominal 0.100	sand:3	: 					
1	1:1.5:3(1 Ce stone aggregates base of footin 4 1.20 For Grouting	ment :1. ate 20 mr g 1.20 at base pl 0.20	5 coarse n nominal 0.100 late	sand:3	0.576	· · · · · · · · · · · · · · · · · ·				
	1:1.5:3(1 Ce stone aggregates base of footin 4 1.20 or Grouting 4 0.20	ment :1. ate 20 mr g 1.20 at base pl 0.20	5 coarse n nominal 0.100 late 0.050	sand:3	0.576					-
1	1:1.5:3(1 Ce stone aggregates of footing 4 1.20 For Grouting 4 0.20 Landing Plate	ment :1. ate 20 mr g 1.20 at base pl 0.20 form	5 coarse n nominal 0.100 late	sand:3	0.576 0.008 0.050					
5 1 1	1:1.5:3(1 Ce stone aggregations of footin 4 1.20 or Grouting 4 0.20 anding Plate 1 1.00	ment :1. ate 20 mm g	5 coarse n nominal 0.100 late 0.050 0.10	sand:3	0.576 0.008 0.050 0.634	0.634	M³	P/M³	Rs.4,373.20	Rs.2,772.61
F L	1:1.5:3(1 Ce stone aggregations of footing 4 1.20 and 1.20 and 1.00 and 1.00	ment :1. ate 20 mm g	5 coarse n nominal 0.100 late 0.050 0.10	sand:3 size)	0.576 0.008 0.050 0.634	0.634	M <sup>3</sup>	P/M <sup>3</sup>	Rs.4,373.20	Rs.2,772.61
6 F	1:1.5:3(1 Ce stone aggregations of footing 4 1.20 and 1.20 and 1.00 around a freinforced of freinforced of stone aggregations and 1.00 around 1.00 aro	ment :1. ate 20 mm g 1.20 at base pl 0.20 form 0.50 I laying incement come	5 coarse n nominal 0.100 late 0.050 0.10 n position	sand:3 size) = = specific	0.576 0.008 0.050 0.634 ed grade the cost	0.634	M <sup>3</sup>	P/M <sup>3</sup>	Rs.4,373.20	Rs.2,772.61
6 F 1.2 c	1:1.5:3(1 Ce stone aggregation	ment :1.  ate 20 mm g 1.20 at base pl 0.20 form 0.50 I laying incement couttering, fir	0.100 late 0.050 0.10 n position oncrete existing an	sand:3 size) = = specific	0.576 0.008 0.050 0.634 ed grade the cost	0.634	M <sup>3</sup>	P/M <sup>3</sup>	Rs.4,373.20	Rs.2,772.61
6 F 1.2 C	1:1.5:3(1 Ce stone aggregations of footing 4 1.20 and 1.20 and 1.20 and 1.00 are inforced to fre	ment :1. ate 20 mm g 1.20 at base p 0.20 form 0.50 I laying incement contering, firelinth level	0.100 late 0.050 0.10 n position oncrete exhishing and	sand:3 size)  = specifie xcluding d reinfor	0.576 0.008 0.050 0.634 ed grade the cost	0.634	M <sup>3</sup>	P/M³	Rs.4,373.20	Rs.2,772.61
6 F 1.2 C	1:1.5:3(1 Ce stone aggregations of footing 4 1.20 and 1.20 and 1.20 and 1.00 are foreinforced of entring, shull work puto [1:1:5:3(1 cerns)]	ment :1. ate 20 mm g 1.20 at base p 0.20 form 0.50  I laying in cement couttering, fir blinth leve	5 coarse n nominal 0.100 late 0.050 0.10 n position oncrete existing an ell oarse san	sand:3 size)  = specifie scluding d reinfor	0.576 0.008 0.050 0.634 ed grade the cost	0.634	M³	P/M³	Rs.4,373.20	Rs.2,772.61
6 F 1.2 C	1:1.5:3(1 Ce stone aggregations of footing 4 1.20 and 1.20 and 1.00 and 1.00 are reinforced of entring, shull work puto ptone aggregations aggregations aggregations aggregations aggregation aggregat	ment :1. ate 20 mm g 1.20 at base pi 0.20 form 0.50 I laying incement contenting, fire pointh leverent: 1.5 contents 20 mm	5 coarse n nominal 0.100 late 0.050 0.10 n position oncrete existing an ell oarse san	sand:3 size)  = specifie scluding d reinfor	0.576 0.008 0.050 0.634 ed grade the cost	0.634	M <sup>3</sup>	P/M³	Rs.4,373.20	Rs.2,772.61
6 F.1.2 C	1:1.5:3(1 Cestone aggregations of footing 4 1.20  For Grouting 4 0.20  Landing Plate 1 1.00  Providing and of reinforced of entring, shull work puto putone aggregations of footing asset of footing asset of footing asset of footing asset of footing asset of footing aggregations aggregation aggregation aggregation aggregations aggregation aggregatio	ment :1. ate 20 mm g 1.20 at base pl 0.20 form 0.50 I laying incement contering, firelinth lever ent: 1.5 contering the content the co	5 coarse n nominal 0.100 late 0.050 0.10 n position oncrete existing and and and and and and and and and and	sand:3 size)  = specifie scluding d reinfor	0.576 0.008 0.050 0.634 ed grade the cost	0.634	M <sup>3</sup>	P/M³	Rs.4,373.20	Rs.2,772.61
6 F 1.2 C	1:1.5:3(1 Ce stone aggregations of footing 4 1.20 and 1.20 and 1.20 and 1.20 and 1.20 are inforced to freinforc	ment :1. ate 20 mm g 1.20 at base p 0.20 form 0.50  I laying in cement countering, fir blinth leve ent: 1.5 coute 20 mm g 1.00	5 coarse n nominal 0.100 late 0.050 0.10 n position oncrete existing an ell oarse san	sand:3 size)  = specifie scluding d reinfor	0.576 0.008 0.050 0.634 ed grade the cost	0.634	M <sup>3</sup>	P/M <sup>3</sup>	Rs.4,373.20	Rs.2,772.61
6 F .1.2 C	1:1.5:3(1 Cestone aggregations of footing 4 1.20  For Grouting 4 0.20  Landing Plate 1 1.00  Providing and of reinforced of entring, shull work puto putone aggregations of footing asset of footing asset of footing asset of footing asset of footing asset of footing aggregations aggregation aggregation aggregation aggregations aggregation aggregatio	ment :1. ate 20 mm g 1.20 at base p 0.20 form 0.50  I laying in cement countering, fir blinth leve ent: 1.5 coute 20 mm g 1.00	5 coarse n nominal 0.100 late 0.050 0.10 n position oncrete existing and and and and and and and and and and	sand:3 size)  specifie xcluding d reinfor d:3 grad size)	0.576 0.008 0.050 0.634 ed grade the cost rcement-	0.634	M <sup>3</sup>	P/M³	Rs.4,373.20	Rs.2,772.61

S.N.			Part	iculars			Quant	itv	Unit	Rate	Am-
	Colum	n above	GL		T	<del> ,</del>			Oille.	Nate	Amcount
٠.,٠,٠,٠	4	0.20	0.20	0.25	7.4=	0.040	,			7 7 7	The state of the s
	- <del></del>	<del></del>		· · · · · ·	1 1	1.376	1.376	1.63	P/M <sup>3</sup>	D- 4 520 00	
7-	Centri	ng .	and	shutter	ina ina	including		IVI	P/IVI	Rs.4,530.30	Rs.6,233.69
5.9.1		_				form for.					• •
	16	1.00	0.30		=						<u>-</u>
	16	0.20	0.85	<del></del>	<del></del> +	4.800				<del></del>	<u>-</u>
	<del></del>	<del></del>		<del></del>		2.720					
	16	0.20	0.25		=	0.800			j		
	<u> </u>	L				8.320	8.320	M²	P/M <sup>2</sup>	Rs.169.00	Rs. 1,406.08
8- 5.22	and bit	itening, o	utting, be	€.	work placing	including in position					
			tor stee	1					· 1 · · · · · · · · · · · · · · · · · ·		
	@0.80		Of Cond			=	86.00	Kg.	P/Kg.	Rs.56.00	Rs.4,816.00
9 2.26	layers consoli	ches, pl not e dating e	inth, side exceeding ach dep	<b>∋s o</b> f o g 20	undation cm	uding rock) ons etc. in in depth: y ramming			:		
40	and wa	tering le	ad			- }	2.086	$M^3$	P/M <sup>3</sup>	Rs.74.50	Rs.155.43
<u>10</u> 10.19	and 0.6	30 Mtr lei nplete a	ngth emb	edded in	n R.C.	12 mm dia C pedestal ngineer in	4.2624 H	(a	D/k-	D. 70.00	
11-	Painting	g with a	eady m	ixed pa	int of	approved	7.2024	<b>\</b> 9	P/kg	Rs.73.60	Rs.313.71
3.82.1	brand a even st	in all sh	nades	to give an	-						
	New ste	el work	(two or n	nore coa	its)				<del></del>	<u> </u>	·· ·· – ···
	Frame	work				<del></del>			<del>                                     </del>		
	0.5	14.00	3.00		=	21.000			- <del></del>	<u> </u>	
	0.5	3.50	3.50		=	6.125					
:						27.125	27.13 N	12	M <sup>2</sup>	Rs.63.60	Rs. 1,725.15
<u>12</u>	Carriag	materia	ls from	quarry to	<u></u>		· '*' -		13. 1,723. 13		
	WORK S	pading.	unloa	ding and					1		
!	staking	as per	specif	fication &							
	direction (a) Brick	& 1 Km.	Voobl					: 			
			Nachr	na lead)	203 N		%0 nos.	Rs.606.10	Rs.123.04		
	(b) Coai	* 1	_		0.860 N	<sup>3</sup>	P/M <sup>3</sup>	Rs.1,221.09	Rs.1,050.14		
	(c) Stone Chips (150 Km. lead)							3	P/M³	Rs.1,746.29	Rs.3,021.08
	(d) Local Sand ( 2 Km. Pucca & 1 Km. Kachha lea							3	P/M <sup>3</sup>	Rs.217.23	Rs.156.41
	<del></del>								- <del> </del>  - +	TOTAL	Rs.1,28,521.72
	_/		<del></del>					_			Rs.1,28,500.00

An American



PUBLIC HEALTH ENGINEERING DEPARTMENT

MODEL ESTIMATE

**FOR** 

CONSTRUCTION OF RURAL PIPED WATER SUPPLY SCHEME FOR A WARD HAVING 100 HOUSE HOLD S

ESTIMATED COST-- Rs. 8.514 Lac

2017-18

### Public Health Engineering Department

ABSTRACT OF COST

NAME OF WORK:- CONSTRUCTION OF RURAL PIPED WATER SUPPLY SCHEME FOR WARD HAVING 100 HOUSE HOLDS

S.N	Description	Total Amount
1	Construction of 200/165 mm dia. 90 Mtr deep Drilled High Yield Tubewell B	.,
	TO THIS Machine with Blue casing U.P.V.C. Pipe etc. all complete and as no	r.
	direction of E/1.	
2	(As per sub Estimate no 1)	Rs.95,242,91
2	Constructing masonry Chamber 100x100x75 cm inside, in brick work in cemen	4
	Injurial 1.4 (I cement : 4 coarse sand) for Tube Well, and PCC top aleb 4.4 5.6	.1
	Time (if certified 1.5 coarse sand : 3 graded stone aggregate 20mm population	.1
	)), necessary excavation, foundation concrete 1:2:4/1 cement : 2 fine condi-	[
	19 added storile aggregate 20 mm nominal size) and inside plastering with compari	.
	inortal 1.3 (1 cement : 3coarse sand) 12 mm thick with 5% cico friehod with 5	
	industry told of near cement, out side plastering with cament moster 1.4 (4)	1
	cernell: 4coarse sand) 12 mm thick complete as per standard specifications \$	
	and definition of the	
3	(As per sub Estimate no2)	Rs.13,210.00
9	Providing and Laying Distribution network of High Density Polyethyene pipe	
	(CIDPE pipe) including 5000 liter PVC tank installed at 3M high MS stocing at a	
4	fall complete as per direction of E/I. (As per sub Estimate no. 3)	Rs.3,90,355.94
	Supply Installation, commissioning and testing of single phase 2 H.P.	
	submersible pump set having discharging capacity 2.5 lps at a total head of 35	
	meter(approx) of KSB/ Kirloskar or equivalent make with all accessories	ļ.
	intuities etc including loading unloading and transportation of the pump set to	
	the work site with all required labour, materials, tools and tackles installation	1
1	testing & commissioning as per standards specifications and direction of Eu	İ
5	(As bell and Estimate 10 4)	Rs.64,403.00
٠	Providing house connection for each house hold including supplying all	
	materials, labours, tools and making ferrule connection with 20 mm dia MDPE and 15mm CPVC Pipes with all fittings etc all complete.	i
- 1	(As per sub Estimate no 5)	j
6	Providing and erecting 3 M high staging of suitably designed MS section of	Rs.1,51,300.00
- 1	angle, channel etc. as per drawing attached. (As per sub Estimate no 6)	
	TOTAL	Rs.1,28,500.00
		Rs.8,43,011.85
	Add 1% Contingency	Rs.8,430.12
	G. TOTAL	Rs.8,51,441.97
	(Rs. Eight Lakh Fifty one Thousand Four Hundred ) only	Rs.8,51,400.00

(Rs. Eight Lakh Fifty one Thousand Four Hundred) only

#### Note:

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- i) This model estimate has been prepared in the light of Guidelines of PRD, Bihar memo no. 6278 dt.23.09.2016. This estimate may not ensure standard pressure in the distribution network. Hence on the spot change in staging of storage tank may be required.
- ii) Water quality testing of source should be done after construction of Tube well.

iii) Road cutting cost may increase or decrease as per local condition.

Technical approval accorded for Rs.8,51,400.00 (Rs. Eight Lakh Fifty one Thousand Four

Hundred) only

Chief Engineer (Design

Facility Health Engineering Fo Bihar, Patna

### Estimate no.- 1

			100	<del>-</del>	
S. NO	1 al ciculaty	Quantity	unit	Rate	Amount
1	Drilling of 200mm x 165mm x 125 meter deep borewell			Nate	Amount
	in all kinds of soll and rock in rural area for installation				
	of pump set with Hydaraulic DTH Rig machine, all				
	complete including supplying all materials, tools, drilling				
	rig, Air Compressor and equipments, as well as fuel,				
	lubricants and cost of transportation of Rig machine				
	and other vehicles up to the site etc all complete as per		•		
	specification and direction of E/L				į
	(i) Up to 50 mtrs depth below GL			<del> </del>	·
	(ii) Beyond 50 mtrs. Up to 90 Mtis.	50	P/M	Rs.729.52	Rs.36,476.0
<del></del>	<u> </u>	40	P/M	Rs.867.88	Rs.34,715.2
	Supplying, assembling, lowering and fixing in vertical				
	position in bore well, unplasticized PVC (UPVC) medium well casing (CM) pipe of required dia,				
2	conforming to IS: 12818, including required hire and				
	labour charges, fittings & accessories etc. all complete,				
	for all depths, as per direction of Engineer -in-charge.	ĺ			
	(200mm dia)	24	P/M	Rs.921,70	D- 22 420 0
j	Supplying labour, cement and calcium chloride or		. / 141	1/3.921.70	Rs.22,120.8
3	betonites solution and equipments for grouting to	İ			
	casing pipe as per specification and direction of E/I.	1	Each	Rs.51.01	. D- 64 0
ĺ	Supplying all tools labors and equipments and doing		20011	NS.31.01	Rs.51.0
4	washing flushing & developing of drilled tube well to	ŀ			
I	give clean and clear water ( min. 2.50 Hours)all	}			
	complete as per direction of E/I.	2.5	P/Hr	Rs.649.40	Rs.1,623.56
5	Supplying labors and equipments including 200 mm dia				. 10.1,020.01
ا '	M.S. Cap & Fitting & Fixing over the tube well properly	-			
l	and taking out as per direction of E/I.	_1	Each	Rs.256.40	Rs.256.46
				TOTAL	Rs.95,242.91

#### (Sub Estimate - 2)

#### Analysis of Chamber for TW

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Supplying materials, labours and constructing chamber of following dimension having 250mm thick wall in C.M. (1:4) in cluding 12mm C.P. (1:3) with punning inside, R.C.C. cover slab with C.f. Surface box, 20mm dia foot rest at 150mm interval 10mm dia lifting ring etc. all complete.

	SIZE	1.00	M	x	1.00	) M x	0.75	M deep	7
<u> </u>						<u> </u>	0.73	и чеер	
<u>S.O.R.</u> <u>No.</u>	<u>Particulars</u>	No.	L	w	H	Qty.	Unit	Rate	Amount
1	Earth work in excavation	1	1.75	1.75	1.0	3.063 M <sup>3</sup>	P/M <sup>3</sup>	Rs.230.50	D: 705.04
S.O.R. N	o. <b>2</b> .8					3.555 W	F/141	115.250.50	Rs.705.91
<u>2</u> \$.O.R. N	Sand filling o. 2.28	1	1.75	1.75	0.075	0.230 <b>M</b> ³	P/M <sup>3</sup>	Rs.204.40	Rs.46.95
<u>3</u> S.O.R. 11	Brick flat soling 1.72	1	1.75	1.75		3.063 M <sup>2</sup>	P/M²	Rs.253.80	Rs.777.26
<u>4</u> S.O.O. 4.	P.C.C. (1:2:4) in foundation	1	1.75	1.75	0.10	0.30€ M³			
						0.306 M³	P/M³	Rs.3,850.50	D- 1 170 00
<u>5</u>	B/Work in (1:4) C.M.	2	2.50	<b>0.2</b> 5	0.75	0.938 M <sup>3</sup>	P/M <sup>3</sup>	Rs.4,724,40	•
S.O.R. No						-,000  4	E-7191	13.4,724.40	Rs.4,429.13
5.O.R. No	R.C.C. Cover slab(1:1.5:3) p. 5.2.2 & 5.9.3	1	1.50	1.50	0.15	0. <b>338 M³</b>	P/M <sup>3</sup>	Rs.5,139.70	Rs.1,734.65
	shuttering	2	1.50	1.50	0.15	3.15 M <sup>2</sup>	P/M²	Rs.291.00	Rs.916.65
<u>7</u>	C.P. (1:3) with 5% Cico & neat cement								113.510.05
<b>S</b> .O.R.	Internal face	2	1.00	4.00				•	
A1.	Bed surface	1	1.00 1.00	1.00	1.00	4.00 M <sup>2</sup>			
+13.36.1		'	1.00	1.00		1.00 M <sup>2</sup>			
						5.00 M <sup>2</sup>	P/M <sup>2</sup>	Rs.166.30	Rs.831.50
<u>8</u>	C.P. (1:4) out side of wall	2	1.50	1.50	0.75	4.5 M <sup>2</sup>	P/M <sup>2</sup>	D- 444.70	
S.O.R. No					5.10	4.5 IVI	P/M <sup>-</sup>	Rs.114.70	Rs.516.15
<u>9</u> S.O.R. №	8mm dia T.S. Rod . 5.22,7A								
	1961	0.338	M <sup>3 x</sup>	70	Kg/ M3	23.625 Kg.	P/Kg	Rs.56.00	Rs.1,323.00
	Lifting Ring of 10mm dia Rod					4 No.	Each	Rs.30.00	Rs.120.00
<u>11</u> (	Carriage of motorials 50/							Total	Rs.12,580.41
<u></u> ,	Camage of materials 5%								Rs.629.02
						_	_	~	Rs.13,209.43
						Sav	Rs 13 2	210 nn	

Say Rs.13,210.00

	Sub Fel	·			· 
S.N.	WATER SUPPLY DIST	RIBUTION SY	STEM		
1A	Particulars  Earthwork in excavation over areas (exceeding 30 cm in	Quantity	Unit	Rate	Amount
	depth 1.5 in width as well as 10 sqm on plan) including				
	disposal of excavated earth lead upto 50m and lift upto	סן	i		
- <del></del> _	1.5m, disposal earth to be levelled and neatly dressed				
	75mm dia Pipe 150.00 0.30 1.10 =	49.50			<del> </del>
	63mm dia Pipe 150.00 0.30 1.10 =	49.50		· — ·	<u> </u>
	50mm dia Pipe 300.00 0.30 1.10 =	<b>99.0</b> 0		<u></u>	<u> </u>
	40mm dia Pipe 400.00 0.30 1.10 =	132.00	·	·	<del>-</del>
		330.00 M <sup>3</sup>	-	- · · · · · · · · · · · · · · · · · · ·	
	∴ Add 5% extra for fittings =	16.50 M <sup>3</sup>		:	
1B	Provision for PCC road cutting and its restoration	346.50 M <sup>3</sup>		Rs.230.50	Rs.79,868
2	Filling available excavated earth (excluding rock) in	11.25 M <sup>3</sup>	P/M <sup>3</sup>	Rs.4,428.80	
	trenches, plinth, sides of foundations etc. in layers not	:		į	
	exceeding 20cm in depth, consolidating each deposited	:		ļ	
	layer by ramming and watering, lead up to 50 m and lift				
	upto 1.5 m.		3	1	
3 1	Providing and laying High Density Polyethyene pipe	339.57 M <sup>3</sup>	P/M <sup>3</sup>	Rs.74.50	<b>R</b> s.25,297
10	HDPE pipe) of 20 mm to 225 mm OD and pressure 6.0				
ŗ	Ng/cm2 and 10 Kg/cm2 sutable for water supply which		:		
	s available in all standard, like ISI-4984/1995, and	÷			
9	various grades like PE-80, PE-100 including required			:	
(	pecials. Rates are inclusive of, all taxes and duties. Exise duty @12.50% &CST @2% against Form 'C'),		i		
la	abour cess, contractor profit and overhead charges all				
C	omplete as per direction of Engineer-in-charge	į			
*  H	IDPE pipe of materials grade PE100- PN10 (dia in	<u>:</u>			
	<u>im)</u>	:	1		
	5mm dia Pipe from PVC Tank to Distribution main	10.00 M	P/M	Rs.239.81	Rs.2,398.1
	5mm dia Pipe	150.00 M	P/M	Rs.239.81	Rs.35,971.5
_ ,	3mm dia Pipe	150.00 M	P/M	Rs.168.77	
H	DPE pipe of materials grade PE100- PN8 (dia in mm)	· ·			Rs.25,315.5
	Omm dia Pipe		.1		
	Omm dia Pipe	300.00 M	P/M	Rs.89.99	Rs.26,997.0
	<del></del>	400.00 M	Р/М	Rs.59.78	Rs.23,912.00
Pr	mm dia Pipe from T/well to PVC Tank	12.00 M	P/M	Rs.59.78	Rs.717.36
an	oviding and fixing brass gate valve with C.I. wheel of				
	proved quality (screwed end).				
	mm dia Pipe	3 Nos.	Each	Rs.1,351.60	Rs.4,054.80
63	mm dia Pipe	2 Nos.	Each		
50	mm dia Pipe		l	Rs.1,351.60	Rs.2,703.20
-+	nm dia Pipe	2 Nos.	Each	Rs.811.40	Rs.1,622.80
	ora i ipe	4 Nos.	Each :	Rs.613.90	Rs.2,455.60

S.N.	Particulars	Quantity	Unit	Rate	Atmount
. 5	Constructing masonry Chamber 60x60x75 cm inside, in			- Nate	Armount
18.33	brick work in cement mortar 1:4 (1 cement : 4 coarse				
İ	sand) for sluice valve, with C.I. surface box 100mm top	-	<u> </u>		
	diameter, 160 mm bottom diameter and 180 mm deep (				<u>'</u>
	inside) with chained lid and RCC top slab 1:2:4 mix (1		!		
	cement : 2 coarse sand : 4 graded stone aggregate	:			
	20mm nominal size ) , necessary excavation.				
	foundation concrete 1:5:10(1 cement : 5 fine sand : 10.	:			
]	graded stone aggregate 40 mm nominalsize) and inside plastering with cement mortar 1:3 (1 cement : 3coarse	•	İ	:	
	sand) 12 mm thick, finished with a floating coat of neat				:
	cement complete as per standard specifications &		1		
	direction of E/I.	6 N	·	_	:
1	Work for additional depth	y Nos.	Each	Rs.5,807.50	Rs.52,267.5
	Brick work (1:4) in foundation			<del></del> ·	<u> </u>
	2 1.10 0.25 0.35 0.193	·		· <del></del> · · ·	
	2 0.60 0.25 0.35 0.105	<u>l</u>	<del> </del>	<del></del>	<u> </u>
	0.298	2.678 CuM	C. 14		ļ
F	Plaster (1:3)	- Culvi	Culvi	Rs.4,724.40	Rs.12,649.5
	8 1.10 0.35 3.08	27.72 SqM	SaM		
6 0	Carriage 10% of item 5	27.72 Sqivi	Sqivi	Rs.128.20	Rs.3,553.7
<u>7</u>	Providing and placing on terrace (at all floor levels)		<u>                                   </u>		Rs.6,847.0
	polyethylene water storage tank, ISI: 12701 marked,		:	:	
	vith cover and suitable locking arrangement and				
	naking necessary holes for inlet, outlet and overflow				
	ipes but without fittings and the base support for tank.			: :	
<u>a</u> P	Providing and fixing PTMT extension nipple for water	5000 Ltrs.	P/Ltr	Rs.6.60	Rs.33,000.00
t	ank pipe, fittings of approved quality and colour.		:		
	0mm dia	2 Nos.		5. 252 22	·· <u> </u>
7	5mm dia	·	each	Rs.250.00	Rs.500.00
+-		1 No.	each	Rs.400.00	Rs.400.00
		ļ	i	TOTAL	Rs.3,90,355.94

Sub Est. No. 4

Model estimate for supply, installation & commissioning of single phase 2 H.P submersible motor pump set with all accessories including extension of L.T. line from nearest source up-to pumping

SI. No.	Particulars	Quantity	Unit	<del></del>	Amount
1	2	3	4	5	6
	Supply Installation, commissioning and testing of single phase 2 H.P. submersible pump set having discharging capacity 2.5 lps at a total head of 35 meter(approx) of KSB/Kirloskar or equivalent make with all accessories & fittings etc including loading unloading and transportation of the pump set to the work site with all required labour, materials, tools and tackies installation, testing & commissioning as per standards specifications and direction of E/I.  (i) 40 mm dia x 3 mtrs long medium class G.I column pipe both end threaded and one end socketed- 6(six)nos  (ii) 1x3x1.5 mm² flat copper conductor submersible cable -40 (forty) mtrs.  (iii) 40 mm dia union socket- 1(one) no.  (iv) 50 mm dia x 250 mm long G.I. nipple- 1 (one) no.  vi) 40 mm dia G.I Elbow—1(One) no.  vii) 40 mm dia M.S. clamps—2(Two) Pairs.  viii) 40 mmx 250 mm long G.I nipple-L(One) no.  viii) Tube well cap for 125 mm dia /Well — 1(one) no.  viiii) Tube well cap for 125 mm dia /Well — 1(one) no.  vix) 40 mm dia x 50 mm dia reducer ocket—1(one) no.	1 (one) job	p/job	Rs.30,500.00	Rs.30,500.00

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				1	otal Rs.	Rs.64,403.00
	specification.	<u> 1 jo</u>	b	p/job	Rs.2,803.00	Rs.2,803.00
	etc.with salt, charcoal, etc. as per IE & IS specification.		_			ľ
	e e e e e e e e e e e e e e e e e e e		]	ļ	ĺ	
- 1	i was starting tocking					
	providing masonry enclosure with			ļ		
- 1	accessories excavation of earth					II
	mtrs 20fts. long G.I pipe including					
	with G.I earth pipe of 40 mm dia x 4.5		ļ	j	:	
	required for doing earthing station					
[D]	Providing all materials and labour					13.2,000.00
	station	20 r	ntrs	P/Mt	Rs.130.00	Rs.2,600.00
	nearest source up-to pumping					
	service cable from power point from					
[C]	Supplying & fitting 2.5 mm <sup>2</sup> copper				<del></del>	
	- 1(one) no.					
	panel for above motor of BCH /L&Tmake					1
	(ii) Suitable single phase starter control			]		
	Sen & Pandit/ Vertex/ISI marked If any. 1 No.			,	1	
	automatic voltage stabilizer make-					
	(i) 95-272 V range single phase S KVA					
	following accessories	1	(one) job	p/job	Rs.28,500.00	Rs.28,500.00
	spray powder coated painting with	j				
	sheet ( minimum 2mm thick) duly					
	following accessories made of M.S					-
	spray power coated painting with			1		
	sheet (minimum 2 mm thick) duly					
	Submersible pump set made of MS					
	220 V, 3 phase , 50 c/s for 2 HP					
	starter controll pannel operated on					
	and testing of floor mounted outdoor type L.T feeder pillar single phase				1	
[B]	Supply Installation, commissioning			[	•	

Sub Est. No. 5

S.No. 1A	Estimate for the work - House SUB-ESTIMAT Description				
	Description				
1A		Qty	Unit	Rate	Amount
	Providing and fixing MDPE (PE 80				
	GradeCompound) pipes PN-12.5 (12.5kg/Sqcm				
	as per ISO 4427 and specification fo	г	İ		<u>'</u>
	waterapplication rates are inclusive of, taxes and	i l			
	duties (Exise duty @12.50% &CST @2% agains	t			
	Form 'C'), labour cess, contractor profit and	1			
	overhead charges all complete asper direction of	f			
	Engineer-in-charge.complete.				
	MDPE Pipe 20mm dia nomina! bore	6.00	PM	Do 10.07	
1B	Providing and fixing Chlorinated Polyviny	0.00	PIVI	Rs.19.97	Rs.119.82
	Chloride (CPVC) pipes, having thermal stability	1	1		
	for hot & cold water supply, including all CPVC			]	
	plain & brass threaded fittings, including fixing				
	the pipe with clamps at 1.00 m spacing. This	) 			
	includes jointing of pipes & fittings with one step				
	CPVC solvent cement and testing of joints		1		
	complete as per direction of Engineer in Charge.				
	Internal work - Exposed on wall		ĺ		
18.7.1	15 mm nomonal bore	1.0	PM	Rs.138.70	Rs.138.70
2	Earth work in excavation in foundation trenches		1		
	or drains(not exceeding 1.5 m in width or 10 sqm			ĺ	
	on plan) including dressing of sides and amming		1		
	of bottoms, lift upto 1.5 m . including getting out			1	
	the excavated soil and disposal of surplus		ĺ		
	excavated soil as directed, within a lead of 50 m.			_	
<u></u>	All kinds of soil				
2.8.1	6.00 0.30 0.60 1.08	1.08	CuM	Rs.230.50	Rs.248.94
3	Filling available excavated earth (excluding rock)				
2.26	in trenches, plinth, sides of foundations etc. in				
	layers not exceeding 20 cm in depth:			Rs.74.50	Rs.78.85
	consolidating each deposited layer by ramming			i	
	and watering lead	1.06	CuM		
4	Providing and fixing brass ferrule with CI mouth				
	cover incuding boring and tapping the main:				
18.20.1	15mm nominal bore	1	Each	D= 054.40	5 05 1
	Providing and fixing P.P. Black service Saddle		Each	Rs.254.10	Rs.254.10
	(Brass threaded)	1	Each	Rs.400.00	Rs.400.00
5	Providing and fixing brass bib cock of approved				
	quality:				
18.15.1	15mm nominal bore	1	Each	Rs.273.00	Rs.273.00
	Total Sav	·			Rs.1,513.41
	Total Nos. of House Holds= Say	dos .	@	Rs.1,513.00	Rs.1,513.00 Rs.1,51,300.00

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2 Earth work in excavation in foundation trenches 2.8.1 or drains(not exceeding 1.5 m in width or 10 sqm on plan) including ressing of sides and ramming of bottoms, lift upto 1.5 m including getting out the excavated soil and disposal of surplus excavated soil and disposal of surplus excavated soil and disposal of surplus excavated soil and disposal of surplus excavated soil and disposal of surplus excavated soil and disposal of surplus excavated soil and disposal of surplus excavated soil and disposal of surplus excavated soil and disposal of surplus excavated soil and disposal of surplus excavated soil and disposal of surplus excavated soil and disposal of surplus excavated soil and disposal of surplus excavated soil and disposal of surplus excavated soil and disposal of surplus excavated soil and disposal of surplus excavated soil and disposal of surplus excavated soil and disposal of surplus excavated soil and surplus exc							Sub Est.					
1   Structural steet work riveted or bolled in built up	e N	4	3.1			TRUC	TURE STAC				<del></del>	<b>1</b>
10.3   seetlons, trusess and framed work, including cutting/lossing/fixing in position and applying a priming coat of approved primer all complete.		Struct	ural ster		<del></del>	halted	l in huilt un	Guan	tity	Unit	Kate	Am ount
cutting, hoisting, fixing in position and applying a priming cast of approved primer all complete.  8M high staging with GI enclosure to house electric witch panel of suitably designed MS section of angle, channel, etc. as per drawing stateched.  2 Earth work in excavation in foundation trenches or drains fixed primers or plan) including ressing of sides and ramming of bottoms, lift upto 1.5 m including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50 m. All Kinds of soit base of footing.  4 1.20 1.20 1.425 = 8.208 For fixing Ladder 1 1.00 0.50 0.275 = 0.138 8.346 8.346 M² P/M² Rs.230.50 Rs.1,92  3 Supplying and fifting in pirith with local sand and under floors including watering, ramming consolidating and dressing complete base of footing 4 1.20 1.20 0.10 = 0.576 Landing Plateform 1 1.00 0.50 0.10 = 0.050 Providing designation of 100A Brick flat Soling in filled with local sand including cost of watering, taxes 8 royalty all complete as per specification 8 direction of Ell. base of footing 4 1.20 1.20 = 5.760 Landing Plateform 1 1.00 0.50 = 0.500 = 0.500 Providing and laying in position cement concrete of specified grade extuding the cost of centring and shuttering-all work upto plinth level 1.15.3(1 Cement 1.5 coarse sand.3 graded stone aggregate 20 mm nominal size) base of footing 4 1.20 1.20 0.100 = 0.576 For Grouting at base plate 4 0.20 0.20 0.050 = 0.008 Landing Plateform 1 1.00 0.50 0.10 = 0.050 Osal Discourse of the cost of centring and shuttering-all work upto plinth level 1.15.3(1 Cement 1.5 coarse sand.3 graded stone aggregate 20 mm nominal size) base of footing 4 1.20 1.20 0.100 = 0.576 For Grouting and laying in position specified grader of entiring,shuttering, finishing and reinforcement-All work upto plinth level 1.15.3(1 cement 1.5 coarse sand.3 graded stone aggregate 20 mm nominal size) base of footing 0 1.20 0.00 0.00 0.00 0.00 0.00 0.00 0.0	_										1	
priming cost of approved primer all complete.  8M high staging with G1 endosure to house electric switch panel of suitably designed MS section of angle, channel, etc. as per drawing attached.  2 Earth work in excavation in foundation trenches 2.8.1 or dramstood exceeding 1.5 m in width or 10 sgm on plan) including ressing of sides and rammring of bottoms, lift uplo 1.5 m including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50 m. All Kinds of soil base of footing.  4 1.20 1.20 1.425 = 8.208  5 Supplying and filling in plinth with local sand and under floors including watering, ramming consolidating and dressing complete.  5 Supplying and filling in plinth with local sand and under floors including watering, ramming consolidating and dressing complete.  5 Description of 1.00 0.50 0.50 0.00 = 0.576  1 1.00 0.50 0.50 0.010 = 0.576  1 1.00 0.50 0.50 0.010 = 0.576  1 1.00 0.50 0.50 0.010 = 0.556  4 1.20 1.20 0.10 = 0.556  4 1.20 1.20 0.50 0.50 0.626 0.626 0.626 M² P/M² Rs.204.40 Rs.12  1 1.00 0.50 0.50 0.50 0.626 0.626 0.626 M² P/M² Rs.204.40 Rs.12  1 1.00 0.50 0.50 0.50 0.626 0.626 0.626 M² P/M² Rs.253.80 Rs.1,586  5 Providing designation of 100A Brick flat Soling looks flat with local sand including cost of watering, taxes & royalty all complete as per specification & direction of E1.  5 Diase of footing 1 1.00 0.50 0.50 0.50 0.50 0.50	<u> 10</u>								1	1		
8M high staging with Gl enclosure to house electric width panel of suitably designed MS section of angle, channel, etc. as per drawing attached.  2 Earth work in excavation in foundation trenches or drains(ad exceeding 1.5 m in width or 10 sgm on plan) including resisting of sides and ramming of bottoms, lift upto 1.5 m including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50 m. All Kinks of soil base of footing.  4 120 120 1425 = 8.208 For fixing Ladder 1 1.00 0.50 0.275 = 0.138 3- Supplying and filting in plinth with local sand and under floors including watering, ramming consolidating and dressing complete. base of footing 4 120 1.20 0.10 = 0.576 Landing Plateform 1 1.00 0.50 0.10 = 0.050 1.10 0.50 0.10 = 0.050 4 120 1.20 = 5.760 Landing Plateform 1 1.00 0.50 = 0.500 6.260 6.260 M² P/M² Rs.253.80 Rs.1.588 For violing and laying in position cement concrete of specified grade extuding the cest of centring and shuttering-all work upto plinth level. 11.5.3(1 Cement 1.5 coarse sand:3 graded stone aggregate 20 mm nominal size) base of footing 4 1.20 1.20 0.000 = 0.576 For Grouting at base plate 4 0.20 0.20 0.050 = 0.008 Landing Plateform 1 1.00 0.50 0.10 = 0.050 6.260 6.260 M² P/M² Rs.253.80 Rs.1.588 For violing and laying in position specified grade stone aggregate 20 mm nominal size) base of footing 4 1.20 1.20 0.000 = 0.576 For Grouting at base plate 4 0.20 0.20 0.050 = 0.0008 Landing Plateform 1 1.00 0.50 0.10 = 0.050 6.260 6.260 M² P/M² Rs.4,373.20 Rs.2,772 6 Providing and laying in position specified grade of enting, shuttering, finishing and reinforcement-All work puto plinth level 11.15.3(1 cement 1.5 coarse sand:3 graded stone aggregate 20 mm nominal size) base of footing 4 1.00 0.00 mm nominal size) base of footing 9 4 0.00 0.00 mm nominal size) base of footing 1 4 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0									1			. *
electric switch panel of suitably designed MS section of angle, channel, etc. as per drawing attached.									<del>                                     </del>	÷   · · · · · · · · · · · · · · · · · ·		
section of another, channel, etc. as per drawing attached.  Earth work in excavation in foundation trenches or individual of the control of t										1		
attached. 2   2   2   2   2   2   2   2   2   2												
2.8.1 or drains tot exceeding 1.5 m in witth or 10 sgm on plan) including ressing of sides and ramming of bottoms, lift upto 1.5 m including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50 m. All Kinks of soil base of footing  4 1.20 1.20 1.425 = 8.208  For fixing ladder  1 1.00 0.50 0.275 = 0.138  Supplying and filling in plinth with local sand and under floors including watering, famming consolidating and dressing complete. base of footing  4 1.20 1.20 0.10 = 0.576  Landing Pleteform  1 1.00 0.50 0.10 = 0.576  Landing Pleteform  1 1.00 0.50 0.10 = 0.626  4 1.20 1.20 1.20 0.10 = 0.626  4 1.20 1.20 0.00 Bink flat Soling joints filled with local sand including cost of watering, taxes 8 royalty all complete as per specification & direction of E/I. base of footing  4 1.20 1.20 = 5.760  Landing Pleteform  1 1.00 0.50 = 0.500  6.250 6.250 M² P/M² Rs.253.80 Rs.1,586  Froviding and laying in position cement concrete of specified grade exituding the cost of centring and shuttering all work upto plinth level  1.1.53(1 Cement :1.5 coarse sand.3 graded stone aggregate 20 mm nominal size) base of footing  4 1.20 1.20 0.00 = 0.576  For Grouting and laying in position specified grade of reinforced cement concrete excluding the cost of reinforced cement concrete excluding the cost of centring and shuttering all work upto plinth level  1.1.53(1 Cement :1.5 coarse sand.3 graded stone aggregate 20 mm nominal size) base of footing  4 1.20 1.20 0.00 0.00 = 0.050  6 Providing and laying in position specified grade of reinforced cement concrete excluding the cost of enting, shuttering, finishing and reinforcement-All work upto plinth level  1.1.53(1 cement :1.5 coarse sand.3 graded stone aggregate 20 mm nominal size) base of footing  4 1.00 1.00 0.30 = 1.200  Column below GL.					,			1490	Kg	P/Kg	Rs.69.20	Rs.1,03,108.00
on plani including ressing of sides and ramming of bottoms, lift upto 1.5 m including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50 m. All Kinks of soil base of footing  4 1.20 1.20 1.25 = 8.208  For fixing Ladder  1 1.00 0.50 0.275 = 0.138  3- Supplying and filling in plinth with local sand and ucconsolidating and dressing complete.  base of footing  4 1.20 1.20 0.10 = 0.576  Landing Plateform  1 1.00 0.50 0.10 = 0.050  4 1.20 1.20 0.10 = 0.576  Landing Plateform  1 1.00 0.50 0.10 = 0.500  4 1.20 1.20 = 5.760  Landing Plateform  1 1.00 0.50 = 0.500  Landing Plateform  1 1.00 0.50 = 0.500  Providing and laying in position cement concrete of specified grade excluding the cost of centring and shuttening-all work upto plinth level  1 1.53(1 Cement : 1.5 coarse sand:3 graded stone aggregate 20 mm nominal size)  base of footing  4 1.20 1.20 0.10 = 0.576  For Grouting and laying in position specified grade stone aggregate 20 mm nominal size)  base of footing  4 1.20 1.20 0.00 = 0.576  For Grouting and laying in position specified grade stone aggregate 20 mm nominal size)  base of footing  4 1.20 1.20 0.000 = 0.050  Calumn betwo KL.	2	Earth	work in	excavat	ion in fol	ındatio	n trenches		i	<u> </u>		
of bottoms, lift uplo 1.5 m. including getting out the excavated soil as directed, within a lead of 50 m. All Kinds of soil base of footing	2.8.1									į		•
the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50 m. All Kinds of soil base of footing 4 1.20 1.20 1.425 = 8.208   For fixing Ladder 1 1.00 0.50 0.275 = 0.138   3- Supplying and filting in plinth with local sand and under floors including watering, ramming consolidating and dressing complete.  base of footing 4 1.20 1.20 0.10 = 0.576   Landing Plateform 1 1.00 0.50 0.10 = 0.050   1 1.00 0.50 0.10 = 0.050   1 1.00 0.50 0.10 = 0.050   1 1.00 0.50 0.10 = 0.050   1 1.00 0.50 0.10 = 0.050   1 1.00 0.50 0.00   1 1.00 0.50 0												
excavated soil as directed, within a lead of 50 m. All Kinds of soil		of bot	toms, lif	t upto 1.	5 m . i <b>nc</b>	luding	getting out					
All Kinds of soil base of footing   4     1.20    1.20    1.425    = 8.208    For fixing Ladder												
base of footing		i			cted, with	in a lea	ad of 50 m.			:	f.	
4					<del> </del>	<del></del>				<del></del>	:	<del></del>
For fixing Ladder					+=	<u></u>						
1   1.00   0.50   0.275   =   0.138   8.346   8.346   M³   P/M³   Rs.230.50   Rs.1,92		<del></del>			1.425	; =	8.208		<u>:</u>			
3- Supplying and filling in plinith with local sand and under floors including watering, ramming consolidating and dressing complete.  base of footing  4 120 1.20 0.10 = 0.576  Landing Plateform  1 1.00 0.50 0.10 = 0.050  Providing designation of 100A Brick flat Soling joints filled with local sand including cost of watering, taxes & royalty all complete as per specification & direction of £/I.  base of footing  4 120 1.20 = 5.760  Landing Plateform  1 1 0.0 0.50 = 0.500  Providing and laying in position cement concrete of specified grade excluding the cost of centring and shuttering-all work upto plinth level.  11.53(1 Cement :1.5 coarse sand:3 graded stone aggregate 20 mm nominal size)  base of footing  4 120 1.20 0.050 = 0.050  Providing and laying in position specified grade of footing and shuttering-all work upto plinth level.  11.53(1 Cement :1.5 coarse send:3 graded stone aggregate 20 mm nominal size)  base of footing  4 120 0.20 0.050 = 0.008  Landing Plateform  1 1.00 0.55 0.10 = 0.050  Providing and laying in position specified grade of footing and laying in position specified grade of entring, shuttering, finishing and reinforcement-All work puto plinth level  11.53(3) cement :1.5 coarse sand:3 graded stone aggregate 20 mm nominal size)  base of footing  4 1.20 1.20 0.050 = 0.008  Landing Plateform  1 1.00 0.55 0.10 = 0.050  Providing and laying in position specified grade of entring, shuttering, finishing and reinforcement-All work puto plinth level  11.53(3) cement :1.5 coarse sand:3 graded stone aggregate 20 mm nominal size)  base of footing  4 1.00 1.00 0.30 = 1.200  Column below GL			·		0.375		0.105				<u> </u>	
3- Supplying and filling in plinth with local sand and under floors including watering, ramming consolidating and dressing complete.    base of footing		<del>                                     </del>	1.00	0.50	0.275	=_			-	·	<u> </u>	
2.28   under floors including watering, ramming consolidating and dressing complete.		-	<u> </u>	1	<u> </u>	<u> </u>		8.346	<u>M</u> <sup>3</sup>	P/M <sup>3</sup>	Rs.230.50	Rs. 1,923.64
Consolidating and dressing complete   base of footing   4   120   1.20   0.10   = 0.576							1		•	:		
base of footing	2.28	1			_		ramming			:		
4   1.20   1.20   0.10   = 0.576     Landing Plateform		<del></del>			sing com	p <b>lete</b> .			<u> </u>			
Landing Plateform												
1   1.00   0.50   0.10   =   0.050     0.626   0.626   M³   P/M³   Rs 204 40   Rs 127		•			0.10	=	0.576		:	1		
## Providing designation of 100A Brick flat Soling joints filled with local sand including cost of watering, taxes & royalty all complete as per specification & direction of E/I.    base of footing					<u> </u>				:		<u> </u>	
Providing designation of 100A Brick flat Soling joints filled with local sand including cost of watering, taxes & royalty all complete as per specification & direction of E/l.		1	1.00	0.50	0.10	=_						
4.   Providing designation of 100A Brick flat Soling joints filled with local sand including cost of watering, taxes & royalty all complete as per specification & direction of E/I.				1				0.626	M <sup>3</sup>	P/M <sup>3</sup>	Rs.204.40	Rs.127.95
watering, taxes & royalty all complete as per specification & direction of E/I.	-									1		
Specification & direction of E/I.	11.72								1			
base of footing		waterir	ng, taxe	es & roy	alty all	comple	ete as per					
4					n of E/I.				1	·		- ·· · -··
Landing Plateform		+		<del></del>	<u>!</u>	<u> </u>			:			
1   1.00   0.50   = 0.500   6.260   6.260   M²   P/M²   Rs.253.80   Rs.1,588		1 .			<del>-</del>	=	5.760				<u>.</u>	
6.260   6.260   M²   P/M²   Rs 253.80   Rs.1,588				<del></del>	·	<del>                                     </del>		<u> </u>	·		.	
Providing and laying in position cement concrete  4.1.2 of specified grade exluding the cost of centring and shuttering-all work upto plinth level.  1:1.5:3(1 Cement: 1.5 coarse sand:3 graded stone aggregate 20 mm nominal size)  base of footing  4		1	1.00	0.50		=			9			·
of specified grade exluding the cost of centring and shuttering-all work upto plinth level.  1:1.5:3(1 Cement :1.5 coarse sand:3 graded stone aggregate 20 mm nominal size)  base of footing  4 1.20 1.20 0.100 = 0.576  For Grouting at base plate  4 0.20 0.20 0.050 = 0.008  Landing Plateform  1 1.00 0.50 0.10 = 0.050  Providing and laying in position specified grade of reinforced cement concrete excluding the cost of entring,shuttering,finishing and reinforcement-All work puto plinth level  1:1:5:3(1 cement: 1.5 coarse sand:3 graded stone aggregate 20 mm nominal size)  base of footing  4 1.00 1.00 0.30 = 1.200  Column below GL	- E	Descript	na -= -	<u> </u>		!		6.260	M <sup>*</sup>	P/M <sup>2</sup>	Rs.253.80	Rs.1,588.79
of specified grade exluding the cost of centring and shuttering-all work upto plinth level.  1:1.5:3(1 Cement :1.5 coarse sand:3 graded stone aggregate 20 mm nominal size) base of footing  4 1.20 1.20 0.100 = 0.576  For Grouting at base plate  4 0.20 0.20 0.050 = 0.008  Landing Plateform  1 1.00 0.50 0.10 = 0.050  Providing and laying in position specified grade of reinforced cement concrete excluding the cost of entring, shuttering, finishing and reinforcement-All work puto plinth level  1:1:5:3(1 cement: 1.5 coarse sand:3 graded stone aggregate 20 mm nominal size) base of footing  4 1.00 1.00 0.30 = 1.200  Column below GL		LLOAIG	ing and	ayıng ın	position	cemer	nt concrete					
and shuttering-all work upto plinth level.  1:1.5:3(1 Cement: 1.5 coarse sand:3 graded stone aggregate 20 mm nominal size)  base of footing  4 1.20 1.20 0.100 = 0.576  For Grouting at base plate  4 0.20 0.20 0.050 = 0.008  Landing Plateform  1 1.00 0.50 0.10 = 0.050  Providing and laying in position specified grade of reinforced cement concrete excluding the cost of entring, shuttering, finishing and reinforcement-All work puto plinth level  1:1:5:3(1 cement: 1.5 coarse sand:3 graded stone aggregate 20 mm nominal size)  base of footing  4 1.00 1.00 0.30 = 1.200  Column below GL	7.1.∠	of spe	cified gr	rade exl	uding the	cost	of centrina		:	i	i ;	
1:1.5:3(1 Cement :1.5 coarse sand:3 graded stone aggregate 20 mm nominal size)  base of footing  4		<u> </u>					- !			1	1	
Stone aggregate 20 mm nominal size)   base of footing										•		
base of footing							3 graded				· · · · · · · · · · · · · · · · · · ·	
4   1.20   1.20   0.100   =   0.576					n nominal	size)			: 4	1	<u> </u>	
For Grouting at base plate  4 0.20 0.20 0.050 = 0.008  Landing Plateform  1 1.00 0.50 0.10 = 0.050  Providing and laying in position specified grade of reinforced cernent concrete excluding the cost of entring, shuttering, finishing and reinforcement-All work puto plinth level  1:1:5:3(1 cement: 1.5 coarse sand:3 graded stone aggregate 20 mm nominal size)  base of footing  4 1.00 1.00 0.30 = 1.200  Column below GL		- 3		1	<u> </u>					; 		
For Grouting at base plate  4 0.20 0.20 0.050 = 0.008  Landing Plateform  1 1.00 0.50 0.10 = 0.050				[	i	=	0.576		_		1	
4 0.20 0.20 0.050 = 0.008  Landing Plateform  1 1.00 0.50 0.10 = 0.050  0.634 0.634 M³ P/M³ Rs.4,373.20 Rs.2,772  6 Providing and laying in position specified grade of reinforced cement concrete excluding the cost of entring,shuttering,finishing and reinforcement-All work puto plinth level  1:1:5:3(1 cement: 1.5 coarse sand:3 graded stone aggregate 20 mm nominal size)  base of footing  4 1.00 1.00 0.30 = 1.200  Column below GL		For Gr	outing a	t base pl	ate					<u> </u>		
Landing Plateform  1 1.00 0.50 0.10 = 0.050  0.634 0.634 M³ P/M³ Rs.4,373.20 Rs.2,772  6 Providing and laying in position specified grade of reinforced cement concrete excluding the cost of entring, shuttering, finishing and reinforcement-All work puto plinth level  1:1:5:3(1 cement: 1.5 coarse sand:3 graded stone aggregate 20 mm nominal size)  base of footing  4 1.00 1.00 0.30 = 1.200  Column below GL				1	1	=	በ በበጸ		; · i	<u> </u>	1	
1 1.00 0.50 0.10 = 0.050  0.634 0.634 M³ P/M³ Rs.4,373.20 Rs.2,772  6 Providing and laying in position specified grade of reinforced cement concrete excluding the cost of entring, shuttering, finishing and reinforcement-All work puto plinth level  1:1:5:3(1 cement: 1.5 coarse sand:3 graded stone aggregate 20 mm nominal size)  base of footing  4 1.00 1.00 0.30 = 1.200  Column below GL		Landin				<del>  -</del>  -	0.000		<u> </u>	<del> </del> .	<del> </del>	
6 Providing and laying in position specified grade of reinforced cement concrete excluding the cost of entring, shuttering, finishing and reinforcement-All work puto plinth level  1:1:5:3(1 cement: 1.5 coarse sand:3 graded stone aggregate 20 mm nominal size)  base of footing  4 1.00 1.00 0.30 = 1.200  Column below GL			-	7	0.10	<del>  _+</del>	0.050			<del> </del>	ļ	
6 Providing and laying in position specified grade 5.1.2 of reinforced cement concrete excluding the cost of entring, shuttering, finishing and reinforcement-All work puto plinth level 1:1:5:3(1 cement: 1.5 coarse sand:3 graded stone aggregate 20 mm nominal size) base of footing 4 1.00 1.00 0.30 = 1.200 Column below GL		•	1.00	0.00	0.10	= -				<u> </u>	ļ	
6 Providing and laying in position specified grade 5.1.2 of reinforced cement concrete excluding the cost of entring,shuttering,finishing and reinforcement- All work puto plinth level 1:1:5:3(1 cement: 1.5 coarse sand:3 graded stone aggregate 20 mm nominal size) base of footing 4 1.00 1.00 0.30 = 1.200 Column below GL				<u>L</u>	<u> </u>			0.634	M³	P/M <sup>3</sup>	Rs.4,373.20	Rs.2,772.61
of entring,shuttering,finishing and reinforcement- All work puto plinth level  1:1:5:3(1 cement: 1.5 coarse sand:3 graded stone aggregate 20 mm nominal size)  base of footing  4 1.00 1.00 0.30 = 1.200  Column below GL												
All work puto plinth level  1:1:5:3(1 cement: 1.5 coarse sand:3 graded stone aggregate 20 mm nominal size)  base of footing  4 1.00 1.00 0.30 = 1.200  Column below GL											1	
1:1:5:3(1 cement: 1.5 coarse sand:3 graded stone aggregate 20 mm nominal size)  base of footing  4		OT entring, shuttering, finishing and reinforcement-										
stone aggregate 20 mm nominal size)   base of footing										<u> </u>		
base of footing	l	1:1:5:3(1 cement: 1.5 coarse sand:3 graded										
4 1.00 1.00 0.30 = 1.200 Column below GL					nominal	size)				1		
Column below GL		base of	footing					i		T	T	
Column below GL	ļ	4	1.00	1.00	0.30	=	1.200			<del>                                     </del>		
		Columr	below	GL								
4 0.20 0.20 0.85 = 0.136				r	O 85		0.400			<del> </del>	<del> </del>	

S.N.	T		Part	ticulars			Quantity	Unit	Rate	Amenat
	Colum	n above						Onne	Nate	Amount
	4	0.26	0.20	0.25	=	0.040			<del> </del>	
	1		<del>                                     </del>		<del>  ``  </del>	1.376	1.376 M <sup>3</sup>	P/M <sup>3</sup>	D- 4500.00	
7-	Centri	na .	and	shutteri	na i	including	1.370 141	P/IVI	Rs.4,530.30	Rs.6,233.69
5.9.1	,	-		and remov			İ			
	16	1.00	0.30		1				-	
	16	0.20	0.85		=	4.800	· <del>-  </del>	<del> </del>		
					=	2.720				
<del></del>	16	0.20	0.25		=	0.800				
	ļ <u> </u>	<u> </u>	L			8.320	8.320 M <sup>2</sup>	P/M <sup>2</sup>	Rs.169.00	Rs 1,406.08
8-		rcement		R.C.C.	work	including				
5.22	straigh	itening, c	cutting, b	ending, p	lacing	in position	!			
			complet							
		Reinforce	tor stee	el 		···		<u></u>		
			ement. I. Of Con		!	= .	86.00 Kg.	P/Kg.	Rs.56.00	Po 4 040 00
9					<del>, .</del>			, , , , , , , , , , , , , , , , , , ,	13.50.00	Rs.4,816.00
2.26	in tren	ches ni	inth eid	iced earth	(exci	uding rock) ons etc. in	٠	1		
2.20	lavers	not e	exceedin	ig 20			:			
						in depth: y ramming				
	and wa	tering le	ad			•	2 086 M <sup>3</sup>	P/M <sup>3</sup>	Rs.74.50	D- 455 40
10	Providi	ng and	fixing a	nchor bol	t of 1	12 mm dia			13.74.50	Rs.155.43
10.19	and 0.6	30 Mtr le	ngth em	bedded in	R.C.	C pedestal				
	all cor	nplete a	s per	direction	of E	ngineer in		1		
			0.5328k				4.2624 Kg	P/kg	Rs.73.60	Rs.313.71
11-	Paintin	g with i	ready n	nixed pai	nt of	approved		<del></del>	······································	
13.82.1	brand a	and man	ufacture	in all sh	ades	to give an	į			
	even si						:	1		
			(two or i	more coat	s)			<del></del>	· · · · · · · · · · · · · · · · · · ·	
	Frame					·				·
	0.5 0.5	14.00	3.00	<del></del>	_=	21.000				
	0.5	3.50	3.50	·	_=_	6.125	- · <b>-</b> · · · · <del>}</del> ·	· 	<u> </u>	
12	Corrier		4-11			27.125	27.13 M <sup>2</sup>	M <sup>2</sup>	Rs.63.60	Rs. 1,725.15
<u>12</u>	Carnag	e or the	ioliomiud	g matenal	s from	quarry to	:	!	,	
	staking	at wor	rk cita	oading,	unioa	iding and				
j	direction	at wo	v sife	as per	speci	fication &	:	1		1
	(a) Brick	ks ( 7 Kn	n. Pucca	& 1 Km.	Kachi	ha lead)	203 Nos.	%0 nos.	De 600 40	
			1 (100 Ki		1.420111	ila load)		1	Rs.606.10	Rs.123.04
			(150 Km	- 1	_  -		0.860 M <sup>3</sup>	P/M <sup>3</sup>	Rs.1,221.09	Rs.1,050.14
					<u></u>		1.730 M <sup>3</sup>	P/M <sup>3</sup>	Rs.1,746.29	Rs.3,021.08
	(u) Loca	alia (	∠ NM. F	rucca & 1	KM. I	Kachh <b>a</b> lea	0.720 M <sup>3</sup>	P/ <b>M</b> <sup>3</sup>	Rs.217.23	Rs.156.41
-	- #-	<u></u>			- L					Rs.1,28,521.72
		<del></del> -								Rs.1,28,500.00

- 1/2 An

An January



PUBLIC HEALTH ENGINEERING DEPARTMENT

MODEL ESTIMATE

**FOR** 

CONSTRUCTION OF RURAL PIPED WATER SUPPLY SCHEME FOR A WARD HAVING 150 HOUSE HOLDS

ESTIMATED COST-- Rs. 11.111 Lac

2017-18

#### **GOVERNMENT OF BIHAR** Public Health Engineering Department **ABSTRACT OF COST**

NAME OF WORK:- CONSTRUCTION OF RURAL PIPED WATER SUPPLY SCHEME FOR WARD HAVING 150 HOUSE HOLDS

S.N.	Description	
1	Construction of 150mm X 90m door Creation	Total Amount
	Construction of 150mm X 90m deep Gravel packed T/W etc. all complet and as per direction of E/I.	te
_	(As per sub Estimate no 1)	
2	Constructing masonry Chamber 100x100x75 cm inside, in brick work in cereent morter 1:4 (1 compart - 4	Rs.1,65,744.00
	Touristic mortal 1.4 (1 Cement & Coarge cand) for Tube 14/11	- 1
	I've olde iniverse maker company in a constant of the constant	Į.
	1-33, 33 to 2011111 HOHIIIIdi SIZE ) hacaccan avacuation ( )	1
	remarks the first the content of the same and the same an	1
	TOTAL SILE OF GIRL HISBUR DRASIANDA WITH ASSOCIATION AS A COMPANY OF THE PROPERTY OF THE PROPE	
		f .
	The second of the second secon	1
	12 mill trick complete as per standard and accept	.
- 1		*
3	(As per sub Estimate no 2)	Rs.13,210.00
3	Providing and Laying Distribution network of High Density Polyethyene	13.13,210.00
	'	
- 1	staging etc all complete as per direction of E/I. (As per sub Estimate no.	
	<del>- 1</del> .	· ·
	Supply Installation, commissioning and testing of single phase 3 H.P.	
ŀ	submersible pump set having discharging capacity 3.35 lps at a total nead of 35 meter(approx) of KSB/ Kirloskar or equivalent make with all	
a	accessories & fittings etc including loading unloading and transportation	1
"	" TO PUMP SELLU LIE WORK SITE WITH All required labor.	
a	ind tackles installation, testing & commissioning as per standards	
	Framestrone and direction of EV	
(/	As per sub Estimate no 4)	
5 P	roviding house connection for each house hold including supplying all	Rs.93,603.00
ļn	naterials, labours, tools and making femule connection with 20 mm dia	
<sub>N</sub>	IDPE and 15mm CRVC Disass its arrange connection with 20 mm dia	
	IDPE and 15mm CPVC Pipes with all fittings etc all complete.	
<u>  (/</u>	As per sub Estimate no 5)	Rs.2,26,950.00
,	roviding and erecting 3 M high staging of suitably designed MS section	113.2,20,300.00
6)	angle, Glainlei etc. as per grawing attached (As per sub Estimate as I	
		Rs.1,28,500.00
	TOTAL	Rs.11,00,060.21
	Add 1% Contingency	Rs.11,000.60
	G. TOTAL	Rs.11,11,060.81
(R	s. Eleven Lakh Fleven Thousand O / I - Say	Rs.11,11,100.00

(Rs. Eleven Lakh Eleven Thousand One Hundred) only

#### Note:

i) This model estimate has been prepared in the light of Guidelines of PRD, Bihar memo no. 6278 dt.23.09.2016. This estimate may not ensure standard pressure in the distribution network. Hence on the spot change in staging of storage tank may be required.

ii) Water quality testing of source should be done after construction of Tube well.

iii) Road cutting cost may increase or decrease as per local condition.

Technical approval accorded for Rs.11,11,100.00 (Rs. Eleven Lakh Eleven Thousand One

Hundred) only

Chief Engineer (Design Public Health Engineering D. Bihar, Patna

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		e mil.		**************************************	
	(Sub Estim	ate - 1)			
1	(A) Construction of 150mm X		Gravel na	acked T/W	
S.	Particulars	Quantity	Unit	Rate	Amount
<u>10.</u>			OTIL	Nate	Amount
1	Transportation of machine, equipments including all accessories etc.	1 No.	Each	Po 1 010 00	Bo 1 010 /
2	Boring/drilling bore well of required dia for		Each	Rs.1,010.00	Rs.1,010.
	casing/strainer pipe, by suitable method prescribed		1		
	in IS: 2800 (part I), including collecting samples		1		
	from different strata, preparing and submitting strata				
	chart/ bore log, including hire & running charges of all equipments, tools, plants & machineries required		1		
	for the job, all complete as per direction of Engineer				
	in-charge, upto 90 metre depth below ground level.				
	(All types of soil)	<u> </u>			
	400mm dia bore from GL to 90.0M	90 Mtr.	. P/M	Rs.529.30	Rs.47,637.
Α	Supplying, assembling, lowering and fixing in				
	vertical position in bore well, unplasticized PVC				
	(UPVC) medium well casing (CM) pipe of required dia, conforming to IS: 12818, including required hire				
	and labour charges, fittings & accessories etc. all				
	complete, for all depths, as per direction of Engineer				
	-in-charge.				
В	(a) 150 mm nominal size dia	59 M	P/M	Rs.61 <b>5</b> .30	Rs.36,302.
В	Supplying, assembling, lowering and fixing in				
	vertical position in bore well unplasticized PVC				
	(UPVC) medium well screen (RMS) pipes with ribs,				
	conforming to IS: 12818, including hire & labour				
	charges, fittings & accessories etc. all complete, for				
	all depths, as per direction of Engineer-in-charge.				
	150 mm nominal size dia	30.0 M	P/M	Rs.554.30	Rs.16,629.
ŀ	Supplying fitting & fixing the following Fitting of approved make and specification at work site				
	complete job.				
	(a) 150mm center guide Nos. in each T/W	9 Nos.	Each	Rs.150.00	Rs.1,350.
	(b) 150 mm dia well plug	1 No	Each	Rs.205.10	Rs.205.
	(b) 150 mm dia M.S. Clamp 1.6 M long (one Pair)	1 No	Each	Rs.1,031.10	Rs.1,031.
	Supplying 3mm to 6 mm Well washed assorted pea	<del></del>			
	gravel and doing surrounding around the annular				
			1 .		
	space between bore hole & 125mm pipe uniformity	i			
	up to the depth 10 mtr. below G.L all work complete				
	up to the depth 10 mtr. below G.L all work complete as per direction of E/I.	11 M³	P/M <sup>3</sup>	Rs.917. <b>00</b>	Rs.10,087.
	up to the depth 10 mtr. below G.L all work complete as per direction of E/I. Carriage of Pea gravel from Dhalbhumigarh (taken				
	up to the depth 10 mtr. below G.L all work complete as per direction of E/I. Carriage of Pea gravel from Dhalbhumigarh (taken av distance 400Km)	11 M³	P/M <sup>3</sup>	Rs.917.00 Rs.4,336.54	
	up to the depth 10 mtr. below G.L all work complete as per direction of E/I.  Carriage of Pea gravel from Dhalbhumigarh (taken av distance 400Km)  Supplying all materials laobours and equipments to				
	up to the depth 10 mtr. below G.L all work complete as per direction of E/I.  Carriage of Pea gravel from Dhalbhumigarh (taken av distance 400Km)  Supplying all materials laobours and equipments to seal T/W up to the depth of 12 mtr below G.L. by				
	up to the depth 10 mtr. below G.L all work complete as per direction of E/I.  Carriage of Pea gravel from Dhalbhumigarh (taken av distance 400Km)  Supplying all materials laobours and equipments to seal T/W up to the depth of 12 mtr below G.L. by Sticky clay to prevent contamination from surface	11 M³		Rs.4,336.54	Rs.10,087.0
	up to the depth 10 mtr. below G.L all work complete as per direction of E/I.  Carriage of Pea gravel from Dhalbhumigarh (taken av distance 400Km)  Supplying all materials laobours and equipments to seal T/W up to the depth of 12 mtr below G.L. by Sticky clay to prevent contamination from surface from all complete job as per direction of E/I.				Rs.47,701.9
	up to the depth 10 mtr. below G.L all work complete as per direction of E/I.  Carriage of Pea gravel from Dhalbhumigarh (taken av distance 400Km)  Supplying all materials laobours and equipments to seal T/W up to the depth of 12 mtr below G.L. by Sticky clay to prevent contamination from surface from all complete job as per direction of E/I.  Supplying all materials laobours and equipments	11 M³	P/M³	Rs.4,336.54	
	up to the depth 10 mtr. below G.L all work complete as per direction of E/I.  Carriage of Pea gravel from Dhalbhumigarh (taken av distance 400Km)  Supplying all materials laobours and equipments to seal T/W up to the depth of 12 mtr below G.L. by Sticky clay to prevent contamination from surface from all complete job as per direction of E/I.  Supplying all materials laobours and equipments incluiding 150mm dia G.I. Cap /C.I. Cap over the	11 M³	P/M³	Rs.4,336.54 Rs.51.01	Rs.47,701.9
	up to the depth 10 mtr. below G.L all work complete as per direction of E/I.  Carriage of Pea gravel from Dhalbhumigarh (taken av distance 400Km)  Supplying all materials laobours and equipments to seal T/W up to the depth of 12 mtr below G.L. by Sticky clay to prevent contamination from surface from all complete job as per direction of E/I.  Supplying all materials laobours and equipments	11 M³	P/M <sup>3</sup> Each	Rs.4,336.54 Rs.51.01 Rs.205.10	Rs.47,701.
	up to the depth 10 mtr. below G.L all work complete as per direction of E/I.  Carriage of Pea gravel from Dhalbhumigarh (taken av distance 400Km)  Supplying all materials laobours and equipments to seal T/W up to the depth of 12 mtr below G.L. by Sticky clay to prevent contamination from surface from all complete job as per direction of E/I.  Supplying all materials laobours and equipments including 150mm dia G.I. Cap /C.I. Cap over the casing of 150mm dia T/W properly all complete.  Carriage of necessary equipment & materials.  Supplying all tools equipments & labour for flushing	11 M³ 1 item 1 No.	P/M³	Rs.4,336.54 Rs.51.01	Rs.47,701.9 Rs.51.0 Rs.205.
	up to the depth 10 mtr. below G.L all work complete as per direction of E/I.  Carriage of Pea gravel from Dhalbhumigarh (taken av distance 400Km)  Supplying all materials laobours and equipments to seal T/W up to the depth of 12 mtr below G.L. by Sticky clay to prevent contamination from surface from all complete job as per direction of E/I.  Supplying all materials laobours and equipments incluiding 150mm dia G.I. Cap /C.I. Cap over the casing of 150mm dia T/W properly all complete.  Carriage of necessary equipment & materials.  Supplying all tools equipments & labour for flushing washing and developing the T/W to give clean &	11 M³ 1 item 1 No.	P/M <sup>3</sup> Each	Rs.4,336.54 Rs.51.01 Rs.205.10	Rs.47,701.9
	up to the depth 10 mtr. below G.L all work complete as per direction of E/I.  Carriage of Pea gravel from Dhalbhumigarh (taken av distance 400Km)  Supplying all materials laobours and equipments to seal T/W up to the depth of 12 mtr below G.L. by Sticky clay to prevent contamination from surface from all complete job as per direction of E/I.  Supplying all materials laobours and equipments incluiding 150mm dia G.I. Cap /C.I. Cap over the casing of 150mm dia T/W properly all complete.  Carriage of necessary equipment & materials.  Supplying all tools equipments & labour for flushing washing and developing the T/W to give clean & clear water and all complete job as per direction of	11 M³  1 item  1 No. 1 No.	Each Each Each	Rs.4,336.54  Rs.51.01  Rs.205.10  Rs.287.50	Rs.47,701.9 Rs.51.0 Rs.205. Rs.287.9
D	up to the depth 10 mtr. below G.L all work complete as per direction of E/I.  Carriage of Pea gravel from Dhalbhumigarh (taken av distance 400Km)  Supplying all materials laobours and equipments to seal T/W up to the depth of 12 mtr below G.L. by Sticky clay to prevent contamination from surface from all complete job as per direction of E/I.  Supplying all materials laobours and equipments incluiding 150mm dia G.I. Cap /C.I. Cap over the casing of 150mm dia T/W properly all complete.  Carriage of necessary equipment & materials.  Supplying all tools equipments & labour for flushing washing and developing the T/W to give clean &	11 M³ 1 item 1 No.	P/M <sup>3</sup> Each	Rs.4,336.54 Rs.51.01 Rs.205.10	Rs.47,701.

## (Sub Estimate - 2) Analysis of Chamber for TW

Supplying materials, labours and constructing chamber of following dimension having 250mm thick wall in C.M. (1:4) in cluding 12mm C.P. (1:3) with punning inside, R.C.C. cover slab with C.I. Surface box , 20mm dia foot rest at 150mm interval 10mm dia lifting ring etc. all complete.

	SiZE		0 M	X	1.00	M x	0.75	M deep	
600							0.70	in deep	
<u>S.O.R.</u> No.	Particulars	No.	<u>r</u>	w	H	Qty.	Unit	Rate	Amount
<u>1</u> 1.S.O.R. r	Earth work in excavation No. 2.8	1	1.75	1.75	1.0	3.063 M <sup>3</sup>	P/M <sup>3</sup>	Rs.230.50	Rs.705.91
<u>2</u> S.O.R. 1	Sand filling No. 2.28	1	1.75	1.75	0.075	0.230 M <sup>3</sup>	P/M <sup>3</sup>	Rs.204.40	Rs.46.95
<u>3</u> \$.0.R. 1	Brick flat soling	1	1.75	1.75		3.063 M <sup>2</sup>	P/M <sup>2</sup>	Rs.253.80	Rs.777.26
<u>4</u> \$.0.0.4	P.C.C. (1:2:4) in foundation (1.1.3)	1	1.75	1.75	0.10	0.306 M <sup>3</sup>			
<u>5</u>	B/Work in (1:4) C.M.	2	2 50	0.25	0.75	0.306 M <sup>3</sup>	P/M <sup>3</sup>	Rs.3,850.50	Rs.1,179.22
S.O.R. N	lo. <b>6.1.12/1</b>	_	2.00	0.23	0.75	0.938 M <sup>3</sup>	P/M <sup>3</sup>	Rs.4,724.40	Rs.4,429.13
<u>6</u> \$.O.R. N	R.C.C. Cover slab(1:1.5:3) lo. 5.2.2 & 5.9.3	1	1.50	1.50	0.15	0.338 M <sup>3</sup>	P/M <sup>3</sup>	Rs.5,139.70	Rs.1,734.65
7	shuttering C.P. (1:3) with 5% Cico & neat cement	2	1.50	1.50	0.15	3.15 M <sup>2</sup>	P/ <b>M</b> ²	Rs.291.00	Rs.916.65
\$.O.R.	Internal face	2	1.00	4.00	4.00				
No.	Bed surface	1	1.00 1.00		1.00	4.00 M <sup>2</sup>			
+13.36.1		•	1.00	1.00	-	1.00 M <sup>2</sup>			
						5.00 M <sup>2</sup>	P/M <sup>2</sup>	Rs.166.30	Rs.831.50
	C.P. (1:4) out side of wall c. 13.11.2	2	1.5 <b>0</b>	1.50	0.75	4.5 M²	P/M <sup>2</sup>	Rs.114.70	Rs.516.15
9 S.O.R. No	8mm día T.S. Rod p. 5.22,7 <b>A</b>								
40	Lifting Ring of 10mm dia	0.338	M³ x	70	Kg/ M3	23.625 Kg	P/Kg	Rs.56.00	Rs.1,323.00
<u>10</u>	Rod					4 No.	Each	Rs.30.00	Rs.120.00
<u>11</u>	Carriage of materials 5%							Total	Rs.12,580.41 Rs.629.02
									Rs.13,209.43
						Say	Rs.13,2	210.00	

			—— ———	st. No. 3		· · ·		
S.N.		WAT	ER SUPPLY DI	STRIBU	TION	SYSTEM		
1A	Earthwork in excava	Particulars	200ding 20 a t	Qua	antity	Uni	Rate	Amount
	depth 1.5 in width a				ľ			
						:		•
	disposal of excavate				. {	÷		
- ·	1.5m, disposal earth 75mm dia Pipe	1						
		195.00 0.30	1.10 =	64.	35			
	63mm dia Pipe	195.00 0.30	1.10 =	64.	35			· ·- · <u></u>
	50mm dia Pipe	390.00 0.30	1.10 =	128.	70		<del>'                                    </del>	<del></del>
	40mm dia Pipe	520.00 0.30	1.10 =	171.0	60	:		
	Add 5	% extra for fittings =			00 M <sub>3</sub>		:	· · · · · · · · · · · · · · · · · · ·
					15 M <sup>3</sup>			
1B	Provision for PCC roa	ad cutting and its res	toration		15 M³ 33 M³	P/M <sup>3</sup>		Rs.1,03,828.73
2	Filling available exc	avated earth (excl	uding rock) in	2, <u>.113</u>	191	P/IVI	Rs.4,428.80	Rs.64,793.34
	trenches, pliath, side	s of foundations et	c. in layers not			:		
	exceeding 20cm in d	epth, consolidating	each deposited					
	ayer by ramming and upto 1.5 m.	watering, lead up t	o 50 m and lift		:	į		
	Providing and laying	High Donaite Del		441.4	4 M <sup>3</sup>	P/M <sup>3</sup>	Rs.74.50	Rs.32,887.35
(	HDPE pipe) of 20 mr	n to 225 mm OD an	yethyene pipe			į		113.02,007.35
ŀ	(g/cm2 and 10 Kg/cm	2 sutable for water	Supply which is		÷			
a	ivaliable in all standa	rd, like ISI-4984/199	5 and various		i		:	
į9	rades like PE-80, P	E-100 including rea	Uired specials				· · · · · · · · · · · · · · · · · · ·	
6	Rates are inclusive of	, all taxes and duti	es (Exise duty				:	
0	212.50% &CST @29	% against Form 'C')	, labour cess,				1	
р	er direction of Engine	wennead charges a er-in-charge	i complete as					ļ
АН	DPE pipe of materials	s grade PE100- PN1	0 (dia in mm)		<del></del>			
- +-			i		; ì			
- /:	omm dia Pipe from P	VC Tank to Distributi	on main	14.00	M	P/M	Rs.239.81	Rs.3,357.34
	mm dia Pipe			195.00	М	P/M	Rs.239.81	
63 3	3mm dia Pipe			195.00	M	P/M	Rs.168.77	Rs.46,762.95
H	OPE pipe of materials	grade PE100- PN8	(dia in mm)				13.100.17	Rs.32,910.15
	mm dia Pipe		=	···	<u>.</u>			
	mm dia Pipe		· :	390.00	_	P/M	Rs.89.99	Rs.35,096.10
-+	mm dia Pipe from T/v	well to DVC TI		520.00	М	P/M	Rs.59.78	Rs.31,085.60
Pro	oviding and fixing bra	ISS date valve with	21	12.00	M	?/M	Rs.89.99	Rs. 1,079.88
ар	proved quality (screw	ed end)	Sil wheel of	į		:	:	
!	mm dia Pipe	J.i.dy.	T				·	
-+	nm dia Pipe			3	Nos.	Each	Rs.1,351.60	Rs.4,054.80
+-	nm dia Pipe				٠.,	Each	Rs.1,351.60	Rs.2,703.20
$\dashv$ $-$	nm dia Pipe			3	Nos.	Each	Rs.811.40	Rs.2,434.20
7011	in dia Pipe			3 1	Nos.	Each	Rs.613.90	Rs.1,841.70

YS.N		Particula	ars		<del></del> -			1		: 
5	Constructing mason			v75		Qua	ntity	Unit	Rate	Amount
18.3	sand) for sluice valved diameter, 160 mm be inside) with chained cement: 2 coarses 20mm nominal size) concrete 1:5:10(1 cemaggregate 40 mm nomicement mortar 1:3 (1) thick, finished with complete as per stanting sand)	t mortar 1 e, with C.I. ttom diam lid and R( eand : 4 , necessa nent : 5 fin ninalsize); cement a floating	:4 (1 ce surface neter and CC top s graded ry excav e sand : and insid : 3coars	box 10 180 m slab 1:2 stone a ation, for 10 grad le plast le sand	4 coarse 00mm top nm deep ( 24 mix (1) aggregate oundation ded stone ering with ) 12 mm					
<u> </u>	E/I. Work for additional de						9 Nos	Each	Rs.5,807.50	Pc 50 207 5
<u> </u>	<del>-</del>									Rs. 52,267.50
<i>-</i>	Brick work (1:4) in four	ndation					→ ·	T - T		
	<u> </u>	1.10	0.25	0.35	0.193		+-			
<u> </u>	2	0.60	0.25	0.35	0.105		-!			· · · · · · · · · · · · · · · · · · ·
	Di. 1 (1 2				0.298	2.678	CuM	CuM	Rs.4,724.40	
· —	Plaster (1:3)							Calt	113.4,724.40	Rs.12,649.58
	8	1.10		0.35	3.08	——— 27 <b>7</b> 2	SqM	SaM		
6	Carriage 10% of item 5						. Odivi	SQIVI	Rs.128.20	Rs. 3,553.70
<u>7</u> 18.48	Providing and placing	on terra	ce (at a	all floor	levels)		<del> </del>		<del>-</del> -	Rs.6,847.08
10.40	polyethylene water sto	rage tank	, ISI :	12701	marked				;	į
	with cover and suitable	locking ar	талдет	ent and	makina					
	necessary holes for inl	et outlet	and ove		making		:	!		
	Without fittings and the	on ounce	and ove	illow pi	pes but				! !	
8	without fittings and the t Providing and fixing P	ase supp	ort for ta	nk.		5000	Ltrs.	P/Ltr.	Rs.6.60	Rs.33,000.00
	tank pipe, fittings of app	roved gua	lify and a	ppie to	r water					
	50mm dia		and C	Midul.	· —	_				<u></u>
	75mm dia						Nos.	each	Rs.250.00	Rs.500.00
	<del></del>					1	No.	each	Rs.400.00	Rs.400.00
	——— <u> </u>								TOTAL	Rs.4.72.053.21

Sub Est. No. 4

O

Model estimate for supply, installation & commissioning of single phase 3 H.P submersible motor pump set with all accessories including extension of L.T. line from nearest source up-to pumping station.

		station.			
SI. No.	Particulars	Quantity	Unit	Rate	Amount
				j	<u> </u>
1	2	3	4	5	
[A.]	Supply Installation,	1 (one) job		Rs.42,700.00	6 Rs.42,700.00
	commissioning and testing of	-			1.0.12,100.00
	single phase 3 H.P. submersible				
	pump set having discharging				
	capacity 3.35 lps at a total head				
ĺ	of 35 meter(approx) of KSB/				
	Kirloskar or equivalent make with				
	all accessories & fittings etc			1	
	including loading unloading and		i	}	}
	transportation of the pump set to				•
	the work site with all required				
	labour, materials, tools and				
	tackles installation, testing &	ı	ľ		
	commissioning as per standards				]
	specifications and direction of				1
	E/I.				į
	(i) 50 mm dia x 3 mtrs long				
	medium class G.I column pipe				İ
1	both end thread and one end			j	j
	socketed- 6(six)nos	1		İ	Í
	(ii) 1x3x2.5 mm <sup>2</sup> flat copper	[	-		
	conductor submersible cable -40	ĺ	}		
	forty) mtrs.		ļ		
	iii) 50 mm dia union socket-				j
1	L(one) no.				j
[(i	iv) 65 mm dia x 250 mm long G.I.				
n	ripple- 1 (one) no.	1	i		
]{\	v) 50 mm dia G.I Elbow—1(One)		1		
,	0.	1		1	
(4	vi) 50 mm dia M.S.	İ			
	lamps—2(Two) Pairs.	İ		ļ	ſ
	/ii) 50 mmx 250 mm long G.i	1	Į	[	
	ipple- 1(One) no.		· ·	1	ľ
	riii) Tube well cap for T/Well –			}	ĺ
	(оле) по.			}	
(i)	x) 50 mm dia x 6S mm dia			}	ł
re	educer socket -1(one) no.		j		1

			<u> </u>	Total Rs.	Rs.93,603.00
	per IE & IS specification.				
	locking arrangement and watering pipe etc.with salt, charcoal,etc.as				
j	enclosure with cover plate having			[	
	of earth, providing masonry		1	]	
	including accessories excavation			]	
i	x 4.5 mtrs 20fts. long G.1 pipe				
	with G.I earth pipe of 40 mm dia				
•	required for doing earthing station	r Joo	p/job	Rs.2,803.00	Rs.2,803.00
[D]	pumping station  Providing all materials and labour	l job	n/:-h	Po 2 902 00	
	point from nearest source up-to			]	
	copper service cable from power				•
[C]	Supplying & fitting 2.5 mm <sup>2</sup>	20 mtrs	P/Mt	Rs.130.00	Rs.2,600.00
[C]	BCH/L&Tmake — 1(one) no.			<u> </u>	
	control panel for above motor of				
	(ii) Suitable single phase starter				
	TOTAL THE RECUIT MILY. 1 NO.				
	stabilizer make- Sen & Pandit/ Vertex/ISI marked If any. 1 No.				
	5 KVA automatic voltage				
	(i) 90-220 V range single phase7.	ļ		[	
	accessories			}	
	painting with following	1		1	
	thick) duly spray powder coated				
	of M.S sheet ( minimum 2mm				
	with following accessories made				
	duly spray power coated painting				
	MS sheet (minimum 2 mm thick)				
	Submersible pump set made of				
	V, 3 phase , 50 c/s for 3 HP				
	feeder pillar single phase starter controll pannel operated on 220			•	
	floor mounted outdoor type L.T				<u> </u>
	commissioning and testing of	1	ļ		
[B]	Supply Installation,	1 (one) jo	b p/job	Rs.45,500.00	Rs.45,500.0

7 7 7

Sub Est. No. 5

**(**)

	Estimate for the work - House		ice con	nection	
	SUB-ESTIMA				
S.No.	Description	Qt	y Uni	t Rate	Amount
. <b>1</b> A	Providing and fixing MDPE (PE 8	n		-	Amount
	GradeCompound) pipes PN-12.5 (12.5kg/Sqcm	1)			1
	as per ISO 4427 and specification for	\r.			
	waterapplication rates are inclusive of , taxes an	d			
	duties (Exise duty @12.50% &CST @2% against	et		-	
	Form 'C'), labour cess, contractor profit an	ď		1	
	overhead charges all complete asper direction of	f	-		
	Engineer-in-charge.complete.				
	MDPE Pipe 20mm dia nominal bore	1000			
1B	Providing and fixing Chlorinated Polyviny	6.00	PM	Rs.19.97	Rs.119.8
	Chloride (CPVC) pipes, having thermal stability	1	j		
	for hot & cold water supply, including all CPVC	XI	1		
	plain & brass threaded fittings, including fixing	[]	1		
	the pipe with clamps at 1.00 m spacing. This	5		1	
	includes jointing of pipes & fittings with one step				
	CPVC solvent cement and testing of joints	<u>`</u> [			
	complete as per direction of Engineer in Charge.	'l			
	Internal work - Exposed on wall				
		•			
18.7.1	15 mm nomonal bore	1.0	PM	Rs.138.70	Rs.138.70
2	Earth work in excavation in foundation trenches		<u> </u>		110.100.70
	or drains(not exceeding 1.5 m in width or 10 sqm	l		,	
	on plan) including dressing of sides and amming				
,	of bottoms, lift upto 1.5 m. including getting out			1	
	the excavated soil and disposal of surplus				
	excavated soil as directed, within a lead of 50 m	i	1	1	
201	All kinds of soil			}	
2.8.1	6.00 0.30 0.60 1.08	1.08	CuM	Rs.230.50	Rs.248.94
2.26	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in			ł T	
			]	1	
	layers not exceeding 20 cm in depth: consolidating each deposited layer by ramming		[	Rs.74.50	Rs.78.85
	and watering lead		]	[	ì
4	Providing and fixing brass ferrule with CI mouth	1.06	CuM	<u> </u>	
	cover incuding boring and tapping the main:		]		
	o o sampling and main.				
18.20.1	15mm nominal bore	1	Each	Rs.254.10	Rs.254.10
	Providing and fixing P.P. Black service Saddle (Brass threaded)	•		Rs.400.00	Rs.400.00
	Providing and fixing brass bib cock of approved	1	Each		
	quality :			Ī	
18.15.1	15mm nominal bore	1	Each	Rs.273.00	Rs.273.00
<del></del> -	Total	· · · · ·			Rs.1,513.41
	Total Nos. of House Holds= Say	loe	<u> </u>	Da 4 540 55	Rs.1,513.00
	150 P	105.	@	Rs.1,513.00	Rs.2,26,950.00

		3	M HIGH	STEEL	STRL	Sub Est ICTURE STA	GING E	OP EO	00 LITED	DVO TANK	<del></del>
S.N.			Pa	erticulars	;	O TOILE OTA	Oria	intity			
1	Structi	ural ste				ed in built up	Gue	T	Unit	Rate	Am-ount
<u>10.3</u>	section	ns, tru	sess ar	nd frame	d wa	ork, including					
	cutting	.hoistir	ia fixina	in positi	on ar	nd applying a					
	primin	d coat	of annro	ved prim	or all	o applying a				·	
<u>_</u>	8M hi	gh sta	aina wi	th Clear	Ci all	re to house	<del></del>			<del></del>	
	electric	switch	h nane	Lof suits	iciost Microst	designed MS					
	section	ofan	nde ch	annol of	abiy (	per drawing				!	
	attache	. O. a.	igie, cit	aillei, ei	c. as	per drawing		01.6	1		
2	Farth v	work in	) eycava	ation in fo	······	tion trenches	149	0 Kg	P/Kg	Rs.69.20	Rs.1,03,108.
	or drain	ns(not	evceedii	na 1 5 m	in wie	Ith or 10 sqm					
	on plan	n) inclu	dina re	esina of c	iidoo	and ramming		ĺ			
	of botte	oms lit	ft unto 1	5 m in	olues olues	g getting out			٠.		
	the ex	rcavate	n upto i sel coil	and die	Ciuuii	of surplus		1		į	
	excava	ted soi	il ac dire	anu uis	posa	or surplus lead of 50 m.					
	All Kind	de of ea	n as une sil	cied, Will	ıın a	lead of 50 m.					
	base o				· T · · -					·	
	4	1.20	1.20	1.425			· ·			<u> </u>	
	For fixi			1.425	÷	8.208			_	<u>-</u> - <u>:</u>	
	1				+-	:		į	<u>.</u>	<u> </u>	
		1.00	0.50	0.275	<b>∔</b> .=			i	<u> </u>		
_ :		<del>.</del>	<u> </u>	<u> </u>	i	8.346	_8.340	<sup>3</sup> M <sup>3</sup>	P/M <sup>3</sup>	Rs.230.50	Rs.1,923.6
3-	Supply	ing and	l filling i	n plinth w	ith lo	cal sand and					
;	under	floors			tering			!		!	•
	consoli	dating a	and dres	ssing com	plete	-		į		!	
1	base of	footing	3	Ţ— - :-	Ţ·	<u> </u>		<del></del>	†·	<del></del>	
	4	1.20	1.20	0.10	=	0.576				<del> </del>	
	Landing	Platef	om		1			<del></del>		<del>,</del>	- <del></del>
	1	1.00	0.50	0.10	<b> </b>	0.050	··		<u>.</u>	+	·
				T		0.626	0.626	NAS -	P/ <b>M</b> <sup>3</sup>	D- 204 40'	· · · · · · · · · · · · · · · · · · ·
4-	Providir	na des	ionation	of 100A	Bric	k flat Soling	0.020	-	F/IVI	Rs.204.40	Rs. 127.9
1.72	ioints f	illed w	ith loca	al sand	includ	ing cost of		1		i İ	
[,	, waterin	a taxe	s & ro	valtv all	COME	lete as per				' !	
}:	specific	ation &	directio	n of E/I.	COMP	nece as per					
	base of	footing	. <u> </u>	- C/1.	<del></del>	r		· · · · · · · · · · · · · · · · · · ·		4	
:- :	4	1.20	1.20	+	· · ·	5.760					
il.	Landing			Τ	<del>-</del>	3.70 <u>0</u>			÷ ·	· -· i.	
	1	1.00	0.50	+	+:	0.500		.j	ļ <u>.</u>		
- +	- <u>-</u>	1.00	0.50	<del> </del>						<u> </u>	
5 i	Providin	a and	lavina ir			6.260 ent concrete	6.260	M_	P/M <sup>2</sup>	Rs.253.80	Rs.1,588.7
1.2	TOVIGIT	ig allu	iaying ii	position	ceme	ent concrete		:			
	of speci	ified gr	ade ext	udina the	cost	of centring				!	
									!		
				upto plin							
1	1:1.5:3(	1 Cem	nent :1.	5 coarse	san	d:3 graded				•	
s	stone ag	gregat	e 20 mn	n nomina	size)	,					
	ase of				T ·	<del>-</del>		1	: .	• • •	
	4	1.20	1.20	0.100					•	•	
F	or Grou		L	.1		0.576					
					+			ļ;	:	: . <u></u>	
	4	0.20	0.20	0.050	=	0.008		: 		:	
L	anding.	Platefo	orm								
	1	1.00	0.50	0.10	=	0.050			<del></del>		
								- 3			
6 P	Providina				1	0.634	0.634	M.	P/M <sup>3</sup>	Rs.4,373.20	Rs.2,772.61
1.2 0	f reinfo	g and o	aying ii	i position	spec	cified grade					
	f ontrin	COU CE	ment co	oncrete e	xclua	ng the cost					
0	ll entim	g,snutt	ering, no	iisning an	ia reir	forcement-		İ			
	ll work										
j1)	:1:5:3(1	ceme	nt: 1.5 cd	oarse sar	ıd:3 g	raded					
si	tone ag	gregate	20 mm	nominal	size)			İ			
b	ase of f	ooting			T				-		
j	4	1.00	1.00	0.30		1.200			··· ··		
				<del></del>	<b>├</b>	·					
С	olumn l	celow (	jL '		!	1					
С	olumn t	0.20	3L 0.20	0.85	=	0.136					

**O** ,

S.N.			Part	iculars	1. 1		Quan	titv	Unit	Rate	Am
	Colum	in above							0,111	Nate	Am ount
	4	0.20	0.20	0.25	=	0.040		1 2 2		<del>-  </del>	<u> </u>
	+	1 0.20	0.20	0.20		0.040	·	3	-		
7	Centri			-! !! !		1.376	1.376	M	P/M <sup>3</sup>	Rs.4,530.30	Rs. 6,233.69
5.9.1	i	_	and	shutteri		including					
J.J. I	1			nd remo	val of	form for.		i	<u> </u>		
	16	1.00	0.30	<u> </u>	_=	4.800		İ			
	16	0.20	0.85		=	2.720		†`	<b>——</b>		
	16	0.20	0.25		=			<del></del> -	<del></del>		·
			0.20		┝╌┼	0.800 8.320		2	D 0 42		
8-	Reinfo	rcement	for	R.C.C.	work		8.320	IVI	P/M <sup>2</sup>	Rs.169.00	Rs. 1,406.08
5.22						including in position			1		
<b>U.LL</b>	and his	nding all	complete	chang, p	иаст	in position		•			
		to 16 mn			T	<del></del>			<u> </u>	<u> </u>	
		Reinforce		<del>-</del>					<del>-</del>		
		% of Vol		creto		=	86.00	Ka.	P/Kg.	Rs.56.00	Rs.4,816.00
					(2)	uding rock)					
2.26	in tren	chee ni	linth sid	ed eaim	(exci	ons etc. in:					
2.20	layers	not 4	exceedin								
	•					in depth: y ramming			!		
		atering le		osited 19	iyei b	y ram:ning	2.086	143	P/M <sup>3</sup>	D- 74.50	D 455 45
10				ichor ho	lt of	12 mm dia		IVI		Rs.74.50	Rs.155.43
	and 0.6	30 Mtr le	noth emi	nedded ir	n R C	C pedestal					
	all cor	nolete a	as per d	direction	of F	ngineer in			ĺ		
	charge	. @4x2x	0.5328kd	1	۷. ـ	inginoe: iii	4.2624	Ka.	P/kg	D- 70 CO	D - 040 T
11-					int of	approved	7.2027	ivy	- r/kg	Rs.73.60	Rs.313.71
3.82.1	brand	and mar	ufacture	in all sh	ades	to give an					
	even s			0 0.		to give an	ļ				
	<del>ا</del>		(hyo or r	nore coa	tc\				·	<u> </u>	
	Frame		(100 01 1	ilore coa	13/	i		-	·	<del></del>	······
	0.5	14.00	3.00		=	21.000			<del></del>	ļ	
	0.5	3.50	3.50		=	6.125			ļ	<del> </del>	<del></del>
			- 0.00			27.125	27.13	. 42		D- 02 00	
<u>12</u>	Carriac	e of the	following	 L materia	le from	n quarry to	27.13	M	, M <sup>2</sup>	Rs.63.60	Rs. 1,725.15
<del></del> :	work	site inc	ludina l	oading,		ading and					
					SDAC	ification &			;		
	directio	n of E/I.	0110	us per	spec	incation &					
			n. Pucca	& 1 Km.	Kach	ha lead)	203	Nos	%0 nos.	Rs.506.10	Rs.123.04
		rse San					0.860		† <del></del>	·	
		ne Chips							P/M <sup>3</sup>	Rs.1,221.09	Rs.1,050.14
							1.730		P/M <sup>3</sup>	Rs.1,746.29	Rs.3,021.08
	(u) Loc	ai Sand (	( <b>∠ r.m</b> . P	ucca & 1	Km.	Kachha lea	0.720	M₃	P/M <sup>3</sup>	Rs.217.23	Rs.156.41
										TOTAL	Rs.1,28,521.72
	<u> </u>	!								say	Rs.1,28,500.00

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PUBLIC HEALTH ENGINEERING DEPARTMENT

MODEL ESTIMATE

**FOR** 

CONSTRUCTION OF RURAL PIPED WATER SUPPLY SCHEME FOR A WARD HAVING 150 HOUSE HOLDS

ESTIMATED COST-- Rs. 10.977 Lac

2017-18

### **Public Health Engineering Department** ABSTRACT OF COST

NAME OF WORK: CONSTRUCTION OF RURAL PIPED WATER SUPPLY SCHEME FOR **WARD HAVING 150 HOUSE HOLDS** 

S.N.	Description	Total Amount
1	Construction of 125 mm x75mmX 125m deep T/W etc. all complete	-
	and as per direction of E/I. (As per sub Estimate no 1)	Rs.1.52.506.32
2	Constructing masonry Chamber 100x100x75 cm inside in brick	
	work in cement mortar 1:4 (1 cement: 4 coarse sand) for Tube Well,	
	and RCC top slab 1:1.5:3 mix (1 cement : 1.5 coarse sand : 3	
	graded stone aggregate 20mm nominal size ) , necessary	
f	excavation, foundation concrete 1:2:4(1 cement : 2 fine sand : 4	
	graded stone aggregate 20 mm nominal size) and inside plastering	
	with cement mortar 1:3 (1 cement : 3coarse sand) 12 mm thick with	
	5% cico fnished with a floating coat of neat cement, out side	
	plastering with cement mortar 1:4 (1 cement : 4coarse sand) 12 mm	
	thick complete as per standard specifications & direction of E/I.	
	(As per sub Estimate no 2)	Rs.13,210.00
3	Providing and Laying Distrbution network of High Density	1.0.10,2.10.00
	Polyethyene pipe (HDPE pipe) including 5000 liter PVC tank	
	installed at 3M high MS staging etc all complete as per direction of	
	E/I. (As per sub Estimate no 3)	Rs.4,72,053.21
4	Supply Installation, commissioning and testing of single phase 3	
	H.P. submersible pump set having discharging capacity 3.35 lps at	
	a total head of 35 meter(approx) of KSB/ Kirloskar or equivalent	
	make with all accessories & fittings etc including loading unloading	
	and transportation of the pump set to the work site with all required	
	labour, materials, tools and tackles installation, testing &	
	commissioning as per standards specifications and direction of E/I.	
	(As per sub Estimate no 4)	Rs.93,603.00
5	Providing house connection for each house hold including supplying	
	all materials, labours, tools and making ferrule connection with 20	
	mm dia MDPE and 15mm CPVC Pipes with all fittings etc all	
	complete.	
	(As per sub Estimate no 5)	Rs.2,26,950.00
6	Providing and erecting 3 M high staging of suitably designed MS	
i	section of angle, channel etc. as per drawing attached. (As per sub Estimate no6)	
		Rs.1,28,500.00
-	TOTAL	Rs.10,86,822.53
	Add 1% Contingency	Rs.10,868.23
	G. TOTAL	Rs.10,97,690.76
	Say	Rs.10,97,700.00

(Rs. Ten Lakh Ninety seven Thousand Seven Hundred ) only

#### Note:

no. 6278 dt.23.09.2016. This estimate may not ensure standard pressure in the distribution network. Hence on the spot change in staging of storage tank may be

- ii) Water quality testing of source should be done after construction of Tube well.
- iii) Road cutting cost may increase or decrease as per local condition.

Technical approval accorded for Rs.10,97,700.00 (Rs. Ten Lakh Ninety seven Thousand

Seven Hundred) only

Chief Engineer (Design) Public Health Engineering Departm Bihar, Patna

Sub Est. No. 1

<b>CONSTRUCTION OF 129</b>	MM X 75MM DIA 8	125M DEEP THE	RE WELL
	ana viranni biv ö	Y IAJRIDEEF 10E	JE NICLL

		<u> </u>		TOL WILL	
S.No.	Description	Qty.	Unit	Rate	Am <b>⊙</b> unt
1	Boring/drilling bore well of required dia for casing/strainer pipe, by suitable method prescribed in IS: 2800 (part !), including collecting samples from different strata, preparing and submitting strata chart/ bore log, including hire & running charges of all equipments, tools, plants & machineries required for the job, all complete as per direction of Engineer -in-charge, upto 90 metre depth				
24.1.1.	below ground level. (All types of soil)  1 (a) 300mm dia bore from G.L. to 30.0M  (b) 300mm dia bore from 30.0 m to 60.0M	30.0 M 30.0 M	P/M P/M	Rs.378.00 Rs.378.00	Rs.11,340.00 Rs.11,340.00
0404	(c) 300mm dia bore from 60M to 90.0M	30.0 M	P/M	Rs.378.00	Rs.11,340.00
24.2.1.1	(d) 300mm dia bore from 90.0M to 150.0M Supplying, assembling, lowering and fixing in vertical position in bore well, unplasticized PVC (UPVC) medium well casing (CM) pipe of required dia, conforming to IS: 12818, including required hire and labour charges, fittings & accessories etc. all complete, for all depths, as per direction of Engineer -in-charge.	35.0 M	P/M	Rs.441.10	Rs.15,438.50
2425	(b) 125 mm nominal size dia	30.0 M	P/M	Rs.462.50	Rs.13,875.00
24.3.5 24.4.5 3	(c) 75 mm dia U.P.V.C. strainer Providing all materials, tools & labours and fixing the following fittings etc. all complete as per specification & direction of E/I.	69.0 M 21.0 M	P/M P/M	Rs.328.50 Rs.420.30	Rs.22,666.50 Rs.8,826.30
	(a) 125 mm dia P.V.C. well cap	1 No.	Each	Rs.166.60	Rs.166.60
	(b) 125 mm dia center guide	4 Nos.	Each	Rs.100.00	Rs.400.00
	(c) 75 mm dia center guide	6 Nos.	Each	Rs.75.00	Rs.450.00
	(d) 75 mm dia P.V.C. pipe shoe plug	1 No.	Each	Rs.185.00	Rs. 185.00
	(e)125mm x 75 mm dia P.V.C. Reducer	1 No.	Each	Rs.475.00	Rs.475.00
	(d)125mm dia M.S.Clamp				
4a	Providing all materials, labours, & equipments for fixing	1 No.	Each	Rs.974.60	Rs.974.60
24.6	tubewell with peagravel of Dalbhumigarh to size 4mm to				
	8mm approx. as suitable for strata including carriage				
	washing, placing and packing the same in position around				
4b	the tubewell etc. all complete as per direction of E/i. Camage of Pea Gravel from Dhalbhumigarh (taken av	9.0 M <sup>3</sup>	P/M <sup>3</sup>	Rs.917.00	Rs.8,253.00
	distance 400km.)	$9.0  M^3$	P/M <sup>3</sup>	Rs.4,336.54	Rs.39,028.82
	Development of tube well in accordance with IS: 2800 (part I) and IS: 11189, to establish maximum rate of usable water yield without sand content (beyond permissible limit), with required capacity air compressor, running the compressor for required time till well is fully developed, measuring yield of well by "V" notch method or any other approved method, measuring static level & draw down etc. by step draw down method, collecting water sampl &getting tested in approved laboratory, disinfection of tubewell, all complete, including hire & labour charges of air compressor, tools & accessories etc., all as per requirement and direction of Engineer-incharge.  Supplying all materials and labours for arrangement for additional water required during the drilling period for 40 Hrs & site clearance & leveling etc. And providing the	5 Hrs.	Each	Rs.649.40	Rs.3,247.00
	soap duster etc. to staff engaged in drilling etc. all				
	complete work as per specification & direction of E.I	1 No.	Each	Rs.4,500.00	Rs.4,500.00
	_	TOTAL			Rs.1,52,506.32
	<del>-</del>				

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(Sub Estimate - 2)

Analysis of Chamber for TW

Supplying materials, labours and constructing chamber of following dimension having 250mm thick wall in C.M. (1:4) in cluding 12mm C.P. (1:3) with punning inside, R.C.C. cover slab with C.I. Surface box , 20mm dia foot rest at 150mm interval

	SIZE	1.00	) M·	X	1.00	D M X	0.75 M deep		
COB	Γ						0.75	m deep	
<u>S.O.R.</u> <u>No.</u>	<u>Particulars</u>	<u>No.</u>	L	w	H	Qty.	Unit	Rate	Amount
1 S.O.R. No	Earth work in excavation	1	1.75	1.75	1.0	3.063 M <sup>3</sup>	P/M <sup>3</sup>	Rs.230.50	Rs.705.91
2 S.O.R. No	Sand filling	1	1.75	1.75	0.075	0.230 M <sup>3</sup>	P/M <sup>3</sup>	Rs.204.40	Rs.46.95
<u>3</u> S.O.R. 11,	Brick flat soling .72	1	1.75	1.75		3.053 M <sup>2</sup>	P/M <sup>2</sup>	Rs.253.80	Rs.777.26
<u>4</u> \$.O.O. 4,1	P.C.C. (1:2:4) in foundation .3	1	1.75	1.75	0.10	0.306 M <sup>3</sup>			
<u>5</u> S.O.R. No	B/Work in (1:4) C.M.	2	2.50	0.25	0.75	0.306 M <sup>3</sup>	P/M <sup>3</sup> P/M <sup>3</sup>	Rs.3,850.00 Rs.4, <b>7</b> 24.40	Rs.1,179.06 Rs.4,429.13
<u>6</u>	R.C.C. Cover slab(1:1.5:3) . 5.2.2 & 5.9.3	1	1.50	1.50	0.15	0.338 M <sup>3</sup>	P/M <sup>3</sup>	Rs.5,139.70	Rs.1,734.65
7	shuttering C.P. (1:3) with 5% Cicc & neat cement	2	1.50	1.50	0.15	3.15 M <sup>2</sup>	P/M²	Rs.291.00	Rs.916.65
	Internal face	2	1.00	1.00	1.00	4.00 M <sup>2</sup>			
13.17.1 E	Bed surface	1	1.00	1.00		1.00 M <sup>2</sup>			
+13.36.1	_				•	5.00 M <sup>2</sup>	P/M²	Rs 166.30	Rs.831,50
S.O.R. No.		2	1.50	1.50	0.75	4.5 M <sup>2</sup>	P/M²	Rs.114.70	Rs.516.15
<u>9</u> 8 S.O.R. No.	mm dia T.S. Rod 5.22.7A								
ın L	ifting Ring of 10mm dia	0.338	√3 ×	70	Kg/ M3	23.625 Kg.	P/Kg	Rs.56.00	Rs.1,323.00
10 R	od					4 No.	Each	Rs.30,00	Rs.120.00
<u>11</u> C	arriage of materials 5%							Total	Rs.12,580.25 Rs.629.01
						Say	Rs.13,2	210.00	Rs.13,209.27

		Sub Est.	No. 3			
<u> </u>		WATER SUPPLY DIST	RIBUTION SY	STEM	<del></del>	
S.N.	<u></u>	Particulars	Quantity	Unit	Rate	Amount
1A	1	ation over areas (exceeding 30 cm i				
	depth 1.5 in width	as well as 10 sqm on plan) includin	g	:		
	disposal of excavat	ed earth lead upto 50m and lift upt	0			
	1.5m, disposal earth	to be levelled and neatly dressed.				i
	75mm dia Pipe	195.00 0.30 1.10 =	64.35			
	63mm dia Pipe	195.00 0.30 1.10 =	64.35		<del>-</del>	<u> </u>
	50mm dia Pipe	390.00 0.30 1.10 =	128.70			<u> </u>
	40mm dia Pipe	520.00 0.30 1.10 =	171.60	· · —		
			429.00 M <sup>3</sup>			
	Add A	5% extra for fittings =	21.45 M <sup>3</sup>		··	
В	Provision for PCC re	pad cutting and its restoration	450.45 M <sup>3</sup>	P/M <sup>3</sup>		Rs.1,03, 828.73
2	Filling available ex	cavated earth (excluding rock) in	14 63 M <sup>3</sup>	P/M <sup>3</sup>	Rs.4,428.80	Rs.64, 793.34
		es of foundations etc. in layers no				
		depth, consolidating each deposited		i		
		nd watering, lead up to 50 m and lif				
	upto 1.5 m.		441 44 M <sup>3</sup>	P/M <sup>3</sup>	Rs.74.50	D- 22 007 45
3	Providing and laying	g High Density Polyethyene pipe		7710	Ks.74.50	Rs.32,887.35
	(HDPE pipe) of 20 n	nm to 225 mm OD and pressure 6.0				
1	Kg/cm2 and 10 Kg/d	cm2 sutable for water supply which		i	:	
j,	various grades like	standard, like ISI-4984/1995 and PE-80, PE-100 including required		1 :	i	
	specials. Rates are	inclusive of , all taxes and duties	:			
[	Exise duty @12.50	% &CST @2% against Form 'C'),				
		tor profit and overhead charges all				
(	complete as per dire	ction of Engineer-in-charge.			į.	
A ∤I	HDPE pipe of material	als grade PE100-PN10 (dia in mm)	<del>.</del>	<del>-</del> · · - · ·	····	
-	75mm dia Pine from	PVC Tank to Distribution main	44.00	+		
- 1	75mm dia Pipe	- C rank to Distribution math	14.00 M	P/M	Rs.239.81	Rs.3,357.34
		<del></del>	195.00 M	P/M	Rs.239.81	Rs.46,762.95
3	33mm dia Pipe		195.00 M	P/M	Rs.168.77	Rs.32,910.15
į.	IDPE pipe of materia	als grade PE100- PN8 (dia in mm)				1
5	00mm dia Pipe		390.00 M	D/44		
	I0mm dia Pipe		520.00 M	P/M	Rs.89.99	Rs.35,096.10
	0mm dia Pipe from	/ //well to PVC Tank	12.00 M	P/M	Rs.59.78	Rs.31,085.60
		prass gate valve with C.I. wheel of	12.00 NJ	: P/M :	Rs.89.99	Rs.1,079.88
	pproved quality (scre				}	į
	5mm dia Pipe		3 Nos.	Each	Rs.1,351.60	Rs.4,054.80
6	3mm dia Pipe		2 Nos.	Each	Rs.1,351.60	Rs.2,703.20
5	0mm dia Pipe		3 Nos.	Each	Rs.811.40	Rs.2,434.20

S.N.		Particu	lars			Qua	entity	Unit	Rate	A 46 s
5	Constructing masonn	y Chamb	er 60x60	x75 cm	inside in	<del></del>		- Cilit	Rate	Amount
18.33	IDUCK WORK IN CEMEN	ick work in cement mortar 1:4 (1 cement · 4 coarse)								
	sailu) loi stuice valve	e,with C.I	. surface	box 10	:	; *.   -		•	,	
	diameter, 160 mm bo	ttom diar	neter and	1 180 m	ım deen /	!	1			
	miside) with chained	lid and R	CC top s	siab 1.2	'4 miy /1	:	:			
	cement : 2 coarse s	sand: 4	graded	stone a	annegato					
	20mm nominal size )	, necessa	ary excav	ation, fo	oundation;					
	concrete 1:5:10(1 ce	ment : 5	fine sa	ind : 10	0 graded					
	stone aggregate 40	) mm r	nominalsi	ze) an	d inside		;			
	plastering with cemer	n mortar	1:3 (1 o	ement :	3coarse			1		
	sand) 12 mm thick, fir	nisnea w	ith a floa	ting coa	it of neat					L
	cement complete as direction of E/I.	per st	arida <b>rd</b> :	specifica	ations &					i i
	Work for additional de	oth			- <del>-</del>	·	Nos.	Each	Rs.5,807.50	Rs.52, 267.50
	Brick work (1:4) in four	-		· - <u>-</u>				· ‡		
	2		0.25		0.193					: <del> ·</del>
	2	0.60	0.25	0.35 0.35	0.105			<del> </del>		
:	· ·- — —		0.23	0.35	0.298	0.070		ļ		·
	Plaster (1:3)					2.678	CuM	CuM	Rs.4,724.40	Rs.12,649.58
	8		<del></del> -	— <u>—</u>			: <del></del> -	<u> </u>		
6				0.35	3.08_	27.72	SqM	SqM	Rs.128.20	Rs.3,553.70
	Carriage 10% of item 5							i		Rs.6,847.08
0.40	Providing and placing									
- !!	oclyethylene water sto	orage tan	ık, ISI :	12701	marked,		:			<u>'</u>
1	with cover and suitable	locking a	arrangem	ent and	making					
	necessary holes for inl							i		
					hes not					
8 F	vithout fittings and the Providing and fixing P	TMT out	port for ta	ank.	:-	5000	Ltrs.	P/Ltr.	Rs.6.60	Rs.33,000.00
t	ank pipe, fittings of app	NOVED ON	ension n	ippie ro	or water					
 :5	0mm dia	noved qu	anty and	Colour.			_ :			
1.7	5mm dia					2	Nos.	each	Rs.250.00	Rs.500.00
				‡		1	No.	each	Rs.400.00	Rs.400.00
<u>-</u> -							į		TOTAL	Rs.4,72,053.21

Sub Est. No. 4

Model estimate for supply, installation & commissioning of single phase 3 H.P submersible motor pump set with all accessories including extension of L.T. line from nearest source up-to pumping station.

SI. No.	Particulars	Quantity	Unit	Rate	Amount
1	2	3	4	5	6
[A.]	Supply Installation,	1 (one) job	p/job	Rs.42,700.00	Rs.42,700.00
	commissioning and testing of				
	single phase 3 H.P. submersible				
	pump set having discharging				
	capacity 3.35 lps at a total head				
	of 35 meter(approx) of KSB/				
	Kirloskar or equivalent make with				
	all accessories & fittings etc				
	including loading unloading and				
	transportation of the pump set to	i			
	the work site with all required			j	
I I	labour, materials, tools and		ļ		
	tackles installation, testing &				,,
	commissioning as per standards				
	specifications and direction of				
	E/I.				İ
	(i) 50 mm dia x 3 mtrs long				
	medium class G.I column pipe			]	
	both end thread and one end		1		İ
	socketed- 6(six)nos				
	(ii) 1x3x2.5 mm <sup>2</sup> flat copper			1	
	conductor submersible cable -40				
	(forty) mtrs.				
(	(iii) 50 mm dia union socket-				
	1(one) no.			]	
10	(iv) 65 mm dia x 250 mm long G.1.			1	
	nipple- 1 (one) no.				
(	(v) 50 mm dia G.I Elbow—1(One)				İ
ļr	no.				1
1	(vi) 50 mm dia M.S.	,			İ
	clamps—2(Two) Pairs.				
	vii) 50 mmx 250 mm long G.I			]	į
I .	nipple- 1(One) no.				
	viii) Tube well cap for T/Well –				
1	l(one) no.				

				Total Rs.	Rs.93,603.00
i I	required for doing earthing station with G.I earth pipe of 40 mm dia x 4.5 mtrs 20fts. long G.I pipe including accessories excavation of earth, providing masonry enclosure with cover plate having locking arrangement and watering pipe etc. with salt, charcoal, etc. as per IE & IS specification.	,	p/job	Rs.2,803.00	Rs.2,803.00
	Supplying & fitting 2.5 mm <sup>2</sup> copper service cable from power point from nearest source up-to pumping station  Providing all materials and labour	20 mtrs	P/Mt	Rs.130.00	Rs.2,600.00
	Vertex/ISI marked If any. 1 No.  (ii) Suitable single phase starter control panel for above motor of BCH /L&Tmake – 1(one) no.				
	painting with following accessories (i) 90-220 V range single phase7. 5 KVA automatic voltage stabilizer make- Sen & Pandit/				
	MS sheet (minimum 2 mm thick) duly spray power coated painting with following accessories made of M.S sheet (minimum 2mm thick) duly spray powder coated painting with following				
	commissioning and testing of floor mounted outdoor type L.T feeder pillar single phase starter controll pannel operated on 220 V, 3 phase, 50 c/s for 3 HP Submersible pump set made of				
[B]	(ix) 50 mm dia x 65 mm dia reducer socket –1(one) no. Supply Installation,	1 (one) jot	p/job	Rs.45,500.00	Rs.45,500.0

Sub Est. No. 5

	Estimate for the work - House		ice con	ection	
C N .	SUB-ESTIMA	TE			<del></del>
S.No.	Description	Qı	y Unit	Rate	Amount
1A	GradeCompound) pipes PN-12.5 (12.5kg/Sqcn	or d st			Amount
	MDPE Pipe 20mm dia nominal bore	<b>↓</b>			
18	Providing and fixing Chlorinated Polyviny Chloride (CPVC) pipes, having thermal stability for hot & cold water supply, including all CPVC plain & brass threaded fittings, including fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step CPVC solvent cement and testing of joints complete as per direction of Engineer in Charge. Internal work - Exposed on wall	9	O PM	Rs.19.97	Rs.119.
18.7.1	15 mm nomonal bore	1.0	PM	Rs.138.70	Rs.138.7
2	Earth work in excavation in foundation trenches or drains(not exceeding 1.5 m in width or 10 sqm on plan) including dressing of sides and amming of bottoms, lift upto 1.5 m. including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50 m. All kinds of soil				
2.8.1	6.00 0.30 0.60 1.08	1.08		Do 220 50	
3 2.26	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20 cm in depth: consolidating each deposited layer by ramming and watering lead  Providing and fixing brass ferrule with CI mouth	1.06	CuM	Rs.230.50 Rs.74.50	Rs.248.94 Rs.78.85
·	cover incuding boring and tapping the main:	i			
.20.1	15mm nominal bore	1	Each	Rs.254.10	Rs.254.10
5	Providing and fixing P.P. Black service Saddle (Brass threaded) Providing and fixing brass bib cock of approved	11	Each	Rs.400.00	Rs.400.00
	quality:				
15.1	15mm nominal bore	1	Each	Rs.273.00	Rs.273.00
	Total Say				Rs.1,513.41
	Total Nos. of House Holds= 150 N	OS.	<u>@</u> I	Rs.1,513.00	Rs.1,513.00 Rs.2,26,950.00

( <u>)</u>
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Sub Est. No. 6 3 M HIGH STEEL STRUCTURE STAGING FOR 5000 LITER PVC TANK S.N. Particulars Quantity Structural steel work riveted or bolted in built up Unit Rate Am ount sections, trusess and framed work, including 10.3 cutting, hoisting, fixing in position and applying a priming coat of approved primer all complete. 8M high staging with GI enclosure to house electric switch panel of suitably designed MS section of angle, channel, etc. as per drawing attached. 1490 Kg P/Kg Earth work in excavation in foundation trenches 2 Rs.69.20 Rs.1,0-3,108.0 2.8.1 or drains(not exceeding 1.5 m in width or 10 sqm on plan) including ressing of sides and ramming of bottoms, lift upto 1.5 m. including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50 m. All Kinds of soil base of footing 1.20 8.208 For fixing Ladder 1.00 0.50 0.275 0.138 8.346 8.346 M<sup>3</sup> Supplying and filling in plinth with local sand and 3-Rs.230.50 Rs. 1,923.64 2.28 under floors including watering, consolidating and dressing complete. base of footing 1.20 1.20 0.10 0.576 Landing Plateform 1.00 0.50 0.10 0.050 0.626 0.626 M<sup>3</sup> Providing designation of 100A Brick flat Soling  $P/M^3$ Rs.204.40 Rs.127.95 11.72 joints filled with local sand including cost of watering, taxes & royalty all complete as per specification & direction of E/I. base of footing 4 1.20 1.20 5.760 Landing Plateform 1.00 0.50 0.500 6.260 6.260 M<sup>2</sup> Providing and laying in position cement concrete P/M<sup>2</sup> Rs.253,80 Rs. 1, 588.79 4.1.2 of specified grade exluding the cost of centring and shuttering-all work upto plinth level. 1:1.5:3(1 Cement :1.5 coarse sand:3 graded stone aggregate 20 mm nominal size) base of footing 1.20 1.20 0.100 0.576For Grouting at base plate 0.20 0.20 0.050 0.008 Landing Plateform 1.00 0.50 0.10 0.050 0.634  $0.634 \, \mathrm{M}^3$ P/M<sup>3</sup> Providing and laying in position specified grade Rs.4,373.20 Rs.2,772.61 5.1.2 of reinforced cement concrete excluding the cost of entring, shuttering, finishing and reinforcement-All work puto plinth level 1:1:5:3(1 cement: 1.5 coarse sand:3 graded stone aggregate 20 mm nominal size) base of footing 1.00 1.00 0.30 1.200 Column below GL 0.20 0.20 0.85 0.136

<u>S.N.</u>	<del> </del>		Pari	liculars		<u> </u>	0	4.4	T	<u> </u>	
	Colun				Quar	HITY	Uni	t Rate	Ameount		
. +.	4	0.20	0.20	0.25	_		<del> </del>	4			Sunt
		-			=	0.040	<del>+</del>	! 			
7-	Centri	na	and	shutterin		1.376		M <sup>3</sup>	P/M	<sup>3</sup> Rs.4,530.3	0 Rs. 6,233
5.9.1				nd remov	g od og	including	1	1			10.0,233
	16	1.00	0.30	III I EIIIOV	al Of	torm for.	<u> </u>	1			
	16	<del> </del>	<del> </del> -	—i	_=	4.800	:	:			<del>-</del>
	<del> </del> -	0.20	0.85		_=	2.720		 	<del> </del> -	<del></del>	
<u>-</u>	16	0.20	0.25		=	0.800		1 	<del> </del>		
						8.320	8.320	642		<b>,</b>	<u> </u>
8-	Reinfo	rcement	fer F	R.C.C.	vork			IVI _	P/M	Rs.169.00	Rs. 1,406.
5.22	straigh	tening, c	utting, be	adina at	cing	in position					
	CITO DIE	ronny an t	zompiete			P - Cittoff	į				
	ŏ mm t	o 16 mm	tor steel			:			<u></u>	<del></del>	-
	otal R	einforcer	ment.					- —	·		
	<u>ლი 80</u> º	% of Vol.	Of Cond	rete		=	86.00	Kg.	P/Kg.	Rs.56.00	Do 4 040
9	Filling a	available	excavate	ed earth (	exclu	iding rock)	:		T	0.00.00	Rs.4,816.0
		vics, pa	iui, side	S Of Our	datio	naing rock) Ins etc. in					:
	4,013	mot ex	ceedina	20 ~	- :					f	
	consolic	tating ea	ich depo	sited laye	r by	n depth: ramming:					
			1)				2.086 N	√f <sup>3</sup>	P/M <sup>3</sup>	De 74.50	_
0.19	and 0 Se	ng and n	xing and	hor bolt	of 12	2 mm dia				Rs.74.50	Rs.155.4
a	il com	njete se	gui embe	edded in F	R.C.C	2 mm dia 2 pedestal:		!			
C	harge	@4x2x0	F220ka	rection of	En	pedestal gineer in	i	ĺ			
11- P	ainting	with ro	oozong				4.2624 K	g	_ P/kg	Rs.73.60	D= 040 =
82.1 b	rand a	nd manu	auy IIII) faatura i	ceo paint	of :	approved	::	1		113.73.00	Rs.313.71
e	ven sha	manu	iaciule II	ii alii shac	ies to	give an	1	į			
						i	:	:			
F	rame w	ork (t	wo or inc	ore coats)	<del></del>		. ,			<u>+</u>	
			3.00	<del></del>	<u> </u>					<del></del>	
			3.50		=	21.000		- 1			· · · · · · · · · · · · · · · · · · ·
		=:			-	6.125	1			<del></del>	· · · · · · · · · · · · · · · · · · ·
2 Ca	arriage	of the fol		· <del>-</del>		27.125	27.13 M	2 .	M <sup>2</sup>	Rs.63.60	Po 4 70-
wo	ork sit	e includ	iowing U	naterials f	om d	quarry to	*.47		!?!		Rs.1,725.15
sta	kina :	et work	miy 10a sita a-	ding, un	loadi	ng and				i	
				per spe							ļ
(a)	Bricks	(7 Km. I	Succa &	1 Km. Ka	chh-	<u></u>		· - <u></u>			
(b)	Coarse	e Sand (1	100 K	lood)	rina	iead)	203 No	s. 🥍	60 nos.	Rs.606.10	Rs. 123.04
(0)	Stone	China (4)	100 KIII.	1990)			0.860 M <sup>3</sup>		P/M <sup>3</sup>	Rs.1,221.09	
- (4)	Local	Chips (15	ou Km. le	ead)	! 		1.730 M <sup>3</sup>		P/M <sup>3</sup>	Rs.1,746.29	Rs.1,050.14
_ ((a)	Local	oano (2)	Km. Puc	ca & 1 Km	. Ka		0.720 M <sup>3</sup>		P/M <sup>3</sup> :		Rs.3,021.08
			i .	-!	_		* . P¥1		C/IAI	Rs.217.23	Rs.156.41
				i	•		÷	•	,	TOTAL F	s.1,28,521.72
	1									say ⊨R	s.1,28,500.00

In 34h

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PUBLIC HEALTH ENGINEERING DEPARTMENT

MODEL ESTIMATE

**FOR** 

CONSTRUCTION OF RURAL PIPED WATER SUPPLY SCHEME FOR A WARD HAVING 150 HOUSE HOLDS

ESTIMATED COST-- Rs. 11.546 Lac

2017-18

### Public Health Engineering Department

#### **ABSTRACT OF COST**

## NAME OF WORK:- CONSTRUCTION OF RURAL PIPED WATER SUPPLY SCHEME FOR WARD HAVING 150 HOUSE HOLDS

S.N		Total Amount
1	Construction of 125 mm x75mmX 125m deep T/W for rocky strata	
j	etc. all complete and as per direction of E/I.	1.7
2	(As per sub Estimate no 1)	Rs.2,08,868.82
	Constructing masonry Chamber 100x100x75 cm inside, in brick work	
	in cement mortar 1:4 (1 cement : 4 coarse sand) for Tube Well, and	
	RCC top slab 1:1.5:3 mix (1 cement : 1.5 coarse sand : 3 graded	
ļ	stone aggregate 20mm nominal size ) , necessary excavation,	1
	foundation concrete 1:2:4(1 cement : 2 fine sand : 4 graded stone	
	aggregate 20 mm nominal size) and inside plastering with cement	
	mortar 1:3 (1 cement : 3coarse sand) 12 mm thick with 5% cice	1
	fnished with a floating coat of neat cement, out side plastering with	į
	cement mortar 1:4 (1 cement : 4coarse sand) 12 mm thick	
ĺ	complete as per standard specifications & direction of E/I.	
<u> </u>	(As per sub Estimate no 2)	D- 40 040 00
3	Providing and Laying Distrbution network of High Density	Rs.13,210.00
	Polyethyene pipe (HDPE pipe) including 5000 liter PVC tank installed	
	at 3M high MS staging etc all complete as per direction of E/I. (As	
	[per sub Estimate no 3)	Pe 4 72 052 21
4	Supply Installation, commissioning and testing of single phase 3	113.4,72,000.23
	H.P. submersible pump set having discharging capacity 3.35 lps at	
	a total head of 35 meter(approx) of KSB/ Kirloskar or equivalent	
	make with all accessories & fittings etc including loading unloading	
	and transportation of the pump set to the work site with all required	
	labour, materials, tools and tackles installation, testing &	
	commissioning as per standards specifications and direction of E/I	
	(As per sub Estimate no 4)	Rs.93,603.00
5	Providing house connection for each house hold including supplying	1.0.00,000.00
	all materials, labours, tools and making ferrule connection with 201	
i	mm dia MDPE and 15mm CPVC Pipes with all fittings etc all	
	complete.	
6	(As per sub Estimate no 5)	Rs.2,26,950.00
١ ٠	Providing and erecting 3 M high staging of suitably designed MS	
	section of angle, channel etc. as per drawing attached. (As per sub Estimate no6)	
	TOTAL	Rs.1,28,500.00
		Rs.11,43,185.03
	Add 1% Contingency	Rs.11,431.85
	G. TOTAL	Rs.11,54,616.88
	(Rs. Fleven Lakh, Fifty four Thousand Six Live dock)	Rs.11,54,600.00

(Rs. Eleven Lakh Fifty four Thousand Six Hundred ) only

#### Note:

i) This model estimate has been prepared in the light of Guidelines of PRD, Bihar memo no. 6278 dt.23.09.2016. This estimate may not ensure standard pressure in the distribution network. Hence on the spot change in staging of storage tank may be

ii) Water quality testing of source should be done after construction of Tube well.

iii) Road cutting cost may increase or decrease as per local condition.

Technical approval accorded for Rs.11,54,600.00 (Rs. Eleven Lakh Fifty four Thousand

Six Hundred) only

- Marun

An French

Gronog

Souristing 1-

Chief Engineer (Design)
Public Mestin Engineering Departu
Bihar, Patna

Sub Est. No. 1

CONSTRUCTION OF 125 MM X 75MM DIA & 125M DEEP TUBE WELL

_ C N	(For Rocky strata inclu	udina Bo	ulders)	108E MELL	
S.N	Description	A.	Unit	Rate	Amaria
'				- itale	Amount
	pipe, by suitable method prescribed in IS: 2800 (part I),	•			•
	including collecting samples from different strata,	٠,			•
	preparing and submitting strata chart/ bore log, including				•
	hire & running charges of all equipments, tools, plants &				
	machineries required for the job, all complete as per				
	direction of Engineer -in-charge, upto 90 metre depth				
24.1.	below ground level. (Rocky strata including Boulders) 1.1 (a) 300mm dia bore from G.L. to 30.0M				
	(b) 300mm dia bore from 30.0 m to 60.0M	30.0 M	P/M	Rs.833.10	Rs.24,993.00
	(c) 300mm dia bore from 60M to 90.0M	30.0 M	P/M	Rs.833.10	Rs.24,993.00
24.2.	1.1 (d) 300mm dia bore from 90.0M to 150.0M	30.0 M	P/M	Rs.833.10	Rs.24,993.00
2	Supplying, assembling, lowering and fixing in vertical	35.0 M	P/M	Rs.881.20	Rs.3O,842.00
	position in bore well, unplasticized PVC (UPVC) medium				
	well casing (CM) pipe of required dia, conforming to IS:				
	12818 including required bits and late				
	12818, including required hire and labour charges, fittings				
	& accessories etc. all complete, for all depths, as per direction of Engineer -in-charge.				
	(b) 125 mm nominal size dia				
24.3.	5 (b) 75 mm nominal size dia	30.0 M	P/M	Rs.462.50	Pr 13 075 00
24.4.	5 (c) 75 mm dia U.P.V.C. strainer	69.0 M	P/M	Rs.328.50	Rs.13,875.00 Rs.22,666.50
3	Providing all materials tools a tu	21.0 M	P/M	Rs.420.30	Rs.8,826.30
	Providing all materials, tools & labours and fixing the				143.0,020.30
	following fittings etc. all complete as per specification & direction of E/I.				
	(a) 125 mm dia P.V.C. well cap				
	(b) 125 mm dia center guide	1 No.	Each	Rs.166.60	Rs. 166.60
	(c) 75 mm dia center guide	4 Nos		Rs.100.00	Rs.400.00
	(d) 75 mm dia P.V.C. pipe shoe plug	6 Nos		Rs.75.00	Rs.450.00
	(e)125mm x 75 mm dia P.V.C. Reducer	1 No.	Each	Rs.185.00	Rs. 185.00
24.14.	1 (d)125mm dia M.S.Clamp	1 No.	Each	Rs.475.00	Rs.475.00
4a	Providing all materials, labours, & equipments for fixing	1 No.	Each	Rs.974.60	Rs.974.60
24.6	tubewell with peagravel of Dalbhumigarh to size 4mm to				
	8mm approx as suitable ( )			4	
	8rmm approx. as suitable for strata including carriage				
	washing, placing and packing the same in position around				
	the tubewell etc. all complete as per direction of E/I	9.0 M <sup>3</sup>	P/M <sup>3</sup>	D - 047.04	
4b	Carriage of Pea Gravel from Dhalbhumigarh (taken av	J.Q 101	L/M	Rs.917.00	Rs.8,253.00
_	distance 400km.)	9.0 M <sup>3</sup>	P/M <sup>3</sup>	Do 4 200 54	
5	Development of tube well in accordance with IS: 2800	0.0 141	1 7141	Rs.4,336.54	Rs.39,028.82
<b>2</b> 4.12	(part i) and iS: 11189, to establish maximum rate of				
	usable water yield without sand content (boyond				
	permissible limit). With required capacity oir com			-	
	running the compressor for required time till well is fully				
	develo ped, measuring yield of well by "V" notch method				
	or any other approved method, measuring static level &				
	draw down etc. by step draw down method, collecting water sampl &getting tested in approved				
	laboratory, disinfection of tubewell, all complete, including				
	hire & labour charges of air compressor, tools &				
	accessories etc., all as per requirement and direction of				
	Engineer-in-charge.				
6	Supplying all materials and labours for arrangement for	5 Hrs.	Each	Rs.649.40	Rs.3,247.00
	additional water required documents for				,
	additional water required during the drilling period for 40				
	Hrs & site clearance & leveling etc. And providing the				
	soap duster etc. to staff engaged in drilling etc. all				
	complete work as per specification & direction of E.I	1 No.	Each	Rs.4,500.00	Rs.4,500.00
	<u></u>	TOTAL	-		Rs.2,08,868.82
	· · · · · · · · · · · · · · · · · · ·			· · · · · · · · · · · · · · · · · · ·	

(Sub Estimate - 2)

Analysis of Chamber for TW

Supplying materials, labours and constructing chamber of following dimension having 250mm thick wall in C.M. (1:4) in cluding 12mm C.P. (1:3) with punning inside, R.C.C. cover slab with C.I. Surface box , 20mm dia foot rest at 150mm interval 10mm dia lifting ring etc. all complete.

	SIZE	1.00	M	×	1.00	M x	0.75	M deep	
600		· -					00	т осер	
S.O.R. No.	<u>Particulars</u>	No.	F	w	H	Qty.	<u>Unit</u>	Rate	Amount
<u>1</u>	Earth work in excavation	1	1.75	1.75	1.0	3.063 M <sup>3</sup>	P/M <sup>3</sup>	Rs.230.50	Do 705.04
S.O.R. 1	No. 2.8				-	3.333 14	1.1141	13.230.30	Rs.705. <b>9</b> 1
<u>2</u> S.O.R. N	Sand filling No. 2.28	1	1.75	1.75	0.075	0.2 <b>3</b> 0 M <sup>3</sup>	P/M <sup>3</sup>	Rs.204.40	Rs.46.95
<u>3</u> 3.0.R. 1	Brick flat soling 1.72	1	1.75	1.75		3.063 M <sup>2</sup>	P/ <b>M</b> <sup>2</sup>	<b>Rs.25</b> 3.80	Rs.777. <b>2</b> 6
<u>4</u> S.O.O. 4	P.C.C. (1:2:4) in foundation .1.3	1	1.75	1.75	0.10	0.306 M <sup>3</sup>			
						0.306 M <sup>3</sup>	P/M³	Rs.3,850.50	Rs.1,179.22
<u>5</u>	B/Work in (1:4) C.M.	2	2.50	0.25	0.75	0.938 M <sup>3</sup>	P/M <sup>3</sup>	Rs.4,724.40	Rs.4,429.13
	lo. 6.1.12/1						. ,,,,,,	110.4,124.40	1(5.4,429.13
<u>€</u> S.O.R. N	R.C.C. Cover slab(1:1.5:3) lo. 5.2.2 & 5.9.3	1	1.50	1.50	0.15	0.338 M <sup>3</sup>	P/M <sup>3</sup>	Rs.5,139.70	Rs.1,734.65
7	shuttering C.P. (1:3) with 5% Cico & neat cement	2	1.50	1.50	0.15	3.15 M <sup>2</sup>	P/M²	Rs.291.00	Rs.916.65
S.O.R. No.	Internal face	2	1.00	1.00	1.00	4.00 M²			
13.17.1	Bed surface	1	1.00	1.00		1.00 M <sup>2</sup>			
+13.36.1					•	5.00 M <sup>2</sup>	P/M²	·· Rs.166.30	Rs.631.50
<u>9</u>	C.P. (1:4) out side of wall o. 13.11.2 8mm dia T.S. Rod	2	1.50	1.50	0.75	4.5 M <sup>2</sup>	P/M²	Rs.114.70	Rs.516.15
S.O.R. No	o. 5.22.7A								
	Lifting Disc of 40	0.338	M <sup>3 x</sup>	70	Kg/ M3	23.625 Kg.	P/Kg	Rs.56.00	Rs.1,323.00
<u>10</u>	Lifting Ring of 10mm dia Rod					4 No.	Each	Rs.30.00	Rs.120.00
<u>11</u>	Carriage of materials 5%							Total	Rs.12,580.41 Rs.629.02
									Rs.13,209.43
						Sav	Rs.13,	210.00	

			<u> </u>		Sub Est.				A	
S N	<del>†</del>		WATE	R SUPI	PLY DIST	RIBUTK	JN S	YSTEM		
S.N.		Particui	iars	5 T T T T		0	antity	1 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	nit Rate	<del></del>
14	Earthwork in excava	ation over	areas (	exceed	ing 30 cm	- !	T		Nate -	Amount
	in depth 1.5 in Wi	idth as we	ellas 1	10 sam	On ml==\	, i				
	including disposal (	of excavate	ted earth	h lead	unto En.					
	and lift upto 1.5m, neatly dressed.	disposal (	earth to	be lev	elled and	1				
	rically diessed.	·		<del></del>	·	ļ				1
	75mm dia Pipe	195.00	0.30	1.10	<del></del>	64.	35			<del></del>
	63mm dia Pipe	195.00		1.10	<del>-</del>	64.	35			<del>-</del>
—-·- <u>:</u>	50mm dia Pipe	390.00	0.30	1.10	=	128.7	70			<del></del>
i	40mm dia Pipe	520.00	0.30	1.10	=	171.6	60			<del></del>
		o/ ovtra for	· <del></del>	<u> </u>			00 M			
- ·- <sub>T</sub>		% extra for	fittings	=			45 M		- <del> </del>	- <del> P</del>
1B	Provision for PCC roa	⊥ ad cutting :	and ite re	ti	<u> </u>		45 M		Rs.230.50	0 Rs.1,03,828.
2	Filling available exce	avated ea	th leve	Storauc	<u>n</u>	14.6	33 M <sup>3</sup>	<sup>3</sup> _P/M		Rs.64, 793
1	trenches, plinth, sides	e of found	1111 (CAU	Juany	rock) in		1	Ī.		1,000
	exceeding 20cm in de	anth cone	300.19 C	(C. IT la	lyers not			j i		
1	laver by ramming and	ipαi, consc	Maury	each o	eposited					
,	layer by ramming and upto 1.5 m.	, watering,	lead up	to 50 n	n and lift			:	:	
		Lich Do				441.44	4 M <sup>3</sup>	P/M <sup>3</sup>	Rs.74.50	Do 20 907
- (	Providing and laying (HDPE pipe) of 20 mm	nign Dei	ISITY PO	lyethye	ne pipe					Rs.32, 887.
F	(HDPE pipe) of 20 mm Kg/cm2 and 10 Kg/cm	og eutable. IU ∠∠o mi	M OD ar	nd pres	sure 6.0		!	į		į.
įŗ	s available in all sta	is ontable	TOF Wate	r suppi	ly which				į	!
v	/arious grades like P	2F_80 PF,	400 inc	984/19:	95 and			i I		İ
S	specials. Rates are in	nchisive of	iUU niu, etile	uoing i	equired		i	!		ı
(F	Exise duty @12.50%	ROST @	ים אם אחם. אם אום א	(es and	duties:			:		
ļla	abour cess, contractor	r nrofit and	470 ayai 4 overhe	(NSI PU	rm 'C')		:		i :	
	Uniplete as per direction	ion of Fnair	neer-in-c	charge						
·   rec	ince hipe of materials	s grade PE	100- PN	Harye.			<u> </u>		: 4 1	
- 1.111	<u>"""/</u>							!		
75	5mm dia Pipe from PV	/C Tank to	Distribu	ition ma	ain	14.00	L.	P/M		~
75	5mm dia Pipe			<del></del> -		195.00	<del></del>	<del></del>	Rs.239.81	Rs.3,357.34
	3mm dia Pipe				<u>:</u> _	· :- :	i	P/M	Rs.239.81	Rs.46,762.95
HC	DPF nine of materials			** *** * .		195.00	M	P/M	Rs.168.77	Rs.32,910.15
	DPE pipe of materials	grade PE1	00- PN8	3 (dia ir	ነ <b>mm</b> ) :		i			
	mm dia Pipe	<del></del>				390.00	 M	P/M		
	mm dia Pipe					520.00		P/M	Rs.89.99	Rs.35,096.10
50r	mm dia Pipe from T/w	ell to PVC	Tank	-		12.00			Rs.59.78	Rs.31,085.60
Pro	oviding and fixing bras	ss gate val	ve with	C.I. wh	eel of	14.00		P/M	Rs.89.99	Rs.1,079.88
арр	proved quality (screwe	∍d end).							į	
7 <b>5</b> n	mm dia Pipe					31	Nos.	Each	Po 1 251 60	
63п	nm dia Pipe			_			Nos.	<del> </del>	Rs.1,351.60	Rs.4,054.80
50m	nm dia Pipe							Each	Rs.1,351.60	Rs.2,703.20
40m	nm dia Pipe		_			·	Nos.	Each	Rs.811.40	Rs.2,434.20
		1	1	1	1	3 N	Joe 1	Each	Rs.613.90	Rs.1,841.70

S	Ņ,	Particulars	7 0	414	T	<del></del>	
	5	Constructing masonry Chamber 60x60x75 cm inside in		ntity	Unit	Rate	Amount
118	3.33	prick work in cement mortar 1:4 (1 cement : 4 coarse	`				
		Salid) for sidice valve, with C.I. surface hox 100mm to		ļ	ŀ		4
		charmeter, 160 mm bottom diameter and 180 mm deep	1				ļ
		inside) with chained lid and RCC top slab 1.2.4 mix /1	1			•	
		cernent: 2 coarse sand: 4 graded stone aggregate					
1		20mm nominal size ) necessary excavation					j
1		Tournation concrete 1:5:10(1 cement : 5 fine sand : 10	<b>1</b>				
		graded stone aggregate 40 mm nominalsize) and inside	, i	-			
		- plastering with cement mortar 1:3 (1 cement - 3coarse		•			
		sand) 12 mm thick, finished with a floating coat of neat	t				1
		cement complete as per standard specifications & direction of E/I.	· -	į	] i		
-		Work for additional depth		9 Nos.	Each	Rs.5,807.50	Rs.52, 267.50
-						: <u></u>	13.32,267.50
	- <u></u> i	Brick work (1:4) in foundation		· :	i	·	
	<u>:</u>	2 1.10 0.25 0.35 0.193	: :		†		
<u> </u>	1	2 0.60 0.25 0.35 0.105	!	_!	+		
		0.298	2.67			·	
<u> </u>		Plaster (1:3)		B CuM	CuM	Rs.4,724.40	Rs.12,649.58
L	j	8 1.10 0.35 3.08			<u> </u>	· · · · · · · · · · · · · · · · · · ·	
6		Carriage 10% of item 5 0.35 3.08	27.72	2 SqM	SqM	Rs.128.20	Rs.3,553.70
Z	F	Providing and placing on terrace (at all floor levels)		· · · · · · · · · · · · · · · · · · ·	·		Rs.6,847.08
<u>18.4</u>	<u> 18</u>	polyethylene water stars and the same and th					
		polyethylene water storage tank, ISI: 12701 marked,		-			
	ľ	with cover and suitable locking arrangement and					
	П	naking necessary holes for inlet, outlet and overflow					
	p	pipes but without fittings and the base support for teal					
<u>8</u>	- 11	roviding and fixing PIMT extension nipple for water	5000	Ltrs.	P/Ltr.	Rs.6.60	Rs.33,000.00
	ta	ank pipe, fittings of approved quality and colour.	٠				
	5	Omm dia					
	7	5mm dia		Nos.	each	Rs.250.00	Rs.500.00
	+		1	No.	each	Rs.400.00	Rs.400.00
	<del>-</del> !					TOTAL	Rs.4,72,053.21

Sub Est. No. 4

Model estimate for supply, installation & commissioning of single phase 3 H.P submersible motor pump set with all accessories including extension of L.T. line from nearest source up-to pumping station.

		station.			
Si. No.	Particulars	Quantity	Unit	Rate	Amount
1	2				
[A.]	Supply Installation,	1 (2001)	4	5	6
	commissioning and testing of	1 (one) job	p/job	Rs.42,700.00	Rs.42,700.00
	single phase 3 H.P. submersible				j
	pump set having discharging				
j	capacity 3.35 lps at a total head				
	of 35 meter(approx) of KSB/				
ł	Kirloskar or equivalent make with			1	
. [	all accessories & fittings etc	j			į
ļ	including loading unloading and	1	1	j	İ
1	transportation of the pump set to	ł			j
[1	the work site with all required	ſ	[		
ļí	abour, materials, tools and	ļ	}		
Įt.	ackles installation, testing &			ľ	1
ľ	commissioning as per standards	1			
S	pecifications and direction of				ĺ
j <sup>e</sup>	·/!.	ļ		1	
  (i	) 50 mm dia x 3 mtrs long				
m	nedium class G.I column pipe			1	1
b	oth end thread and one end	1		1	
	ocketed- 6(six)nos	ŀ			
	) 1x3x2.5 mm <sup>2</sup> flat copper	ļ			
cc	onductor submersible cable -40			+	
(fe	orty) mtrs.	}			
(ii	i) 50 mm dia union socket-	1		1	
]1(	one) no.	ļ		]	
(iv	) 65 mm dia x 250 mm long G.I.	ł		}	
nip	ople- 1 (one) no.			1	
	50 mm dia G.I Elbow-1(One)			ļ	
no	t e				
	) 50 mm dia M.S.				
Icia (:	mps—2(Two) Pairs.			•	
n:-	) 50 mmx 250 mm long G.I	}			
	ple- 1(One) no.				}
1/0	i) Tube well cap for T/Well – ne) no.			ŀ	1
1110	ne) no.	ļ ,	1	1	1

				.*	•
		. %			
	·				÷
					•
	(ix) 50 mm dia x 65 mm dia	1	1	ı	r
<u> </u>	reducer socket -1(one) no.				1
[B]	Supply Installation,	1 (one)	ioh =/:		
	commissioning and testing of	1 (one)	job p/j	ob Rs.45,50	0.00 Rs.45,500.
	floor mounted outdoor type L.T				
	feeder pillar single phase starter		ļ		
	controll pannel operated on 220			İ	
	V, 3 phase , 50 c/s for 3 HP			İ	
	Submersible pump set made of			ļ	
	MS sheet (minimum 2 mm thick)		ļ		
	duly spray power coated painting	[			
	with following accessories made		İ	İ	
	of M.S sheet (minimum 2mm		}		
	thick) duly spray powder coated	-			
	painting with following		1		
	accessories		[		
	(i) 90-220 V range single phase7.		İ	[	
	5 KVA automatic voltage				
	stabilizer make- Sen & Pandit/			ĺ	
	Vertex/ISI marked If any. 1 No.			]	
	The marked it ally. I NO.		1	ļ	
	(ii) Suitable single phase starter			1	
ł	control panel for above motor of		1		
	BCH /L&Tmake – 1(one) no.			1	
		20 mtrs	7.4	<del></del>	
	copper service cable from power	בט ווונוג	P/Mt	Rs.130.0	Rs.2,600.00
],	point from nearest source up-to		1		
r	oumping station		}	1	
[D] [	Providing all	l job	<del> </del>		
ļr	equired for doing earthing station	ı Job	p/job	Rs.2,803.0	0 Rs.2,803.00
V	vith G.I earth pipe of 40 mm dia		1		
x	4.5 mtrs 20fts. long G.I pipe		1		
ir	icluding accessories excavation		1		
0	f earth, providing masonry		1		1
eı	nclosure with cover plate having			ţ	1
10	cking arrangement and watering			1	
pi	pe etc.with salt, charcoal, etc. as	ı		1	
pe	er IE & IS specification.		l		
			<u> </u>	<u> </u>	<u> </u>
				Total Rs.	Rs.93,603.00

Sub Est. No. 5

<del></del> -	Estimate for the work - Hous		ce conn	ection	
S.No.	SUB-ESTIMA  Description		1		
1A	Providing and fixing MDPE (PE 8)	Qty	Unit	Rate	Amourat
	GradeCompound) pipes PN-12.5 (12.5kg/Sqcm				
	as per ISO 4427 and specification fo				
	waterapplication rates are inclusive of, taxes and	d	1	İ	
	duties (Exise duty @12.50% &CST @2% agains	it.	1	ļ	
	Form 'C'), labour cess, contractor profit and	d			
	overhead charges all complete asper direction o	f			
	Engineer-in-charge.complete.	!			
	MDPE Pipe 20mm dia nominal bore	6.00	PM	Rs.19.97	D: 4.40.0
1B	Providing and fixing Chlorinated Polyviny	1 0.00	FIVI	K5.19.97	Rs.1 19.8
	Chloride (CPVC) pipes, having thermal stability	,			
	for hot & cold water supply, including all CPVC				
	plain & brass threaded fittings, including fixing	2			
	the pipe with clamps at 1.00 m spacing. This				
	includes jointing of pipes & fittings with one step		1		
	CPVC solvent cement and testing of joints	;			
	complete as per direction of Engineer in Charge.	!			
	Internal work - Exposed on wall				
18.7.1	15 mm nomonal bore	1.0	PM	Rs.138.70	Rs.138.70
2	Earth work in excavation in foundation trenches	1.0	1 141	13.130.73	NS. 130.70
	or drains(not exceeding 1.5 m in width or 10 sqm		Ì		
	on plan) including dressing of sides and amming				
	of bottoms, lift upto 1.5 m including getting out		i	1 1	
	the excavated soil and disposal of surplus		}	1	
	excavated soil as directed, within a lead of 50 m.				
	All kinds of soil				
2.8.1	6.00 0.30 0.60 1.08	1.08	CuM	Rs.230.50	Rs.248.94
2.26	Filling available excavated earth (excluding rock)		Ì		
2.20	in trenches, plinth, sides of foundations etc. in layers not exceeding 20 cm in depth:		]		
	layers not exceeding 20 cm in depth: consolidating each deposited layer by ramming			Rs.74.50	Rs.78.85
	and watering lead				
4	Providing and fixing brass ferrule with CI mouth	1.06	CuM		
·	cover incuding boring and tapping the main:				
	and appring the main.				
18.20.1	15mm nominal bore	1	Each	Rs.254.10	Rs.254.10
	Providing and fixing P.P. Black service Saddle (Brass threaded)	1	Each	Rs.400.00	Rs.400.00
5	Providing and fixing brass bib cock of approved				
	quality:				
8.15.1	15mm nominal bore	1	Each	Rs.273.00	Rs.273.00
	Total Say	<u> </u>			Rs.1,513.41
		Nos.	@	Rs.1,513.00	Rs.1,513.00 Rs.2,26,950.00

S.N.	T	O III III G	HSTEEL	STRU	CTURE ST	AGING	FOR 50	000 LITE	R PVC TANK	
1	Structural						antity	Uni	Rate	Amou
<u>10.3</u>	Structural sections, to	prisess a	nd from	or boile	ed in built u	р				AmOur
-	Cutting bois	ting fiving	iliu Irami	ea wor	k, includin	g				
	cutting, hois	ansy, nxn ic	in posit	ion and	applying .	a				
	priming coa	staning w	ovea prin	ner all c	complete.	·				
	8M high s	itch nand	1111 G e	nciosur	e to house	ė			<del>-  </del>	- <del> </del>
	electric sw	analo ele	or suit	ably de	esigned Ms	3	- 1	İ		ļ
	section of attached	angle, ch	iannei, e	tc.as	per drawing	)				
2	Earth work	in excave	otion in f			149	90 Kg	P/Kg	Rs 69 2	0 Rs.1,03,10
.8.1	or drains(no	t exceed	ina 1 C	oundati	on trenches	<b>S</b> Í		Ţ — <b>-3</b>		v 13.1,03,10
	on plan) inc	ludina re	ing 1.5 M Seina of 1	in wigti	n or 10 sqm	١	!	į	· ·	:
:	of bottoms	lift upto 1	15 m in	sides a	nd ramming	<b>}</b> i	ĺ	-	•	
:	the excava	ted soil	∏ -:4 bee	ciuaing	getting out	t	i	1	j	
:	excavated s	noil se dire	and dis	posal	of surplus	i.		1	i e	
	excavated s All Kinds of	enit	cied, Witi	nın a le	ad of 50 $m_{\odot}$			:		!
:	base of footi	ing		<del></del>			- <u> </u>	_!		
	4 1.20		1.400	_ +		<u> </u>			····	†
	For fixing La	dder	1.425	_ <del> </del>	8.208	<u> </u>		<u></u>	-+	+
	1 1.00								···	<del></del>
	· <u>-</u> · - · -	<u>,                                    </u>	0.275		0.138		T	Ţ — ———	· <del>!</del>	· <del>-</del>
3	Supplying :-				8.346	8.34	6 M <sup>3</sup>	P/M <sup>3</sup>	Rs.230.50	Po 4 355
28	Supplying an	~ := . Mannadil	n piinth w	ith loca	i sand and		<del>-  </del>	<u> </u>		Rs.1,923
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C	consolidating	and dres	sing com	plete.	٦				!	İ
b	pase of footing	ig				<del></del>	<del> </del> -	<u> </u>	<del></del>	<u> </u>
<del></del> !:-	4   1.20		0.10	=	0.576	<del></del>	+	<b></b>	<u> </u>	
<u> </u> _	anding Plate	<del></del>		<del></del>			<del> </del>		.i <u></u>	
	11_00	0.50	0.10	Ţ <b>=</b> !	0.050		<del>+</del> 1		· · · - · - · - · - · - · - · - · - · -	
				T - T-	2 22 2	0.626	3	P/M <sup>3</sup>	· · · · · · · · · · · · · · · · · · ·	: 
	roviding dea		<del>-</del>		U UZ []		IVI -	CJ/R#V	D= 004.46	
-  P	TO AIGHT DES	signation :	of 100A	Brick f	1-4	0.020		TAVI	Rs.204.40	Rs. 127.
- ∣P 72 ∣jo	oints filled v	Signation with local	of 100A	Brick f	1-4	0.020	- 1		RS.204.40	Rs. 127.
. — ;,o	wing wind A	vitii local	l sand i	actudina	lat Soling	0.020			RS.204.40	Rs. 127.
W	ratering, taxe	es & rov	ı sand ir altv all d	actudina	lat Soling	0.020	- 1	····	RS.204.40	Rs. 127.
w sp	ratering, taxe pecification &	es & roy direction	ı sand ir altv all d	actudina	lat Soling		- 1	TAVI	Rs.204.40	Rs. 127.
w sp	ratering, taxed pecification & asse of footing	es & roy direction	ı sand ir altv all d	ncluding complet	lat Soling cost of e as per			- AVI	KS.204.40	Rs. 127.
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			3.50 3.50	<del></del>	<u>-</u>	21.000			T • • •	#	
					·	6.125				* ··· - · · ·	
2	Carriage	of the fo	lowing r	naterials f		27.125	27.13 N	1 <sup>2</sup>	M <sup>2</sup>	Rs.63.60	Rs 1 725 15
\ \\	work sit	e includ	lina lo:	nateriais i	rom q	uarry to	1	1			
8	staking a	at work	site a	per sp	noagi	ng and	:	!			1
		JI [7]					i				į
[(	a) Bricks	(7 Km.	Pucca &	1 Km. Ka	chha	lead)	203 N		0/0		j
(	b) Coars	e Sand (	100 Km.	lead)	1				%0 nos.	Rs.606.10	Rs. 123.04
(	c) Stone	Chips (1	50 Km /	'⊥_ ead)	<u> </u>		0.860 M		P/M <sup>3</sup>	Rs.1,221.09	Rs.1,050.14
((	d) Local s	Sand (2	Km Puc	ca & 1 Kn	. V-		1.730 M		P/M <sup>3</sup>	Rs.1,746.29	Rs.3,021.08
		- '- '- <u>-</u> '-			u. <b>Nac</b> i	inn <b>a</b> lea l	0.720 M	3	P/M <sup>3</sup>	Rs.217.23	Rs.156.41
		- +			<del> </del>			<del>-</del>			Rs.1,28,521.72
		i		!	1			1		say	

July July

Ay James of



# GOVERNMENT OF BIHAR

PUBLIC HEALTH ENGINEERING DEPARTMENT

MODEL ESTIMATE

FOR

CONSTRUCTION OF RURAL PIPED WATER SUPPLY SCHEME FOR A WARD HAVING 150 HOUSE HOLDS

ESTIMATED COST-- Rs. 10.399 Lac

2017-18

### **GOVERNMENT OF BIHAR** Public Health Engineering Department

### ABSTRACT OF COST

NAME OF WORK:- CONSTRUCTION OF RURAL PIPED WATER SUPPLY SCHEME FOR WARD HAVING 150 HOUSE HOLDS

S.N.		Total Amount
	Construction of 200/165 mm dia. 90 Mtr deep Drilled High Yie	ld
	Tubewell By DTH RIG Machine with Blue casing U.P.V.C. Pipe etc.	<b>-11</b>
	complete and as per direction of E/I. (As per sub Estimate no 1)	an
2	Constructing masonry Chamber 100x100x75 cm inside, in brick work	Rs.95,242.9
	cenient mortar 1:4 (1 cement : 4 coarse sand) for Tube Well, and RC	in
	top side 1.1.5.3 mix (1 cement : 1.5 charse sand : 3 graded start	_
	laggregate 20mm nominal size ) necessary excavation formatati	ľ
	concrete 1.2.4(1 cement : 2 line sand : 4 graded stone aggregate 3	ما
	in nominal size) and inside plastering with coment moster 4.3	<u>ا د</u>
	certain . Scoarse sand) 12 mm thick with 5% cico friehed with a figuriar	_1
	coal of fleat certient, out side plastering with compat most and	<u>. i</u>
	certein . 4coarse sand) 12 mm thick complete as per standor	d
	specifications & direction of E/I.	
3	(As per sub Estimate no 2)	Rs.13,210.00
	Providing and Laying Distribution network of High Density Polyethyen	
	pipe (HDPE pipe) including 5000 liter PVC tank installed at 3M high MS staging etc all complete as per direction of E/I. (As per sub Estimate no	3
		1
4	Supply Installation, commissioning and testing of single phase 3 H.P	Rs.4,72,053.21
- F	submersible pump set having discharging capacity 3.35 lbs, at a total	.1
-  1	head of 35 meter(approx) of KSB/ Kirloskar or equivalent make with al	
١٩	accessories & fittings etc including loading unloading and	d J
t	ransportation of the pump set to the work site with all required labour	1
- !'	naterials, tools and tackles installation, testing & commissioning as par	
19	dariualus specifications and direction of F/I	
(,	As per sub Estimate no - 4)	Rs.93,603.00
, ור	Providing house connection for each house hold including supplying all	
N	naterials, labours, tools and making ferrule connection with 20 mm dia	
	IDPE and 15mm CPVC Pipes with all fittings etc all complete. (As per ub Estimate no 5)	
i  P	roviding and erecting 3 M high staging of suitably designed MO	Rs.2,26,950.00
Į"	dangle, charmer etc. as per drawing attached. (As per sub Estimate po	ļ
[6]	)	Rs.1,28,500.00
<u> </u>	TOTAL	Rs.10,29,559.12
	Add 1% Contingency	Rs.10,295.59
	G. TOTAL	Rs.10,39,854.71
	s. Ten Lakh Thirty nine Thousand Nine Hundred) only	Rs.10,39,900.00

ousand Nine Hundred) only

#### Note:

- i) This model estimate has been prepared in the light of Guidelines of PRD, Bihar memo no. 6278 dt.23.09.2016. This estimate may not ensure standard pressure in the distribution network. Hence on the spot change in staging of storage tank may be required.
- ii) Water quality testing of source should be done after construction of Tube well.

iii) Road cutting cost may increase or decrease as per local condition.

Technical approval accorded for Rs.10,39,900.00 (Rs. Ten Lakh Thirty nine Thousand

Nine Hundred) only

Chief Engineer (Design) Public Health Engineering Departmen

Bihar, Patna

## Estimate no.-1

	DTH RIG MACHINE WITH BLUE C				
NO.		Quantity		<del></del>	
. 1	Drilling of 200mm x 165mm x 125 meter deep borewell		unit	Rate	Amoun
	I'm an kinds of soil and rock in rural area for installation	ł	]		
	or pump set with Hydaraulic DTH Rig machine all		1		1
	complete including supplying all materials, tools, drilling		İ		1
	rig, Air Compressor and equipments, as well as fuel,		1		
	lubricants and cost of transportation of Rig machine		1		
	and other vehicles up to the site etc all complete as per				
	specification and direction of E/I.				
	(i) Up to 50 mtrs depth below GL				
	(ii) Beyond 50 mtrs. Up to 90 Mtrs	50	P/M	Rs.729.52	Rs.36,476.
- 1	Supplying, assembling, lowering and fiving in	40	P/M	Rs.867.88	
- 11	position in pore well, unplasticized by a district	Ì			
I`	median wen casing (CM) nine of the control in the	1			
- 1	12018, including required by	- 1			j
	our charges, fittings & accessories at a - it -	1			
- 1.	or deputs, as per direction of Engineer in the	Ì			
		24	P/M	<b> </b>	
اً	upplying labour, cement and calcium chloride or		17141	Rs.921.70	Rs.22,120.8
٦٢	etonites solution and equipments for grouting to	[			  -
44	asing pipe as per specification and direction of E (	1	C		
75,	opprying all tools labors and enginments and dis-	<del></del>	Each	Rs.51.01	Rs.51.0
J **	daring hushing & developing of drilled to be	- 1			
10.	The clear and clear water ( min 250 Herrard	j			
	where as bet direction of the	2.5	P/Hr		
30	opplying labors and equipments including 200 mm dia		- ' / ' ! !	Rs.649,40	Rs.1,623.50
1,41	.s. cap a Fitting & Fixing over the tube well proporty	1	ĺ		
Tau	d taking out as per direction of E/I.	1	Each	D- 000 15	
			Lacii	Rs.256.40	Rs.256.40

## (Sub Estimate - 2)

O

Supplying materials, labours and constructing chamber of following dimension having 250mm thick wall in C.M. (1:4) in cluding 12mm C.P. (1:3) with punning inside, R.C.C. cover slab with C.I. Surface box , 20mm dia foot rest at 150mm interval 10mm dia lifting ring etc. all complete.

	SIZE		M	×	1.00	M x	0.75	M deep	1
0.00							<u> </u>	ni deeb	
<u>\$.O.R.</u> No.	<u>Particulars</u>	No.	Ē	w	<u>H</u>	Qty.	<u>Unit</u>	Rate	Amount
1	Earth work in excavation	1	1,75	1.75	1.0	3.063 M <sup>3</sup>	P/M <sup>3</sup>	Do 220 50	
S.O.R. N	ło. 2.8					3.003 IVI	P/M	Rs.230.50	Rs.705.91
<u>2</u> \$.O.R. N	Sand filling lo. 2.28	1	1.75	1.75	0.075	0.230 M <sup>3</sup>	P/M <sup>3</sup>	Rs.204.40	Rs.46.95
<u>3</u> \$.O.R. 1	Brick flat soling 1.72	1	1.75	1.75		3 063 M <sup>2</sup>	P/M <sup>2</sup>	Rs.253.80	Rs.777.26
<u>4</u> S.O.O. 4	P.C.C. (1:2:4) in foundation .1.3	1	1.75	1.75	0.10	0.306 M <sup>3</sup>			
_						0.306 M <sup>3</sup>	P/M <sup>3</sup>	Rs.3,850. <b>50</b>	Rs.1,179.22
<u>5</u>	B/Work in (1:4) C.M.	2	2.50	0.25	0.75	0.938 M <sup>3</sup>	P/M <sup>3</sup>	Rs.4,724.40	,
	o. <u>6</u> .1.12/1					141	F / IVI	113.4,724.40	Rs.4,429.13
<u>6</u> \$.O.R. N	R.C.C. Cover slab(1:1.5:3) 0. 5.2.2 & 5.9.3	1	1.50	1.5 <b>0</b>	0.15	0.338 M <sup>3</sup>	P/M <sup>3</sup>	Rs.5,139.70	Rs.1,734.65
-	shuttering C.P. (1:3) with 5% Cico &	2	1.50	1.50	0.15	3.15 M <sup>2</sup>	P/M <sup>2</sup>	Rs.291.00	Rs.916.65
Z	neat cement								
S.O.R. No.	Internal face	2	1.00	1.00	1.00	4.00 M <sup>2</sup>			
13.17.1	Bed surface	1	1.00	1.00		1.00 M <sup>2</sup>			
+13.36.1					•	5.00 M <sup>2</sup>	P/M <sup>2</sup>	Rs.166.30	Rs.831.50
<u>8</u> S.O.R. No	C.P. (1:4) out side of wall	2	1.50	1.50	0.75	4.5 M <sup>2</sup>	P/M <sup>2</sup>	Rs.114.70	Rs.516.15
	8mm dia T.S. Rod								
		0.338	43 x	70	Kg/	22.005.4			
	1.991	0.550	PV1	70	M3	23.625 Kg.	P/Kg	Rs.56.00	Rs.1,323.00
	Lifting Ring of 10mm dia Rod					4 No.	Each	Rs.30.00	Rs.120.00
11	Comingo of materials and							Total	Rs.12,580,41
11	Camage of materials 5%								Rs.629.02
								-	Rs.13,209.43
						Say	Rs.13.2	210.00	

	· · · · · · · · · · · · · · · · · · ·	·		<u>S</u>	ub Est. N	<u> </u>					
		WA	TER S	SUPPL	Y DISTRI	BUTION	SYS	TEM		<u></u>	
S.N.		Particulars				Qua	entity	Un	it Rate	Amaount	
1A	Earthwork in excava									Ameddin	
	depth 1.5 in width a										
	disposal of excavate										
	1.5m, disposal earth	n to be levelled	and r	neatly o	dressed.		-				
·· ···	75mm dia Pipe	195.00	0.30	1.10	=	64.	35				
	63mm dia Pipe	195.00	0.30			64.	– 35∶	— <u> </u>	·	ļ	
	50mm dia Pipe	390.00 C	0.30	1.10	=	128.	70	<del></del>		ļ	
	40mm dia Pipe	520.00 0	.30	1.10	†   <b>=</b>	171.6	— !— : 30 i				
					 L		00 M <sup>3</sup>		<u> </u>		
	Add 5	5% extra for fit	tings =	<b>=</b> 			15 M <sup>3</sup>		· · · · · · · · · · · · · · · · · · ·		
1B	Provision for PCC ro	ad cutting and	its re	storatio	<u> </u>		15 M <sup>3</sup>		—-i		
2	Filling available exc	cavated earth	(exc	ludina	rock) in	14.0	3 M <sub>3</sub>	P/M	<sup>3</sup> Rs.4,428.80	Rs.64,793.	
	trenches, plinth, side	es of foundation	ons et	c. in la	avers not			ĺ			
	exceeding 20cm in o	depth, consolid	lating	each d	eposited				_		
	layer by ramming an	d watering, lea	ad up	to 50 i	m and lift						
	upto 1.5 m.	1			ļ	441.4	4 M <sup>3</sup>	P/M	Rs.74.50	Do 30 007 0	
3	Providing and laying	g High Densi	ty Po	iyethye	ene pipe		-1 <b>-1 -1 -1</b> -1	· · · · · · · · · · · · · · · · · ·	113.74.50	Rs.32,887.3	
	(HDPE pipe) of 20 m	m to 225 mm	OD ar	nd pres	ssure 6.0		:				
	Kg/cm2 and 10 Kg/c is available in all s	Standard like	r wate	er supp	oly which		1	:			
	various grades like	PF-80 PF-10	151-4: O incl	984/19 udina	195 and			ļ			
	specials. Rates are	inclusive of	alita)	ces an	required of duties			:			
	(Exise duty @12.50%	% &CST @2%	6 agai	inst Fo	orm 'C')		÷				
-	labour cess, contract	or profit and o	verhe	ad cha	arges all		:				
	complete as per direc	tion of Engine	er-in-c	harge							
	HDPE pipe of materia mm)	als grade PE10	0- PN	10 (dia	a in						
	75mm dia Pipe from F	PVC Tank to D	istrihu	ition m		14.00	<u> </u>				
	75mm dia Pipe				:	14.00	1	P/M	Rs.239.81	Rs.3,357.3	
	33mm dia Pipe				· <del>-</del>	195.00		P/M	Rs.239.81	Rs.46,762.95	
B						195.00	M	P/M	Rs.168.77	Rs.32,910.15	
F	HDPE pipe of materia	ls grade PE10	0- PN8	B (dia i	n mm) 📒		:				
5	0mm día Pipe	<del></del>				390.00	M	P/M	Rs.89.99	D-05-000 (-	
4	0mm dia Pipe					520.00	<del></del>	P/M	Rs.59.78	Rs.35,096.10	
5	0mm dia Pipe from T	/well to PVC T	ank		<del></del>	12.00	<del> </del>	P/M	ļ	Rs.31,085.60	
P	roviding and fixing br	rass gate valve	with	C.I. w	heel of			+	Rs.89.99	Rs.1,079.88	
a	pproved quality (screy	wed end).		_	İ		-				
7	5mm dia Pipe					3	Nos.	Each	Rs.1,351.60	De 4 054 00	
6:	3mm dia Pipe	<del></del>						<del> </del>		Rs.4,054.80	
	Omm dia Pipe				————— <u> </u>		Nos.	<del> </del>	Rs.1,351.60	Rs.2,703.20	
+-	Omm dia Pipe				! 		Nos.	Each	Rs.811.40	Rs.2,434.20	
	min dia ripe					3	Nos.	Each	Rs.613.90	Rs.1,841.70	

S.N.	Particulars	Qı	rantity	Uni		
5	Constructing masonry Chamber 60x60x75 cm inside,		***************************************	Un	t Rate	Amount
10.33	Drick work in cement mortar 1:4 (1 cement : 4	_		-		
ſ	odild) to stude valve, with C.I. surface boy 100mm to	_ i	İ	:		
. [	diameter, 100 mm bottom diameter and 180 mm door	<i>i</i>				
- 1	molde) with chained lid and RCC too stab 1.2.4 miles	4			: :	
1	certent. 2 coarse sand 4 graded stops asset to	1	İ		:	
11.	contin nominal size ) . necessary evaluation	. !	ĺ	· [		
, ,	Concrete 1:5:10/1 cement : 5 fine cond : 4	<u>م</u> ا				ļ
13	graded stolle aggregate 40 mm nominalsizo) and incident		!	:	•	
11	plastering with cement mortar 1:3 (1 cement : 200000	_	:		•	
,	rand) iz iiiii trick, finished with a floating coot of ac-					
	rement complete as per standard specifications 8 lirection of E/t.	•				
	Vork for additional depth	:=	9 No	s. Each	Rs.5,807.5	0 Po 50 007 .
					<u></u>	0 Rs.52,267
	Prick work (1:4) in foundation	:··	1		·	+
	<u>2 1.10 0.25 0.35 0.193</u>	·	- <sub>+</sub> -			<u> </u>
	2 0.60 0.25 0.35 0.105	<del>-</del>			<u> </u>	
	0.298				: :	
P	laster (1:3)	2.6	\a Cnl	M CuM	Rs.4,724.40	Rs.12,649.5
	8 1.10 0.35 2.09	. <u> </u>			<u></u>	 
5 C	arriage 10% of item 5	27.7	2 SqN	/ SqM	Rs.128.20	Rs.3,553.70
Pr	oviding and placing on terrace (at all floor levels)					10.000.71
48	sivethylana water (at all floor levels)		- •		<del>-</del>	Rs.6,847.0
pc	lyethylene water storage tank, ISI: 12701 marked,		1			:
Wi	th cover and suitable locking arrangement and		•			
ma	aking necessary holes for inlet, outlet and overflow					•
pic	Des but without fittings and the hear		:			
Pro	pes but without fittings and the base support for tank.  Eviding and fixing PTMT extension nipple for water	500	Ltrs.	P/Ltr.	Rs.6.60	Re 32 000 00
tan	k pipe, fittings of approved quality and colour.		-	• •		Rs.33,000.00
50r	mm dia		+	:	į	
	nm dia	2	Nos.	each	Rs.250.00	Rs.500.00
	THE UIA	—	No.	each	Rs.400.00	
			- <del> </del>	T		Rs.400.00
			<u> </u>		TOTAL	Rs.4,72,053.21

Model estimate for supply, installation & commissioning of single phase 3 H.P. submersible motor pump set with all accessories including extension of L.T. line from nearest source up-to pumping station.

SI. No.		station.			. Политрина
21. MO'	Particulars	Quantity	Unit	Rate	Amount
				1 1	Amount
1	2	3		<del>  </del>	<del></del>
[A.]	Supply Installation,	1 (one) job	4 p/job	5 Rs.42,700.00	6
	commissioning and testing of	(=1.0)	P/ JOD	RS.42,700.00	Rs.42,700.00
j	single phase 3 H.P. submersible				
	pump set having discharging				
1	capacity 3.35 lps at a total head				
j'	of 35 meter(approx) of KSB/				
-  1	Kirloskar or equivalent make with	j		j	
Įā	all accessories & fittings etc	1			
ļi	ncluding loading unloading and	j	İ	ĺ	
Įt	ransportation of the pump set to	}	j	1	·
Įτ	ne work site with all required	{	,	}	
ļ!ā	abour, materials, tools and	1	j	ĺ	
ta	ackles installation, testing &	ł	ļ		
C	ommissioning as per standards	1	ļ	- 1	
St	pecifications and direction of		1		[
Ε,	/1.	1	1		
	1	}	}		
(i)	50 mm dia x 3 mtrs long		{	1	1
m	edium class G.I column pipe		İ	[	
po	th end thread and one end	li li			
so	cketed- 6(six)nos	1			
(ii)	1x3x2.5 mm <sup>2</sup> flat copper		1	j	
COI	nductor submersible cable -40		j		1
{to	rty) mtrs.	1		Í	
(iii)	50 mm dia union socket-				İ
	ne) no.		1		
(iv)	65 mm dia x 250 mm long G.I.	ĺ		1	
luibi	ple- 1 (one) no.	1	}	j	
(v) :	50 mm dia G.I Elbow—1(One)	1			
no.	l	}	- 1		
(VI)	50 mm dia M.S.			1	
Clan	nps—2(Two) Pairs.	1		ĺ	ľ
[(vii)	50 mmx 250 mm long G.I			1	}
nipp	le- 1(One) no.	1	1		ľ
(VIII)	Tube well cap for T/Well –	1	1		1
	e) no.		l	1	
(IX) 5	0 mm dia x 65 mm dia		l		1
Lisan	cer socket –1(one) no.	_			İ

[B]	Supply Installation,	1 (one) jo	b p/job	Rs.45,500.0	0 Rs.45,500.0
1	commissioning and testing of				113.45,500.0
- 1	floor mounted outdoor type L.T				
	feeder pillar single phase starter				
	controll pannel operated on 220	1			
	V, 3 phase , 50 c/s for 3 HP				
i	Submersible pump set made of				
	MS sheet (minimum 2 mm thick)				
	duly spray power coated painting				
	with following accessories made	i			
	of M.S sheet ( minimum 2mm		-		
	thick) duly spray powder coated				
	painting with following				
	accessories				
	(i) 90-220 V range single phase7.				
	5 KVA automatic voltage				
	stabilizer make- Sen & Pandit/		ĺ		
	Vertex/ISI marked If any. 1 No.				
	(ii) Suitable single phase starter				
ĺ	control panel for above motor of			Ī	
ļ	BCH /L&Tmake – 1(one) no.		İ		
[C]	Supplying & fitting 2.5 mm <sup>2</sup>	20 mtrs	P/Mt	Rs.130.00	Rs.2,600.00
1	copper service cable from power			1	1012,000.00
	point from nearest source up-to			]	
	pumping station				
[D]	Providing all materials and labour	l job	p/job	Rs.2,803.00	Rs.2,803.00
j j	required for doing earthing station				1.0.2,000.00
i i	with G.I earth pipe of 40 mm dia				
[ ]	x 4.5 mtrs 20fts. long G.I pipe			. !	
	including accessories excavation			1	
	of earth, providing masonry				
j.	enclosure with cover plate having			]	
	locking arrangement and watering			]	
] }	pipe etc.with salt, charcoal, etc. as	j		]	
	per IE & IS specification.			]	ł
				Total Rs.	Rs.93,603.00

Sub Est. No. 5

·	Estimate for the work - Hou	se ser	vice con	nection	
S.No.	SUB-ESTIM/ Description				
1A	Providing and fixing MDPE (PE GradeCompound) pipes PN-12.5 (12.5kg/Sqcras per ISO 4427 and specification f waterapplication rates are inclusive of taxes at	or	y Uni	t Rate	Amouret
	duties (Exise duty @12.50% &CST @2% again Form 'C'), labour cess, contractor profit ar overhead charges all complete asper direction (Engineer-in-charge.complete.	rd!			
	MDPE Pipe 20mm dia nominal bore	6.0	0 PM	Rs.19.97	
1B	Providing and fixing Chlorinated Polyving Chloride (CPVC) pipes, having thermal stability for hot & cold water supply, including all CPVC plain & brass threaded fittings, including fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step CPVC solvent cement and testing of joint complete as per direction of Engineer in Charge. Internal work - Exposed on wall	yl C g s		13.13.97	Rs.1 19.8
18.7.1	15 mm nomonal bore	1.0	PM	Rs.138.70	Rs.138.70
-	Earth work in excavation in foundation trenches or drains(not exceeding 1.5 m in width or 10 sqm on plan) including dressing of sides and amming of bottoms, lift upto 1.5 m including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50 m. All kinds of soil				
2.8.1	6.00 0.30 0.60 1.08	1.08	Cutt	D- 000 50	
3 2.26	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20 cm in depth: consolidating each deposited layer by ramming and watering lead		CuM	Rs.230.50 Rs.74.50	Rs.248.94 Rs.78.85
4	Providing and fixing brass ferrule with CI mouth cover incuding boring and tapping the main:	1.06	CuM		
8.20.1	15mm nominal bore	1	Each	Rs.254.10	Rs.254.10
	Providing and fixing P.P. Black service Saddle (Brass threaded) Providing and fixing brass bib cock of approved	1	Each	Rs.400.00	Rs.400.00
(	quality:				
3.15.1	15mm nominal bore Total	1	Each	Rs.273.00	Rs.273.00
	Say				Rs.1,513.41 Rs.1,513.00
	150 N	los.	@	Rs.1,513.00	Rs.2,26,950.00

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S.N.	3 M HIGH STEEL STRUCTURE STAG	ING FOR 50	00 LITER	PVC TANK	<del></del>
4	<u>1                                    </u>	Quantity	Únit		<b>Amount</b>
1.	Structural steel work riveted or bolted in built up			- Itale	Amount
<u>.3</u>	sections, trusess and framed work, including			-	
	cutting, hoisting, fixing in position and applying a			i	1
	priming coat of approved primer all complete.		İ	İ	
	8M high staging with GI enclosure to house				
	electric switch panel of suitably designed MS			ļ	
	section of angle, channel, etc. as per drawing				i.
	<u>lattached</u>	1490 Kg	P/Kg	Rs 69 20	Rs.1,03,108.00
2	Earth work in excavation in foundation trenches			110.00.20	113.1,05,100.00
8.1	or drains(not exceeding 1.5 m in width or 10 sqm	:		•	
	on plan) including ressing of sides and ramming				
	or pottoms, lift upto 1.5 m. including getting out				
	the excavated soil and disposal of surplus	i		1	
	excavated soil as directed, within a lead of 50 m	4		:	
	All Kinds of soil	•			
	base of footing	· · · · · · · · · · · · · · · · · · ·	·	· · · · · · · · · · · · · · · · · · ·	
	4 1.20 1.20 1.425 = 8.208		i		
	For fixing Ladder	· · · · · · · · · · · · · · · · · · ·		· · · · · · · · · · · · · · · · · · ·	<del></del>
	1 1.00 0.50 0.275 = 0.138	<del></del>		·	
	8.346	8.346 M <sup>3</sup>	P/M <sup>3</sup>	Rs.230.50	
•	Supplying and filling in plinth with local sand and		. P/IVI	NS.230.50	Rs.1,923.64
8	under floors including watering, ramming				
į	consolidating and dressing complete.	:	:	1	
	base of footing				
- 1	4 400		i 		
-	4 1.20 1.20 0.10 = 0.576 Landing Plateform				_ · <del></del> · · <del>-</del> -
	1 100 0.50				
-	0.00 0.10 - 0.050			1	
	0.626	0.626 M <sup>3</sup>	P/M <sup>3</sup>	Rs.204.40	Rs. 127.95
72	Providing designation of 100A Brick flat Soling				11.5. 127.55
72	oints filled with local sand including cost of	: i			
	watering, taxes & royalty all complete as per				1
	specification & direction of E/I.				1
_; <u>'</u>	pase of footing			*	
	4 1.20 1.20 = 5.760	_			- · · · · ·
1	anding Plateform				
_	1 1.00 0.50 = 0.500			· · · · · · · · · · · · · · · · · · ·	
	6.260	6.260 M <sup>2</sup>	P/M <sup>2</sup>	Po 353 00	
F	Providing and laying in position cement concrete			Rs.253.80	Rs.1,588.79
/	· ·	: i		!	
C	f specified grade exluding the cost of centring				1
а	nd shuttering-all work upto plinth level.				1
1	1 5:3(1 Compant 1 5 compant 1 5	-			ł
	:1.5:3(1 Cement :1.5 coarse sand:3 graded				
3	tone aggregate 20 mm nominal size)				
D	ase of footing				
	4   1.20   1.20   0.100   = 0.576			.ii.	
	or Grouting at base plate	· :·			
-	4 020 020 0000	<del></del>	·	·	
-	7   <b>9.20</b>   <b>9.20</b>   <b>111511</b>   <b>-</b>     <b>2.20</b>			<u> </u>	
	anding Plateform	į į			
	anding Plateform				
	anding Plateform  1 1.00 0.50 0.10 = 0.050				
Li	anding Plateform  1 1.00 0.50 0.10 = 0.050  0.634	0.634 M <sup>3</sup>	P/M <sup>3</sup>	Rs.4,373.20	Rs.2,772.61
L.	anding Plateform  1 1.00 0.50 0.10 = 0.050  0.634 croviding and laying in position specified grade	0.634 M <sup>3</sup>	P/M <sup>3</sup>	Rs.4,373.20	Rs.2,772.61
Pi	anding Plateform  1 1.00 0.50 0.10 = 0.050  1 0.634  1 0.003 0.50 0.10 control of the cost	0.634 M <sup>3</sup>	P/M³	Rs.4,373.20	Rs.2,772.61
Pi of	anding Plateform  1 1.00 0.50 0.10 = 0.050  roviding and laying in position specified grade reinforced cement concrete excluding the cost entring, shuttering, finishing and reinforcement-	0.634 M <sup>3</sup>	P/M <sup>3</sup>	Rs.4,373.20	Rs.2,772.61
Pi of of Al	anding Plateform  1 1.00 0.50 0.10 = 0.050  roviding and laying in position specified grade reinforced cement concrete excluding the cost entring, shuttering, finishing and reinforcement-lawork puto plinth level	0.634 M <sup>3</sup>	P/M <sup>3</sup>	Rs.4,373.20	Rs.2,772.61
Pi of of AI	anding Plateform  1 1.00 0.50 0.10 = 0.050  0.634  roviding and laying in position specified grade reinforced cement concrete excluding the cost entring, shuttering, finishing and reinforcement-layork puto plinth level  1:5:3(1 cement: 1.5 coarse sand:3 graded)	0.634 M <sup>3</sup>	P/M <sup>3</sup>	Rs.4,373.20	Rs.2,772.61
Pi of of Al	roviding and laying in position specified grade reinforced cement concrete excluding the cost entring, shuttering, finishing and reinforcement-layer work puto plinth level 1:5:3(1 cement: 1.5 coarse sand:3 graded one aggregate 20 mm nominal size)	0.634 M³	P/M <sup>3</sup>	Rs.4,373.20	Rs.2,772.61
Pi of of Al	anding Plateform  1 1.00 0.50 0.10 = 0.050  0.634  roviding and laying in position specified grade reinforced cement concrete excluding the cost entring, shuttering, finishing and reinforcement-layork puto plinth level  1:5:3(1 cement: 1.5 coarse sand:3 graded)	0.634 M³	P/M <sup>3</sup>	Rs.4,373.20	Rs.2,772.61
Pi of Al 1: sto	anding Plateform  1 1.00 0.50 0.10 = 0.050  Toviding and laying in position specified grade reinforced cement concrete excluding the cost entring, shuttering, finishing and reinforcement-work puto plinth level  1:5:3(1 cement: 1.5 coarse sand:3 graded one aggregate 20 mm nominal size)  se of footing	0.634 M <sup>3</sup>	P/M <sup>3</sup>	Rs.4,373.20	Rs.2,772.61
Pi 2 of of Al 1: ste	anding Plateform  1 1.00 0.50 0.10 = 0.050  roviding and laying in position specified grade reinforced cement concrete excluding the cost entring, shuttering, finishing and reinforcement-l work puto plinth level 1:5:3(1 cement: 1.5 coarse sand:3 graded one aggregate 20 mm nominal size) se of footing	0.634 M <sup>3</sup>	P/M <sup>3</sup>	Rs.4,373.20	Rs.2,772.61

**O** ..

<u>S.N.</u>	<del> </del>	,	Part	iculars			Quar	stife.	<del>                                     </del>		
:	4	0.20	0.20	0.85	, =i	0.420		itity	Uni	t Rate	Amount
	Colun	in above	GL		+	0.136	<del> </del>	<b>↓</b>	_		
	4	0.20	0.20	0.25	<del>  _  </del>		<del> </del>	- <del> </del>		<u> </u>	
			<del>                                     </del>		<del>                                     </del>	0.040	d ·	<u>i</u>			
7-	Centri	ng ;	and	shutteri	<u></u>	1.376		M <sub>3</sub>	P/M	<sup>3</sup> Rs.4,530.	30 Rs.6,233
5.9.1	struttir	g,proppi	ng etc. a	nd remov	riy Val of f	including				,	
	16	1.00	0.30				!	i	<u> </u>		
	16	0.20	0.85		<del>                                     </del>	4.800	r·	<u>i</u>			
	16		<del></del>	<del></del>	<del>│    </del> │	2.720					<del></del>
<del>-</del>		0.20	0.25		=	0.800		i -		·	<del></del>
8-	Roinfa	cement		نـــــــــــــــــــــــــــــــــــــ		8.320	8.320	$M^2$	P/M <sup>2</sup>	Rs.169.(	
1 -	strainh	cement	for R	R.C.C.	work	including				1/2 109.0	00 Rs. 1,406.
	and hin	idina all a	uπing, be complete.	ending, pl	lacing	in position			į		•
- +	B mm f	16 mm	tor steel	·	<del></del>				i		
- +	Total R	einforcer	TOI SIEE!				:				+
a	@0.809	6 of Val	Of Conc	roto		=	Se oo'	· V~	<b>C</b> /	- <u>-</u>	<del></del>
9 F	Filling a	vailable	OI CONC	i ete			86.00	∧g.	P/Kg.	Rs.56.0	0 Rs.4,816.0
.26 ir	n trend	hes plir	oncavate oth eidor	o earth (	(exclud	ding rock)		_	T		+
la	ayers	not es	kceeding	s or our 20 c			٠				
C	onsolid	lating ea	ich dena	20 C Sited law	erby	n depth: ramming	:			!	
							2.086 N	<u>.</u> 3	D 2	i i	
<u>10</u>  P	rovidin	g and fi	xing and	hor bolt	of 12	mm dia	4.U86 N	M	P/M <sup>3</sup>	Rs.74.5	Rs_155.4
	na o.e.	i wili lend	OID embe	and hobbe	$D \cap \cap$						· · · · · · · · · · · · · · · · · · ·
ω,	ir com	nere as	per dir	rection d	of Enc	pedestal	i				ļ i
	varye.	ツースとスひ.	ついとはん				4.2624 K	'n	P/kg	<b>D</b>	j
1- Pa 32.1 br	ainting	with re	ady mix	ed pain	t of a			¥		Rs.73.60	Rs.313.7
	and a	o manu	facture in	n all sha	des to	spproved:  give an:			 	1	
	GIL 2019	œ:								1	
ING.	ew stea	work (f	wo or mo	ore coats	)				•	į ·	<u> </u>
— <u>1613</u>	ame w	XK	İ				1	į			·
			3.00		=	21.000				·	·
$-+\frac{\iota}{\iota}$		3.50	3.50		=	6.125					
Ca	rriage.		<u></u>			27.125	27.13 M	2	M <sup>2</sup>	Rs.63.60	
wn	irk 'e#/	ા ine tol	llowing m	naterials i	from q	uarry to		-		113.03.00	_Rs.1,725.15
1	311	, illulut	una iaa	aina o	منصماد						
dire	ection o	nfF/I	site as	per sp	ecifica	ation &	: :				
(a)	Bricks	7 Km.	Pucca &	1 Km K	ochbo				····	j 	
(b)	Coarse	Sand (	100 Km.	load)	TOTAL STATE		_203 No	1	%0 nos.	Rs.606.10	Rs. 123.04
- <del>(c)</del>	Stone	Thine /1/	50 Km. le		1		0.860 M <sup>3</sup>		P/ <b>M</b> <sup>3</sup>	Rs.1,221.09	Rs.1,050.14
- †(4)	L Ocal C	Sand ( ):	Km. Puc	ead)	:		1.730 M <sup>3</sup>	•	P/M <sup>3</sup>	Rs.1,746.29	
	-voai 3	aliu ( Z	nm. Puco	ca & 1 Kr	n. Kad	chha lea i	0.720 M <sup>3</sup>				Rs.3,021.08
_ 7-7		j			• • • • • • • • • • • • • • • • • • • •		V 120 IVI		P/M° I	Rs 217 22	Do 450 4-1
_ <u> </u>	<b>1</b> + -				ļ		0.720 IVI	i	P/M <sup>3</sup>	Rs.217.23	Rs.156.41 Rs.1,28,521.72

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# GOVERNMENT OF BHAR

PUBLIC HEALTH ENGINEERING DEPARTMENT

MODEL ESTIMATE

**FOR** 

CONSTRUCTION OF RURAL PIPED WATER SUPPLY SCHEME FOR A WARD HAVING 200 HOUSE HOLDS

ESTIMATED COST-- Rs. 12.426 Lac

2017-18

#### **GOVERNMENT OF BIHAR** Public Health Engineering Department ABSTRACT OF COST

NAME OF WORK:- CONSTRUCTION OF RURAL PIPED WATER SUPPLY SCHEME FOR WARD **HAVING 200 HOUSE HOLDS** 

	Description	
1	Construction of 150mm X 90m deep Gravel packed T/W etc. all complete as	Total Armount
	For an obtain of Lift IAS her slip Estimate At	
~ ]	Constructing masonry Chamber 100v100v75 on incident	Rs.1,65,744.00
	The second of the second secon	T .
	· · · · · · · · · · · · · · · · · · ·	4
	size), necessary excavation, foundation concrete 1:2:4(1 cement : 2 fine sar	al
:	4 graded stone aggregate 20 mm particular 1:2:4(1 cement : 2 fine sar	ıd <del> </del>
lo	4 graded stone aggregate 20 mm nominal size) and inside plastering will be ment 1:3 (1 cement : 3 center to 1:4)	h
ľv	ement mortar 1:3 (1 cement : 3coarse sand) 12 mm thick with 5% cico fnishe	d
ı	TO THE OUT OF THE OUT OUT OF THE OUT OF THE OUT OUT OF THE OUT OF THE OUT OUT OUT OUT OUT OUT OUT OUT OUT OUT	1
,	TOUR OF THE PROPERTY OF THE PR	d l
d	Providing and Laying Distribution network of High Density Polyethyene pipe holyethyene pipe including 5000 liter BVC table in the provided High Density Polyethyene pipe	e 1.0.10,210.00
	HDPE pipe) including 5000 liter PVC tank installed at 3M high MS staging etc.  Il complete as per direction of E/I. (As per sub Estimate no 3)	
4 S	upply Installation, commissioning and testing of single phase 3 H.P	Rs.5,26,592.09
sı	ibmersible pump set having disability and testing of single phase 3 H.P.	
3	ubmersible pump set having discharging capacity 3.35 lps at a total head o	f
	\"FF'\"\"\"\"\"\"\"\"\"\"\"\"\"\"\"\"\"\	1
ľ	of the more and individual of the control of the co	
1	an iequited labour materials tools and to the	
	and a commissioning as bell standards exocited the	
(A	s per sub Estimate no 4)	D- 00 00-
,	oviding house connection for each house hold including supplying all	Rs.93,603.00
an	aterials, labours, tools and making ferrule connection with 20 mm dia MDPE	
no	d 15mm CPVC Pipes with all fittings etc all complete. (As per sub Estimate	
Pro	Oviding and erecting 3 M high at a	Rs.3,02,600.00
and	oviding and erecting 3 M high staging of suitably designed MS section of	
1011	so, channel etc. as per drawing attached. (As per sub Estimate no 6)	Rs.1,28,500.00
	TOTAL	
<u> </u>	Add 1% Contingency	Rs.12,30,249.09
	G. TOTAL	Rs.12,302.49
		Rs.12,42,551.58
(Rs	.Twelve Lakh Forty two Thousand Six Hundred ) only	Rs.12,42,600.00

ousand Six Hundred) only

#### Note:

- i) This model estimate has been prepared in the light of Guidelines of PRD, Bihar memo no. 6278 dt.23.09.2016. This estimate may not ensure standard pressure in the distribution network. Hence on the spot change in staging of storage tank may be required.
- ii) Water quality testing of source should be done after construction of Tube well.
- iii) Road cutting cost may increase or decrease as per local condition.

Technical approval accorded for Rs.12,42,600.00 (Rs.Twelve Lac Forty two Thousand Six

Hundred ) only

Chief Engineer (Design) Public Mealth Engineering Department

Bihar, Patna

(Sub Estimate - 1)

1		sumate - 1)		<u> </u>	
S.	(A) Construction of 150m			el packed T/W	
No.	Particulars	Quantity	/ Uni	t Rate	Amount
1	Transportation of machine, equipments including a	ill	<u> </u>	+	<del> </del>
2	accessories etc.	1 No.	Eacl	Rs.1,010.0	Rs.1,O10.00
	Boring/drilling bore well of required dia for casing/strainer pipe, by suitable method prescribe	)T			10.00
•	in IS: 2800 (part I), including collecting sample	٥		1	
	Inom different strata, preparing and submitting strate	aĺ	Ì		
	chart/ bore log, including hire & running charges of	ıf.			
	Tall equipments, tools, plants & machineries required	4	}		
	for the job, all complete as per direction of Engineer	-			
	in-charge, upto 90 metre depth below ground level (All types of soil)	1-			
	400mm dia bore from GL to 90.0M				
3A.	Supplying, assembling, lowering and fixing in	90 Mtr.	P/M	Rs.529.30	Rs.47,637.00
	vertical position in bore well, unplasticized PVC	"			
	(CPVC) medium well casing (CM) pipe of required	4			
	luia, conforming to IS: 12818, including required hire		1		
	land labour charges, fittings & accessories etc. al	ri I			1
İ	complete, for all depths, as per direction of Engineer -in-charge.				
	(a) 150 mm nominal size dia			<u> </u>	
3B	Supplying, assembling, lowering and fixing in	59 M	P/M	Rs.615.30	Rs.36,302.70
	vertical position in bore well unplasticized PVC	1 1	İ		
ļ	(LIPVC) medium well sersen (PMC)		ļ		
	(UPVC) medium well screen (RMS) pipes with ribs,		}		
- 1.	conforming to IS: 12818, including hire & labour				
[]	charges, fittings & accessories etc. all complete, for				
<del></del>	all depths, as per direction of Engineer-in-charge.	<u> </u>			
	150 mm nominal size dia	30.0 M	P/M	Rs.554.30	Rs.16,629.00
4	Supplying fitting & fixing the following Fitting of		<u> </u>		
	approved make and specification at work site complete job.				
	(a) 150mm center guide Nos. in each T/W	<del></del>	<del></del>		
ì	(b) 150 mm dia well plug	9 Nos.	Each	Rs.150.00	Rs.1,350.00
	b) 150 mm dia M.S. Clamp 1.6 M long (one Pair)	1 No	Each	Rs.205.10	Rs.205.10
5   5	Supplying 3mm to 6 mm Moli washed	1 No	Each	Rs.1,031.10	Rs.1,031.10
	Supplying 3mm to 6 mm Well washed assorted pea				
8	gravel and doing surrounding around the annular space between bore hole & 125mm pipe uniformity				
- Ju	ip to the depth 10 mtr. below G.L all work complete			İ	
a	is per direction of E/I.		_ ,	ļ	
C	carriage of Pea gravel from Dhalbhumigarh (taken	11 M³	P/M <sup>3</sup>	Rs.917.00	Rs.10,087.00
<u>a</u>	v distance 400Km)	11 M³	P/M <sup>3</sup>	D- 4 202 -	_
S	upplying all materials laobours and equipments to	11.10/1	F/IVI	Rs.4,336.54	Rs.47,701.94
s	eal T/W up to the depth of 12 mtr below G.L. by		] {	1	
s	ticky clay to prevent contamination from surface				
				1	
S	om all complete job as per direction of E/I. upplying all materials laobours and equipments	1 Item	Each	Rs.51.01	Rs.51.01
[in	cluiding 150mm dia G.I. Cap /C.I. Cap over the			T	
108	asing of 150mm dia 1/W properly all complete	1 No.	Each	Do 205 40	• • • •
	arriage of necessary equipment & materials	1 No.	Each	Rs.205.10 Rs.287.50	Rs.205.10
Sı	applying all tools equipments & labour for flushing	. 110.	Lacii	1\3.207.50	Rs.287.50
Wa	ashing and developing the T/W to give clean &				}
CIE	ear water and all complete job as per direction of				
E/	I	5 H	P/H	Rs.649.40	Rs.3,247.00
				TOTAL	Rs.1,65,744.45
				Say	Rs.1,65,744.00

0

(Sub Estimate - 2)

Analysis of Chamber for TW

Supplying materials, labours and constructing chamber of following dimension having 250mm thick wall in C.M. (1:4) in cluding 12mm C.P. (1:3) with punning inside, R.C.C. cover slab with C.I. Surface box, 20mm dia foot rest at 150mm interval 10mm dia lifting ring etc. all complete.

	L SIZE	1.0	0 M			<del> </del>			
			O MI	<u>X</u>	1.0	x M 0	0.75	M deep	7
S.O.R.		<del></del>	<del></del>			_			
	<u>Particulars</u>	No.	1 .	,,,	I			<del> </del> _	<del></del>
No.		NO.		W	<u>H</u>	Qty.	<u>U</u> nit	<u>Rate</u>	Amount
<u>1</u>	Earth work in excavation	1	4 7/		<del></del>	<del></del>		1.600	Aniount
S.O.R. No	2.0	1	1.75	1.75	1.0	3.063 M <sup>3</sup>	P/M <sup>3</sup>	Rs.230.50	De 705.04
	J. 2,8							113.200.00	Rs.705.91
<u>2</u>	Sand filling	1	1 75	1 75	^ ^ -				
S.O.R. No	228	•	1.1	1.75	0.075	0.230 M <sup>3</sup>	$P/M^3$	Rs 204.40	Rs.46,95
<u>3</u>									110.40.55
	Brick flat soling	1	1.75	1.75		3.063 M <sup>2</sup>	<b>-</b> 2	<b>-</b>	
S.O.R. 11	.72			•		3.003 M	P/M <sup>2</sup>	Rs.253.80	Rs.777.26
<u>4</u>	P.C.C. (1:2:4) in foundation	4	4			•			
S.O.C. 4.1	2	1	1.75	1.75	0.10	0.306 M <sup>3</sup>			
0.0.0.4.						•••			
						0.000 - 1	_		
<u>5</u>	B/Work in (1:4) C.M.	_				0.306 M <sup>3</sup>	P/M <sup>3</sup>	Rs.3,850.50	Rs.1,179.22
S.O.R. No	6 1 40/4	2	2.50	0.25	0.75	0.938 M <sup>3</sup>	P/M <sup>3</sup>	Rs.4,724.40	
						,	1 / 141	113.7,724.40	Rs.4,429.13
<u>6</u>	R.C.C. Cover slab(1:1.5:3)	1	1.50	1.50	0.15	0.000			
S.O.R. No.	5.2.2 & 5.9.3	•	1.50	1.50	0.15	0.338 M <sup>3</sup>	P/M <sup>3</sup>	Rs.5,139.70	Rs.1,734.65
									. 10.11,704,00
	shuttering	2	1.50	1.50	0.15	3.15 M <sup>2</sup>	D 11 e2	5 55	
7	C.P. (1:3) with 5% Cico &				•	3.13 M	P/M <sup>2</sup>	Rs.291.00	Rs.916.65
– r	neat cement								
SOR									
	Internal face	2	4 00		_				
10.		2	1.00	1.00	1.00	4.00 M <sup>2</sup>			
13.17.1 <sub>E</sub>	Bed surface	4	4.00						
+13.36.1		1	1.00	1.00		1.00 M <sup>2</sup>			
13.30.1						5.00 M <sup>2</sup>			
						3.00 M	P/M <sup>2</sup>	Rs.166.30	Rs.831.50
<u>8</u> C	CP. (1;4) out side of wall	_							
\$.O.R. No.	12 14 0	2	1.50	1.50	0.75	4.5 M <sup>2</sup>	P/M <sup>2</sup>	Rs.114.70	D- 640 45
						141	L. 11A1	113.114,70	Rs.516.15
9 8	mm dia T.S. Rod								
S.O.R. No.	5.22.7A								
		0.338	.43 ×	70 k	(~! 142	00.00= 14	_		
f :	A:	1.000	٧ŧ	/U F	vg/ M3	23.625 Kg.	P/Kg	Rs.56.00	Rs.1,323.00
10 L	fting Ring of 10mm dia								1.0.1,020.00
- R	od					4 No.	Each	D= 20 00	
							Lacii	Rs.30.00	Rs.120. <b>00</b>
11 C	arriage of metarials cov							Total	Do 40 500 44
<u> </u>	arriage of materials 5%							i Otal I	Rs.12,580.41
									Rs.629.02
						_		F	Rs.13,209.43
						Say	Rs.13.21	0.00	

<i>)</i>	·			<del></del>	Sub E	st. No. 3				
	· ·		WA	TER SU	JPPLY DIS	STRIBUTI	ON S	SYSTEM		
S.N.	Fault to a	Particu	lars	. :		Quar		Unit	Rate	Amount
IA	Earthwork in excav					!				Cino Citt
	depth 1.5 in width a									
	disposal of excavat									
<del>-</del>	1.5m, disposal earth		lled and	neatly (	dressed.	·				
	90mm dia Pipe	70.00	0.30	1.10	=	23.1	0			<u></u>
	75mm dia Pipe	140.00	0.30	1.10	=	46.2	0			<del></del>
	63mm dia Pipe	210.00	0.30	1.10	=	69.3	0			
·	50mm dia Pipe	420.00	0.30	1.10	=	138.60	0	<u> </u>	·-·	<del></del>
	40mm dia Pipe	560.00	0.30	1.10	=	184.80	כ			
	Ado /		r fittings	<u> </u>	<u> </u>	462.00				
			_·_ <del></del>	T	Ţ · · <del>!</del>	23.10 485.10				
IB	Provision for PCC ro	ad cutting	and its re	estoratio	on .	15.75		P/M <sup>3</sup> P/M <sup>3</sup>	Rs.230.50 Rs.4,428.80	Rs.1,11,815.
2	Filling available ex	cavated e	arth (ex	cluding	rock) in				115.4,420.00	Rs.69,753.6
	trenches, plinth, side	es of found	dations e	etc. in fa	ayers not					
	exceeding 20cm in a	depth, cons	olidating	each o	deposited					
	layer by ramming an upto 1.5 m.	id watering	, lead up	to 50 i	m and lift			i	ļ	
	Providing and layin	a High De	noite D			475.40	M <sup>3</sup>	P/M <sup>3</sup>	Rs.74.50	Rs.35,417.
	(HDPE pipe) of 20 m	m to 225 m	nm OD 4	oryetnye	ene pipei		:			
ı	Kg/cm2 and 10 Kg/c	m2 sutable	for wat	er sunr	obide vice			1		
i	is available in all	standard, (	ike ISI-	4984/19	995 and			: 1	į	
1	various grades like	PE-80, PE	-100 inc	cludina	required		i			
S	specials. Rates are	inclusive of	of , all ta	axes an	nd duties		i -			
(	Exise duty @12.50	% &CST @	2% ag	ainst F	orm 'C').		:		1	
]18	abour cess, contract	tor profit ar	nd overh	ead cha	arges all	,	,		•	
C	complete as per direc	tion of Eng	ineer-in-	charge.	:			:		
7	IDPE pipe of materia	als grade Pi	E100- PI	N10 (dia	in mm)		.— –			<del></del>
7	5mm dia Pipe from F	PVC Tank t	o Distrib	ution m	ain	14.00		500		·
	Omm dia Pipe							P/M	Rs.239.81	Rs.3,357.3
	5mm dia Pipe				:	70.00		P/M	Rs.340.84	Rs.23,858.80
	3mm dia Pipe					140.00		P/M	Rs.239.81	Rs.33,573.40
<b>P</b>	<del></del>					210.00	M 	P/M	Rs.168.77	Rs.35,441.70
Н	IDPE pipe of materia	ls grade PE	100- PN	l8 (dia i	n mm)	İ			[	
50	0mm dia Pipe					420.00	M	P/M	Po 90 00	
40	0mm dia Pipe				+-	560.00		P/M	Rs.89.99 Rs.59.78	Rs.37,795.80
50	0 <b>mm dia Pipe fro</b> m T	well to PV	C Tank	<del></del>	<del></del>	12.00		P/M	Rs.89.99	Rs.33,476.80
100	roviding and fixing be	rass gate v	alve with	C.I. w	heel of	12.00		1 //41	K8.09.99	Rs.1,079.88
Pi	oproved quality (scre-	wed end).								
ap	Omm dia Pipe					2 1	los.	Each	Rs.2,016.50	Pe 4 022 00
ap		<b>-</b>					los.		· ·	Rs.4,033.00
90	omm dia Pipe	İ				יוןכ	₹US.	Each	Rs.1,351.60	Rs.4,054.80
90 75	omm dia Pipe						•			13.4,004.60
90 75 63						2 1	į	Each	Rs.1,351.60	Rs.2,703.20
90 75 63	Imm dia Pipe					2 1	los.	Each Each	Rs.1,351.60 Rs.811.40	

S.N.		Quar	stitu	11-14		
5	Constructing masonry Chamber 60x60x75 cm inside, in	Quai	uty	Unit	Rate	Amorunt
18.33	brick work in cement mortar 1:4 (1 cement : 4 coarse				· ·	
f	sand) for sluice valve, with C.I. surface box 100mm top	•				<u>.</u>
1	diameter, 160 mm bottom diameter and 180 mm deep (					
1	inside) with chained lid and RCC top slab 1:2:4 mix (1					
i	cement : 2 coarse sand : 4 graded stone aggregate				1 1,	
	20mm nominal size ), necessary excavation, foundation			•		
1	concrete 1:5:10(1 cement : 5 fine sand : 10 graded		İ			•
1	stone aggregate 40 mm nominalsize) and inside		1			* • •
	plastering with cement mortar 1:3 (1 cement 3 coarse)		!			
	sand) 12 mm thick, finished with a floating coat of peat					
1	cement complete as per standard specifications &		:			
<b>†</b>	direction of E/I.	1.4	: 	į	_	
	Work for additional depth	···· <u>-</u>	Nos.	Each	Rs.5,807.50	Rs.63,882.5
	Brick work (1:4) in foundation		÷	<u></u>		
			<del>-</del>	. <b>.</b>		— · · · · ·
	2 1.10 0.25 0.35 0.193					
						<del></del>
·	Diagram (4.2)	3.273	CuM	CuM	Rs.4,724.40	
_	Plaster (1:3)		<u> </u>	- Calvi	115.4,724.40	Rs 15,460.6
ļ <u>.</u>	8 1.10 0.35 3.08	22.00		<u> </u>		- <del></del>
6	Carriage 10% of item 5	33.88	2divi	SqM	Rs.128.20	Rs.4,343.42
7 1	Providing and placing on terrace (at all floor levels)			<u> </u> 	<u>-</u>	Rs. 8,368.65
18.48	polyethylene water storage tank, ISI: 12701 marked,			-	]	
	with cover and with the several artiful to th					
	with cover and suitable locking arrangement and making		:			
r	necessary holes for inlet, outlet and overflow pipes but	!			-	
v	vithout fittings and the base support for tank.				<u>:</u>	w <sup>2</sup> - 104,
<u>8</u> F	Providing and fixing PTMT extension nipple for water	5000	Ltrs.	P/Ltr.	Rs.6.60	Rs.33,000.00
ta	ank pipe, fittings of approved quality and colour.	!	:			
5	Omm dia					
7	5mm dia	2 1	Nos.	each	Rs.250.00	Rs.500.00
	3.00	1 1	No.	each	Rs.400.00	Rs.400.00
					TOTAL	
					IOIAL	Rs.5,26,592.09

Model estimate for supply, installation & commissioning of single phase 3 H.P. submersible motor pump set with ail accessories including extension of L.T. line from nearest source up-to pumping station.

SI. No.	Particulars	station.			
	rarticulars	Quantity	Unit	Rate	Amount
1				1 1	
	Supplied - Add to	3	4	5	
i	Supply Installation,	1 (one) job	p/job	Rs.42,700.00	6
	commissioning and testing of			2,7 00.00	Rs.42,700.0
	single phase 3 H.P. submersible				
	pump set having discharging	[	j		
	capacity 3.35 lps at a total head		j		
	of 35 meter(approx) of KSB/			ľ	
]	Kirloskar or equivalent make with	1	- 1	ĺ	
	all accessories & fittings etc	[	- 1	İ	
["	ncluding loading unloading and		1		
1	ransportation of the pump set to				
Ι.	he work site with all required	1	}		
la	abour, materials, tools and	{	- 1	1	
ta	ackles installation, testing &	1	- 1		
cc	ommissioning as per standards			}	
sp	Decifications and direction of	1	- 1		1
E/	1.	i			İ
			!		ł
(i)	50 mm dia x 3 mtrs long			j	1
Jme	edium class G.I column pine	1			
lpo	th end thread and one end	1		1	
SOC	cketed- 6(six)nos		1		
(ii)	1x3x2.5 mm <sup>2</sup> flat copper				
cor	nductor submersible cable -40	1	j	İ	ŀ
[{101	rty) mtrs.	j		1	ĺ
(iii)	50 mm dia union socket-			}	
1(o	ne) no.	}			
(iv)	65 mm dia x 250 mm long G.I.	1	- 1		ĺ
luibt	Die- 1 (one) no.		[	ľ	}
(v) 5	50 mm dia G.I Elbow—1(One)				
Jno.		1			ĺ
(vi) !	50 mm dia M.S.	1	ł	1	1
clam	ips—2(Two) Pairs.		ĺ		1
(vii)	50 mmx 250 mm long G.I		1	<b>.</b>	
nipp.	le- 1(One) no.				}
(viii)	Tube well cap for T/Well —				
1(on	e) no.	1	j	1	
(ix) 5	0 mm dia x 65 mm dia	1		1	1
reduc	cer socket -1(one) no.				1

[B	The first wasterfaction,	1 (one	lioh.	n/int	Do 45 555 -	- !
	commissioning and testing of	İ	Job. I	p/job	Rs.45,500.0	Rs.45,500.0
	floor mounted outdoor type LT					İ
-	Teeder pillar single phase starter		1	-		1
İ	controll pannel operated on 220					ļ
1	V, 3 phase, 50 c/s for 3 HP		- 1	-	•	
	Submersible pump set made of		- 1			
1	MIS sheet (minimum 2 mm thick)		- 1	1		
	duly spray power coated painting	,	1			
	With following accessories made	1	1	- 1		
	OT M.S sheet ( minimum 2mm		1	1		
	thick) duly spray powder coated			- [		
	painting with following	ļ				
	accessories					
	(i) 90-220 V range single phase7.	j		ĺ		
	5 KVA automatic voltage	1	1	- 1	1	
	stabilizer make- Sen & Pandit/		1			
	Vertex/ISI marked if any. 1 No.			j	ĺ	
	(ii) Suitable single phase starter					
	control panel for above motor of		1		}	
	BCH /L&Tmake - 1(one) no.		1	- 1	[	
[C]	Supplying & fitting 2.5 mm <sup>2</sup>	20 mtrs	-			
	copper service cable from power	20 11(15	P/Mt	1	Rs.130.00	Rs.2,600.00
	point from nearest source up-to			1	ļ	}
	pumping station			ſ		
[D]	Providing all materials and labour	1 job	<del> </del>			_
- 1	required for doing earthing station	1 300	p/jo	b   R	Rs.2,803.00	Rs.2,803.00
- 1	With G.I earth pipe of 40 mm diel		1	- 1		
- 12	X 4.5 mtrs 20fts, long G.I pine		1	- [		
l,	including accessories excavation		}		}	
- 10	or earth, providing masonry		1		[	ĺ
e	inclosure with cover plate having					1
jte	OCKING arrangement and watering					
IP	ripe etc. with salt, charcoal etc as				1	}
<u> P</u>	er IE & IS specification.				1	
				Tota	l Rs.	Pa 02 000 00
						Rs.93,603.00

Sub Est. No. 5

	Estimate for the work - Hou	se ser	vice con	nection	
S.No.	SUB-ESTIM/ Description	$\overline{}$			
1A	Providing and C.: 1000	Q1   80	y Uni	t Rate	Amou nt
	GradeCompound) pipes PN-12.5 (12.5kg/Sqci	ומ	Ĵ	-	1
	as per ISO 4427 and specification to	~-l			
	waterapplication rates are inclusive of taxes as	al			
	duties (Exise duty @12.50% &CST @2% again	et		]	
	Form C), labour cess, contractor profit at	м		1.	İ
	overhead charges all complete asper direction	of			
	Engineer-in-charge.complete.		ĺ	ł	
	<u> </u>			ł	
	MDPE Pipe 20mm dia neminal bore	6.0	D PM	Rs.19.9	7
1B	Providing and fixing Chlorinated Polyvin	<i>i</i> 1	<del>-   · · ·</del>	1(3.13.3	7 Rs. 119
	Chloride (CPVC) pipes, having thermal stability	v/	1		
	for not & cold water supply, including all CPV	~			İ
	plain & brass threaded fittings, including fixing	ما			
	the pipe with clamps at 1.00 m spacing. This	c	1		
	includes jointing of pipes & fittings with one ste		-		1
	CPVC solvent cement and testing of joint				
	complete as per direction of Engineer in Charge				Ì
	Internal work - Exposed on wall	]	1		
18.7.1	15 mm nomonal bore				
2	<del></del>	1.0	PM	Rs.138.70	Rs.138.7
-	Earth work in excavation in foundation trenches	3			
	or drains(not exceeding 1.5 m in width or 10 sqrr	1			
	on plan) including dressing of sides and amming				
	of bottoms, lift upto 1.5 m including getting out		1	•	
	the excavated soil and disposal of surplus		ł	1	
	excavated soil as directed, within a lead of 50 m. All kinds of soil				
2.8.1	600 0 20			] [	
3	1 5.50   0.00   1.08	1.08	CuM	Rs.230.50	Rs.248.94
2.26	Filling available excavated earth (excluding rock)		]	-	
	in trenches, plinth, sides of foundations etc. in layers not exceeding 20 cm in death		[ ;	1	
				Rs.74.50	Rs.78.85
	consolidating each deposited layer by ramming and watering lead			ŀ	
4	<del></del>	1.06	CuM		
·	Providing and fixing brass femule with CI mouth				
	cover incuding boring and tapping the main:				
.20.1	15mm nominal bore				
	Providing and fixing P.P. Black service Saddle	1	Each	Rs.254.10	Rs.254.10
	(Brass threaded)	1	Each	Rs.400.00	Rs.400.00
5	Providing and fixing brass bib cock of approved				
	quality:		1		
15.1	15mm nominal bore	1	Each	Rs.273.00	Rs.273.00
	Total Say				Rs.1,513.41
	Total Nos. of House Holds= 200 a				Rs.1,513.00

<u>S.N.</u>			WU LIIER	-VI IANK	
	3 M HIGH STEEL STRUCTURE STAG	Quantity	Unit	Rate	Ame
<u>1</u> 10.3	Structural steel work riveted or bolted in built up		-	Vare	Amaou
<u>10.0</u>	sections, trusess and framed work including				
	Cutting, noisting, fixing in position and applying a		i		
	primiting coat of approved primer all complete			·	
	ow ligh staging with GI enclosure to house				
	THECER SWITCH Danel of suitably designed Mac	i .	į		
	section of arigie, channel etc as per drawing	!	.		1
2	lattacijes.	1490 Kg	P/Kg	Rs 69 20	D- 1 0-2 1/
2.8.1	Earth work in excavation in foundation trenches			110.00.20	Rs 1,03,10
2.0. ,	or drains(not exceeding 1.5 m in width or 10 sqm				
	(Oil plair) including ressing of sides and ramming	t			
	of bottoms, lift upto 1.5 m . including getting out			:	
	the excavated soil and disposal of surplus	•		į į	E
	excavated soil as directed, within a lead of 50 m.	:			
	base of footing	<del></del>		!	
—· —	4 120 120 120		1	<u> </u>	<u> </u>
	4 1.20 1.20 1.425 = 8.208 For fixing Ladder	1		i	· · · · · · · · · · · · · · · · · · ·
	1 100 0.50 0.55			Ţ · · · — · ·	<u>.                                    </u>
	$-\frac{100}{0.30} = 0.275 = 0.138$			<del> </del>	
3-	Supplying and filling in the state of the st	8.346 <sub>M</sub> 3	P/M <sup>3</sup>	Rs.230.50	Po 1 02
2.28	Supplying and filling in plinth with local sand and		1 /14	10.200.00	Rs. 1,92
.20	under floors including watering ramming		:	!	
	consolidating and dressing complete	i	:		
	base of footing		ļ	ļ ļ	
- +	4 1.20 1.20 0.10 = 0.576		· ·	ļ i	
	anding Plateform			ļ <u>-</u>	
	1 1.00 0.50 0.10 = 0.050	·- · · ·		<del> </del>	
	0.000	0.626 M <sup>3</sup>	P/M <sup>3</sup>		<u>-</u>
4-  F	TOVIDING designation of 1004 Book flot Collins	0.020111		Rs.204.40	Rs.127
··· ~   J.	Sints inject With [OCA] sand including good as	i a			
T	vatering, taxes & royalty all complete as per	- i	ţ	1	
	" " " " " " ' ' ' ' ' ' ' ' ' ' ' ' ' '		;	1	
	pecinication & direction of E/I		į	:	
	ase of footing		•		
<b>b</b>	ase of footing  4 1.20 1.20 = 5.760			: 	· · · · · · · · · · · · · · · · · · ·
<b>b</b> 	ase of footing  4 1.20 1.20 = 5.760  anding Plateform	· · · · · · · · · · · · · · · · · · ·		· · · · · ·	
<b>b</b> 	ase of footing  4 1.20 1.20 = 5.760  anding Plateform		· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·	
b L	ase of footing  4	6 260 M <sup>2</sup>		+	
b L	ase of footing  4	6.260 M <sup>2</sup>	P/M²	Rs.253.80	Rs.1,588
b   Li	ase of footing  4 1.20 1.20 = 5.760  anding Plateform  1 1.00 0.50 = 0.500  roviding and laying in position cement concrete	6.260 M <sup>2</sup>	P/M²	Rs.253.80	Rs.1,588.
L D P	ase of footing  4 1.20 1.20 = 5.760  anding Plateform  1 1.00 0.50 = 0.500  roviding and laying in position cement concrete  specified grade exluding the cost of centring	6.260 M <sup>2</sup>	P/M²	Rs.253.80	Rs.1,588
b Li D Pi I.2 of	ase of footing  4 1.20 1.20 = 5.760  anding Plateform  1 1.00 0.50 = 0.500  roviding and laying in position cement concrete  specified grade excluding the cost of centring and shuttering-all work upto plinth level	6.260 M <sup>2</sup>	P/M²	Rs.253.80	Rs.1,588.
b Pil.2 of	ase of footing  4 1.20 1.20 = 5.760  anding Plateform  1 1.00 0.50 = 0.500  roviding and laying in position cement concrete  specified grade excluding the cost of centring and shuttering-all work upto plinth level	6.260 M <sup>2</sup>	P/M <sup>2</sup>	Rs.253.80	Rs.1,588.
b Pil.2 of ar	ase of footing  4 1.20 1.20 = 5.760  anding Plateform  1 1.00 0.50 = 0.500  roviding and laying in position cement concrete  specified grade exluding the cost of centring and shuttering-all work upto plinth level.  1.5:3(1 Cement :1.5 coarse sand:3 graded)	6.260 M <sup>2</sup>	P/M²	Rs.253.80	Rs.1,588.
b Prince of the prince of the	ase of footing  4 1.20 1.20 = 5.760  anding Plateform  1 1.00 0.50 = 0.500  roviding and laying in position cement concrete  specified grade exluding the cost of centring and shuttering-all work upto plinth level.  1.5:3(1 Cement :1.5 coarse sand:3 graded one aggregate 20 mm nominal size)	6.260 M <sup>2</sup>	P/M²	Rs.253.80	Rs.1,588.
b Pil.2 of ar 1. stc ba	ase of footing  4 1.20 1.20 = 5.760  anding Plateform  1 1.00 0.50 = 0.500  roviding and laying in position cement concrete  specified grade exluding the cost of centring and shuttering-all work upto plinth level.  1.5:3(1 Cement :1.5 coarse sand:3 graded one aggregate 20 mm nominal size)  se of footing	6.260 M <sup>2</sup>	P/M <sup>2</sup>	Rs.253.80	Rs.1,588.
b Pil.2 of ar 1: sto ba	ase of footing  4 1.20 1.20 = 5.760  anding Plateform  1 1.00 0.50 = 0.500  roviding and laying in position cement concrete  specified grade exluding the cost of centring and shuttering-all work upto plinth level.  1.5:3(1 Cement :1.5 coarse sand:3 graded one aggregate 20 mm nominal size)  ise of footing  4 1.20 1.20 0.100 = 0.576	6.260 M <sup>2</sup>	P/M <sup>2</sup>	Rs.253.80	Rs.1,588.
b District D	ase of footing  4	6.260 M <sup>2</sup>	P/M <sup>2</sup>	Rs.253.80	Rs.1,588.
b L.2 of ar 1. std ba	ase of footing  4	6.260 M <sup>2</sup>	P/M²	Rs.253.80	Rs.1,588
b Pil.2 of ar 1. std. ba	ase of footing  4	6.260 M <sup>2</sup>	P/M²	Rs.253.80	Rs.1,588
b Pil.2 of arr 1: sto ba	ase of footing  4	6.260 M <sup>2</sup>	P/M²	Rs.253.80	Rs.1,588
b Pi La	ase of footing  4	6.260 M <sup>2</sup>	P/M²	Rs.253.80	Rs.1,588
b D D D D D D D D D D D D D D D D D D D	ase of footing  4				
b Pil.2 of ar 1: sto ba	ase of footing  4			Rs.253.80	
b Po Pro Pro Pro Pro Pro Pro Pro Pro Pro	ase of footing  4				
b Pro Pro Pro Pro Pro Pro Pro Pro Pro Pro	ase of footing  4				
Fo Pro of r	ase of footing  4				
Fo Proof (All v. 1:1:	ase of footing  4				
Fo Proof (All vistor)	ase of footing  4				
Fo Proof r of (All v stor) base	ase of footing  4				
Fo Proof (All vistor)	ase of footing  4				Rs.1,588.

<u>S.N.</u>	<del> </del> -		Part	iculars		100	Qua	ntit		<del></del>	
, E	.1 4	- 0.20	0.20	C.85	=	0.400		- LILLY	<u>Un</u>	it Rate	Ameoun
	Colum	in above				0.136	)	-	<u>- 1 9</u>		
	4	-0.20	0.20	0.25	=		<del> </del>	-			
		1	- <del>-</del>			0.040	<del></del>		,		
7-	Centri	ng	and	shutterin		1.376		6 M <sup>3</sup>	P/N	<sup>3</sup> Rs.4,530	0.30 Rs. 6,23
5.9.1	struttin	g,proppi	ng etc. a	nd remov	el of fo	including					. 0,23
·	16	1.00	0.30				<del> </del>			<u>_</u>	
	16	0.20	0.85			4.800	<del> </del>	+		·	
	16	0.20	0.25			2.720	 				
	<u> </u>				=	0.800		i -i	,		
8-	Reinfor	cement	for R	R.C.C. v		8.320		M <sup>2</sup>	P/M	Rs.169.	00
5.22	straight	ening c	uttina be	nding of	vork	including n position			:		.00 Rs. 1,406
1	aug Dill	uniy ali t	complete		zenig i	ıı position				<u>!</u>	
<u>.</u>	8 mm to	) 16 mm	tor steel		·			! <del>!</del>	·	! 	į
į.	Total Re	einforc <b>e</b> r	nent.		- i	+		<u>.</u> .	÷		
	@0.80%	of Vol.	Of Conc	rete	<u>;</u>	=	86.00	Kg.	P/Kg	Rs.56.0	00:
9 ji	Filling a	vailable	excavate	d earth (	exclud	ling rock)		_	<u> </u>		00 Rs. <b>4</b> ,816
1.		nes, pin	iui. Sides	? Of ∩un	dation	s etc. in	į		ļ		
, • •	ayera	not ex	kceedina	20 ~	·		:		•	<u>;</u>	
jo je	onsolid	aung ea	ich depo	sited laye	er by	aepth: ramming			İ		
						mm dia	2.086	$M^3$	P/ <b>M</b> <sup>3</sup>	Rs.74.5	50 - 4
.19 a	nd 0.60	Mtrlend	ath emba	nor bolt	of 12	mm dia				10.14.0	0 Rs 155.
	~	vicie do	Der air	ection of	τ.υ.υ <sub> </sub>	pedestal ineer in	i		1		ļ
	ruige, e	ツ サルムスし.	อง∠ชหก				4.000			į	
1- !P:	ainting	with re	adv miv	ed paint	of a		4.2624	<u>(g</u>	P/kg	Rs.73.6	0Rs.313.7
	and an	o manu	facture in	all shad	es t∩	dive an					
	C11 2119	ue.			JU 10	Aire all	:		:		
Ne	ew stee	work (t	wo or mo	re coats)		- · <u>i</u> -			· *****	ļ	1 : f
	ame wo	<u> </u>			<del>-</del>	j-			1		T
			3.00			21.000					
'	0.5 3	.50 3	3.50			6.125				· <del> </del>	<u> </u>
Ca	_			<u></u> -		07 405	27.13 M	12	M <sup>2</sup>	B- 00 0-	
. Jwn	irraye ( irk eita	vitne tof	lowing m	aterials fr	`om ~:		, IV:	<u>.</u>	<u>iā</u>	Rs.63.60	Rs.1,725.1
;		, illuuu	mic ica	אור אחוד	:			ļ			İ
		1 11 11	site as			1				!	
(a)	Bricks	7 Km. I	Pucca &	1 Km Ka	chho !					<u> </u>	į
(b)	Coarse	Sand (1	100 Km. I	ead)	Cilla I		203 N		%0 nos.	Rs.606.10	Rs. 123.04
(cl)	Stone (	hine (14	50 Km. le		<del> </del>		0.860 M	3	P/M <sup>3</sup>	Rs.1,221.09	
(d)	Local S	and ( ) i	vorm. le K⇔	ao)	: '-		1 730 M <sup>3</sup>		P/M <sup>3</sup>	Rs.1,746.29	
- 437 <u>7</u>		<u> </u>	Km. Pucc	a & 1 Km	ı. Kacı	hha lea - (	0.720 M <sup>3</sup>	3 .	P/M <sup>3</sup>	Rs.217.23	, 02, 00
	·	- · -		· · <del>[ -  </del>				1	7 - 1 - 1	TOTAL	Rs. 156.41 Rs. 1,28,521.72
			i			:			;	- 'YIAL	rs. 1,∠8,521,72

History

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# GOVERNMENT OF BIHAR

PUBLIC HEALTH ENGINEERING DEPARTMENT

MODEL ESTIMATE

**FOR** 

CONSTRUCTION OF RURAL PIPED WATER SUPPLY SCHEME FOR A WARD HAVING 200 HOUSE HOLDS

ESTIMATED COST-- Rs. 12.690 Lac

2017-18

### **GOVERNMENT OF BIHAR**

## Public Health Engineering Department

### ABSTRACT OF COST

NAME OF WORK:- CONSTRUCTION OF RURAL PIPED WATER SUPPLY SCHEME FOR WARD HAVING 200 HOUSE HOLDS

	S.N.	Description	·
	1	Construction of 150mm ×100mm×105	Total Amount
	1	Construction of 150mm x100mmx125m deep T/W etc. all compland as per direction of E/I.	<b>e</b> te
	<u> </u>	(As per sub Estimate no. 1)	
	2	Constructing masonry Chamber 100v100v75	Rs.1,91,907.72
	ĺ	I TO COOKED IN THE COOKED AND A	
	]	RCC top slab 1:1.5:3 mix (1 cement : 1.5 coarse sand : 3 grad stone aggregate 20mm particle : 1.5 coarse sand : 3 grad	and
		stone aggregate 20mm nominal size ) , necessary excavation concrete 1:2:4(1 property 2 for a constant of the concrete 1:2:4(1 property 2 for a constant of the concrete 1:2:4(1 property 2 for a constant of the constant of t	<b>le</b> d
		foundation concrete 1:2:4(1 cement : 2 fine sand : 4 graded sto	on.∫
		aggregate 20 mm nominal size) and inside plastering with ceme	ne .
		mortar 1:3 (1 cement : 3coarse sand) 12 mm thick with 5% ci	ent
ı	i	fnished with a floating coat of neat cement, out side plastering w	<b>c</b> o
	- 1	cement mortar 1:4 (1 cement: 4coarse sand) 12 mm thick completes per standard specifications 8 diseases.	ith
		as per standard specifications & direction of E/I.	etg
	'	no per sub Estimate no 201	
-1	ال د	roviding and Laving Dietrouties	Rs. 13,210.00
1			ty
1			ikl
$\vdash$	4 5	C/I. (As per sub Estimate no 3)	D- 5 00
		Supply Installation, commissioning and testing of single phase	Rs.5,26,592.09
1		The state of the pullip set having discharging assert to a series	4
1		The state of the s	1
1		The state of the s	
		in portugion of the pump set to the work site with all a	9
1		The condition of the co	1
ĺ	CC	ommissioning as per standards specifications and its angle of	<u>\$</u>
Γ-	(A 5 Pr	s per sub Estimate no4)	_
	3 PI	oviding house connection for each house hold including supplying materials, labours, tools and making for	Rs.93,603.00
	m	materials, labours, tools and making ferrule connection with 20	
	CO	m dia MDPE and 15mm CPVC Pipes with all fittings etc all making ferrule connection with 20 mplete.	
		s per sub Estimate no 5)	
(	o jPro	Oviding and erecting 3 M high start (	Rs.3,02,600.00
	se	oviding and erecting 3 M high staging of suitably designed MS ction of angle, channel etc. as per drawing attached. (As per subtimate no6)	
	Es	imate no6) (As per sub	
		TOTAL	Rs.1,28,500.00
		Add 1% Contingency	Rs.12,56,412.81
		G. TOTAL	Rs.12,564.13
			Rs. 12,68,976.94
	(Rs	Twelve Lakh Sixty nine Thousand ) only	Rs.12,69,000.00
		The thousand J Office	

ne inousand) only

i) This model estimate has been prepared in the light of Guidelines of PRD, Bihar memo no. 6278 dt.23.09.2016. This estimate may not ensure standard pressure in the distribution network. Hence on the spot change in staging of storage tank may be

ii) Water quality testing of source should be done after construction of Tube well. iii) Road cutting cost may increase or decrease as per local condition.

Technical approval accorded for Rs.12,69,000.00 (Rs. Twelve Lakh Sixty nine Thousand)

BOUSERS

Chief Engineer (Design) Public Health Engineering Departme Bihar, Patna

Sub Estimate- 1

1	Description  Boring/drilling bore well of required dia for casing/strain	QtQt		Jnit Rate	<del></del>
	pipe, by suitable method dia for casing/strain				
					Amount
	pipe, by suitable method prescribed in IS: 2800 (part including collecting samples from different strata, prepariand submitting strate that				
	Sudd Harr bore is				
	- "9" Cer all Fullame linto on moternia	er			
	- WAS A MARKET OF SOIL	W			
24.1.1.2	(a) 350mm dia bore from G.L. to 30.0M				
24.1.1.1	(b) 300mm dia bore from 30.0 m to 60.0tm	30.0	N P/	/M Rs.413.50	0 Rs.12,40
	(c) 300mm dia bore from 60M to 90.0M	30.0 N	M P/	M Rs.378.00	
24.2.1	(d) 300mm dia base from 60M to 90.0M	30.0 N	A P/I	M Rs.378.00	
2A :	(d) 300mm dia bore from 90 0M to 150.0M	35.0 N	/1 P/(		110.111041
v 1 a	Supplying, assembling, lowering and fixing in vertical position in bore well, unplasticized PVC (UPVC) medium well casing (CM) pipe of required dia, conforming to IS: 12818, including required hire and labour charges, fittings & accessories etc. all complete, for all depths, as per direction of Engineer-in-charge.	f 1 <del>.</del>	. гл	M Rs.441,10	Rs.15,438
	a) 150 mm nominal size dia				
		30.0 M	P/M	Rs.615.30	Pe 19 450
28 Sı	o) 100 mm nominal size dia	60.0 M	P/M		Rs.18,459
we inc all cha	upplying, assembling, lowering and fixing in vertical osition in bore well unplasticized PVC (UPVC) medium ell screen (RMS) pipes with ribs, conforming to IS: 12818, cluding hire & labour charges, fittings & accessories etc. complete, for all depths, as per direction of Engineer-inarge.			Rs.444.20	Rs.26,652.
3 Sur	nominal size dia	30.0 M	P/M	0	
ind pro of E	pplying the following fittings & fixing the same in position per approved lowering assembly and strata chart luding providing all equipments and welding the same on cess of lowering the assay etc. all complete as per S/D E/I.		. 7641	Rs.468.80	Rs.14,064.0
14.2 (b)	150 mm dia M.S. Clarra 4 a s s	1 No.	Each	D- 205 44	
(c) 1	150 mm dia M.S. Clamp 1.6 M long (one Pair) 150 mm dia center guide	1 No.	Each	Rs.205.10	Rs.205.10
(d) 1	100 mm dia center guide	4 Nos.		Rs.1,031.10	Rs.1,031.10
(e) 1	50 mm x 100 mm dia 6mm	6 Nos.		Rs.150.00	Rs.600.00
5.1 (f) 10	150 mm x 100 mm dia 6mm wall thickness MS reducer 00mm dia & 6mm thick M.S. well shoe plug	1 No.	Each	Rs.100.00 Rs.500.00	Rs.600.00
Provi	iding all materials, labours, & equipments for fixing tube	1 No.	Each	Rs.205.60	Rs.500.00
.6 well	with pea gravel of Dalbhumigarh to size 4mm to 8mm			110.200.00	Rs.205.60
appro	ox, as suitable for strata including carriage washing,				
placir	ng and packing the same in position around the tube				
	90 O Ced Gravel from Dhalke	9.0 M <sup>3</sup>	P/M <sup>3</sup>	Rs.917.00	Rs.8,253.00
Devel	opment of tube well in second	9.0 M <sup>3</sup>	P/M³		
2 I) and	opment of tube well in accordance with IS: 2800 (part IS: 11189, to establish maximum rate of usable water			Rs.4,336.54	Rs.39,028.82
yield v	without sand content (beyond permissible limit), with				
require	ad capacity air compressor, running the compressor				
for req	uired time till well is fully develo ped, measuring yield				
	=/ * "Y(G) [[[G]][D]] OF SING AND				
measur	ning static level & draw down etc. by step draw down				
	' with water samp and the terms				
	THE CONTROL OF THE PROPERTY OF				
L	Gidiues of all Assesses				
	o or on compressor tools a				
accesso	The state of the s				
accesso	or-in-charge.	24 Hrs. F			

S.No.				n de la companya de la companya de la companya de la companya de la companya de la companya de la companya de		
	Description	Qty.	Unit	Rate		
	Transportation of drilling plants, developing equipments & all other required tools and M/c by and suitable mechanical means including all cost of loading, unloading, placing at work site and back after completion of work as per S/D of E/I  Supplying all materials and labours for arrangement for additional water required during the drilling period for 70 Hrs & site clearance & leveling etc. And providing the soap duster etc. to staff expanded in drilling	1 No.	Each	Rs.9,200.00	Amount  Rs.9,200.00	
	duster etc. to staff engaged in drilling etc. all complete work as per specification & direction of E.I.	1 No. TOTAL	Each	Rs.7,000.00	Rs.7,000.00 Rs.1,91,907.72	

(Sub Estimate - 2)
Analysis of Chamber for TW

Supplying materials, labours and constructing chamber of following dimension having 250mm thick wall in C.M. (1:4) in cluding 12mm C.P. (1:3) with punning inside, R.C.C. cover slab with C.I. Surface box, 20mm dia foot rest at 150mm interval 10mm dia lifting ring etc. all complete.

	SIZE		M	X	1.00	M >	0.75	M deep	
S.O.R.				,				4000	
No.	<u>Particulars</u>	No.	Ŀ	<u>w</u>	Ħ	Qty.	<u>Unit</u>	Rate	Amount
1	Earth work in excavation	1	1.75	1.75	1.0	3.063 N	/ <sup>3</sup> P/M <sup>3</sup>	Rs.230.50	Rs.705.91
S.O.R. N	·					"		113.250,50	K\$.705.91
<u>2</u> S.O.R. N	Sand filling	1	1.75	1.75	0.075	0.230 N	<sup>3</sup> P/M <sup>3</sup>	Rs.204.40	Rs.46.95
<u>3</u> S.O.R. 1	Brick flat soling	1	1.75	1.75		3.063 N	1 <sup>2</sup> P/ <b>M</b> <sup>2</sup>	Rs.253.80	Rs.777. <b>26</b>
<u>4</u> S.O.O. 4	P.C.C. (1:2:4) in foundation .1.3	1	1.75	1.75	0.10	<b>0</b> .306 №	<b>1</b> 3		
<u>5</u>	DAMA COLOR					0.306 N	1 <sup>3</sup> P/ <b>M</b> <sup>3</sup>	Rs.3,850.50	Rs.1,179.22
	B/Work in (1:4) C.M. o. 6.1.12/1	2	2.50	0.25	0.75	0.938 N	I <sup>3</sup> P/M <sup>3</sup>	Rs.4,724.40	Rs.4,429.13
<u>6</u>	R.C.C. Cover slab(1:1.5:3) o. 5.2.2 & 5.9.3	1	1.50	1.50	0.15	0.338 N	1 <sup>3</sup> P/M <sup>3</sup>	Rs.5,139.70	Rs.1,734.65
<u>7</u>	shuttering C.P. (1:3) with 5% Cico & neat cement	2	1.50	1.50	0.15	3.15 M	<sup>2</sup> P/M <sup>2</sup>	Rs.291.00	Rs.916.65
S.O.R. No.	Internal face	2	1.00	1.00	1.00	4.00 M	2		
13.17.1	Bed surface	1	1.00	1.00		1.00 M			
+13.36.1						5.00 M		Rs.166.30	Rs.831.50
S.O.R. No	C.P. (1:4) out side of wall b. 13.11.2	2	1.50	1.50	0.75	4.5 M	P/M <sup>2</sup>	Rs.114.70	Rs.516.15
9 S.O.R. No	8mm dia T.S. Rod ). 5.22.7A								
	Lifting Ring of 10mm dia	0.338	M <sup>3 x</sup>	70	Kg/ M3	23.625 Kg	ı. P/Kg	Rs.56.00	Rs.1,323.00
	Rod					4 No	. Each	Rs.30.00	Rs.120.00
<u>11</u>	Carriage of materials 5%							Total	Rs.12,580.41 Rs.629.02
						Sa	ıy Rs.13,	210.00	Rs.13,209.43

			st. No. 3			
	T	WATER SUPPLY DI	STRIBUTION S	YSTEM		·· <del></del> -
IA	Forthwork in	Particulars	Quantity	/ Unit	Rate	Amoun
		ation over areas (exceeding 30 cm		:		74.40011
		as well as 10 sqm on plan) includ				
	disposal of excavat	ed earth lead upto 50m and lift u	pto	-		
		n to be levelled and neatly dressed		:	: : :	:
	90mm dia Pipe	70.00 0.30 1.10 =	23.10			<u> </u>
: i	75mm dia Pipe	140.00 0.30 1.10 =	· <del></del>			
	63mm dia Pipe	210.00 0.30 1.10 =		:	<u> </u>	
	50mm dia Pipe	420.00 0.30 1.10 =	· <b>69</b> .30		· —	····
	40mm dia Pipe	F60.00	<b>138</b> .60			
	· · · · · · · · · · · · · · · · ·		184.80		· -—	
	Add 5	% extra for fittings =	462.00 M		<del></del>	
			23.10 M		Po 220 50	
B   F	Filling available	ad cutting and its restoration	45.75		Rs.4,428.80	Rs.1,11,815 Rs.69,753
:1 :+	renches pliate ex	cavated earth (excluding rock)	in:			1,3.03,753
,	exceeding 20cm is a	es of foundations etc. in layers n	ot	İ		:
12	aver by ramming on	lepth, consolidating each deposite	ed;		-	:
lu	upto 1.5 m.	d watering, lead up to 50 m and i	ift			  -  -
		g High Density Polyethyene pip	475.40 M <sup>3</sup>	P/M <sup>3</sup>	Rs.74.50	Rs.35,417
()	HDPE pipe) of 20 m	m to 225 mm OD and pressure 6.	e;			
ν.	√g/cm∠ and 10 Kg/c	m2 sutable for water supply which	h	-		
ıs	s available in all s	tandard, like ISI-4984/1995 an	d·			
, Va	anous grades like	PE-80, PE-100 including require	d <sup>'</sup>			
S	pecials. Rates are	inclusive of , all taxes and dution	e ·			
lai	exise duty @12.50%	6 &CST @2% against Form 'C'	),			
CC	omplete as per direct	or profit and overhead charges a tion of Engineer-in-charge.	Ш		:	
Н	DPE pipe of materia	Is grade PE100- PN10 (dia in	·	<u>.</u>	:- ::- :: :- ::- ::- ::	
- 1111	<u>m,                                      </u>			: :		
75	mm dia Pipe from P	VC Tank to Distribution main	14.00 M	P/M	D= 220 04	
90	mm dia Pipe		70.00 M		Rs.239.81	Rs.3,357.3
75	mm dia Pipe	<del></del>	1	P/M	Rs.340.84	Rs.23,858.8
<del></del>	mm dia Pipe	<del></del>	140.00 M	P/M	Rs.239.81	Rs.33,573.4
· —	<del></del>		210.00 M	P/M	Rs.168.77	Rs.35,441.7
∩L 	or⊏ pipe of material	s grade PE100- PN8 (dia in mm)			•	
<del>-</del>	mm dia Pipe	<del></del>	420.00 M	D/4		<u>-</u>
	mm dia Pipe		560.00 M	P/M	Rs.89.99	Rs.37,795.86
50r	mm dia Pipe from T/	well to PVC Tank	40.00	P/M	Rs.59.78	Rs.33,476.80
Pro	oviding and fixing bra	ass gate valve with C.I. wheel of	12.00 M	P/M	Rs.89.99	Rs.1,079.88
app	proved quality (screw	/ed end).	: :			
	nm dia Pipe		5		·· <u>-</u> · · ·	
75~	nm dia Pipe		2 Nos.	Each	Rs.2,016.50	Rs.4,033.00
	<del></del>		3 Nos.	Each	Rs.1,351.60	Rs.4,054.80
	nm dia Pipe		2 Nos.	Each	·	
50m	ım dia Pipe		3 Nos.		Rs.1,351.60	Rs.2,703.20
10m	m dia Pipe		- · ·	Each	Rs.811.40	Rs.2,434.20
			3⊧Nos.	Each		

S.N.	Particula	ars			Ouantitu	1 4 5 4 4	T	<u> </u>
5 Constructing mason			-75 cm	ingido in	Quantity	Unit	Rate	Ameount
prick work in cemer	nt mortar 1	1:4 (1 cer	ment	4 coarco				
sand) for sluice valv	ve,with C.i.	. surface l	box 10	inm too	-			
diameter, 160 mm b	ottom diam	neter and	180 m	im deen (				
inside) with chained	liid and Ro	CC top st	lab 1.2	4 miy /1	1 2			
cement : 2 coarse	sand: 4	graded s	stone a	iogregate	į			
∠umm nominal size )	) , necessar	rv excava	ation fo	nundation		ļ	1	
concrete 1:5:10(1 c	æment : 5	fine san	nd : 10	Graded				
stone aggregate 4	10 mm no	ominalsiza	re) and	d incida	!			
plastering with ceme	ent mortar	1:3 (1 ce	ement ·	3coarse				:
sand) 12 mm thick, (	inished wir	h a fioati	ing coa	t of neat				
cement complete a direction of E/I.	s per sta	indard sr	pecifica	itions &			•	
Work for additional de	eoth				11 Nos.	Each	<b>Rs</b> .5,807.50	Rs.63,882.5
Brick work (1:4) in fou	•			· — —		<u> </u>		: : :
	2 1.10	0.25	0.35	0.193				÷ +
	2 0.60		0.35	0.105		<u> </u>		
				0.298	3.273 CuM	CUM	Pa 4 724 40	
Plaster (1:3)						Culvi	Rs.4,724.40	Rs.15,460.60
8			0.35	3.08	33.88 SqM	SaM	Rs.128.20	Do 4 242 46
Carriage 10% of item						-	110.120.20	1,040.42
Providing and placing	g on terra	ice (at a	ll floor	levels)		ļ <del>-</del>		Rs. 8,368.65
polyethylene :vater st	orage tani	к, ISI : 1	2701 r	narked,				
with cover and suit	table lock	ing arra	ıngeme	nt and			: :	
making necessary ho	les for inf	et, outlet	and o	verflow	<u>.</u> !			
pipes but without fitting	as and the I	base sanz	nort for	tank	5000.14		-	
Floriding and fixing F	PTMT exte	ension nin	nnie for	r water	5000 Ltrs.	P/Ltr.	Rs.6.60	Rs.33,000.00
tallk pipe, fittings of ap	proved qua	ality and c	colour.	TTUICI	į			
50mm dia			777-		2 Nos.	each	D- 000 00:	· · · <u>-</u> · · <u>- · · · · · · · · · · · · · · · · </u>
75mm dia							Rs.250.00	Rs.500.00
		<del></del> ;	-		1 No.	each	Rs.400.00	Rs.400.00
<u> </u>	<del></del>						TOTAL	Rs.5,26,592.09

Sub Est. No. 4

Model estimate for supply, installation & commissioning of single phase 3 H.P submersible motor pump set with all accessories including extension of L.T. line from nearest source up-to pumping station.

<u> </u>		station.			
SI. No	Particulars	Quantity	Unit	Rate	Amount
1	2	3	4	5	6
[A.]	Supply Installation,	1 (one) job	p/job	Rs.42,700.00	Rs.42,700.00
	commissioning and testing of				12,100.00
	single phase 3 H.P. submersible				
	pump set having discharging	j			
	capacity 3.35 lps at a total head				
	of 35 meter(approx) of KSB/	j			
	Kirloskar or equivalent make with all accessories & fittings etc				
	including loading unloading and		]		
	transportation of the pump set to				
	the work site with all required				Ī
	labour, materials, tools and				
	tackles installation, testing &	ľ			1
• }	commissioning as per standards	1	1		
Į,	specifications and direction of	}			
],	E/I.			·	
[(	(i) 50 mm dia x 3 mtrs long		İ		
ı	medium class G.I column pipe	ļ			
_  Ł	ooth end thread and one end	}			
s	ocketed- 6(six)nos				
(	ii) 1x3x2.5 mm² flat copper		1		
c	onductor submersible cable -40	j			
<b> </b> (1	forty) mtrs.				
Į(i	ii) 50 mm dia union socket-	1			
	(one) no.		]		}
(r	v) 65 mm dia x 250 mm long G.I.	ļ			İ
	ipple-1 (one) no.				ĺ
Itv	) 50 mm dia G.I Elbow—1(One)	1			
no //-	J.	1			j
	i) 50 mm dia M.S.	į	- 1		ļ.
	emps—2(Two) Pairs.	ļ		1	
l (Vi	ii) 50 mmx 250 mm long G.I	1	ł		1
	pple-1(One) no.	Į			1
11/	ii) Tube well cap for T/Well – one) no.	ŀ			
	) 50 mm dia x 65 mm dia	]			
rec	ducer socket –1(one) no.	ĺ	1	1	
	deci socket -t(one) no.	1	1	ļ	

floor mounted outdoor type L.T feeder pillar single phase starter controll pannel operated on 220 V. 3 phase , 50 c/s for 3 HP Submersible pump set made of MS sheet (minimum 2 mm thick) duly spray power coated painting with following accessories made of M.S sheet ( minimum 2mm thick) duly spray powder coated painting with following accessories (i) 90-220 V range single phase 7. 5 KVA automatic voltage stabilizer make- Sen & Pandit/ Vertex/ISI marked If any. 1 No.  (ii) Suitable single phase starter control panel for above motor of BCH/L&make - 1(one) no.  [C] Supplying & fitting 2.5 mm² copper service cable from power point from nearest source up-to pumping station  (D) Providing all materials and labour required for doing earthing station with G.I earth pipe of 40 mm dia x 4.5 mtrs 20fts. long G.I pipe including accessories excavation of earth , providing masonry enclosure with cover plate having locking arrangement and watering pipe etc.with salt, charcoal etc.as		 		otal Rs.	
floor mounted outdoor type L.T feeder pillar single phase starter controll pannel operated on 220 V, 3 phase , 50 c/s for 3 HP Submersible pump set made of MS sheet (minimum 2 mm thick) duly spray power coated painting with following accessories made of M.S sheet ( minimum 2mm thick) duly spray powder coated painting with following accessories (i) 90-220 V range single phase 7. 5 KVA automatic voltage stabilizer make- Sen & Pandit/ Vertex/ISI marked If any. 1 No.  (ii) Suitable single phase starter control panel for above motor of BCH /L&Tmake – 1(one) no.  [C] Supplying & fitting 2.5 mm² copper service cable from power point from nearest source up-to pumping station  [D] Providing all materials and labour. Lists	required for doing earthing station with G.I earth pipe of 40 mm dia x 4.5 mtrs 20fts. long G.I pipe including accessories excavation of earth, providing masonry enclosure with cover plate having locking arrangement and watering	P	)/job	Rs.2,803.00	Rs.2,803.00
floor mounted outdoor type L.T feeder pillar single phase starter controll pannel operated on 220 V, 3 phase, 50 c/s for 3 HP Submersible pump set made of MS sheet (minimum 2 mm thick) duly spray power coated painting with following accessories made of M.S sheet ( minimum 2mm thick) duly spray powder coated painting with following accessories	stabilizer make- Sen & Pandit/ Vertex/ISI marked If any. 1 No.  (ii) Suitable single phase starter control panel for above motor of BCH/L&Tmake – 1(one) no.  Supplying & fitting 2.5 mm <sup>2</sup> copper service cable from power point from nearest source up-to pumping station  Providing all materials and Jahour.				Rs.2,600.00
[B] Supply Installation, 1 (one) job p/job Rs.45,500.00 Rs.45.50	commissioning and testing of floor mounted outdoor type L.T feeder pillar single phase starter controll pannel operated on 220 V, 3 phase , 50 c/s for 3 HP Submersible pump set made of MS sheet (minimum 2 mm thick) duly spray power coated painting with following accessories made of M.S sheet (minimum 2mm thick) duly spray powder coated painting with following accessories	one) jab	p/job	Rs.45,500.0	Rs.45,500

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					- <del>-</del> -	0.800	<del>=</del>	· · · · ·	• • • • •			
8-	Reinford	cement	for 5			8.320	- 9.0	20 M	<sup>2</sup> P/	M <sup>2</sup> Rs 169	3 nn	Pc 1 400
5.22 s	straighte	ening, ci	uttina be	endina st	vork	including in position	ļ.			- ·		Rs. 1,406.
a	and bind	ding all c	omplete:	unig, piè	acing	(i) position	İ	:		:		
8	mm to	16 mm	tor steel	· 	:-		<u> </u>	:		÷	1	
7	otal Re	inforcer	nent		<del></del> -		!					· ·
(0	20.80%	of Vol.	Of Conc	rete	Ī	=	86 (	00 <b>K</b> g	·			
9 F	illing av	/ailable	excevate	od oodb /		ding rock)		oo Ng	ı P/K	(g. Rs.56	.00	Rs.4,816.0
.26 ir	trench	nes, plin	th side	o carring	exclu	ding rock) ns etc. in						
,	·y 🔾 i S	iiot ex	(Ceedino	20 -	:.	!				:		
C	onsolida	ating ea	ch deno	20 ci sited love		n depth: ramming				į	i	
										!		
<u>U</u> P	roviding	and fix	xing and	hor bolt	of 12	mm dia	2.08	6 M <sup>3</sup>	P/N	Rs.74.	50	Rs.155.4
	0.00	MARI ICAL	IIN EMNA	MAAA :- F	<b>`</b> ~ ~				:			
,	COLLIP	10to 92	per dir	ection of	f End	pedestal: gineer in				i	i	
	5 6	らてへを入し、	JJZOKO				4.000			!		
!- ∣Pε	iintina	with re:	adv miss	ed paint	of :		4.262	4 Kg	P/kg	Rs.73.	60	Rs.313.7
2.1 bra	and and	d manuf	acture in	ed paint I ail shad	م بن مد عما	approved					· -÷	
	CII SIIA(	1 <del>C</del> .				give an				į		
Ne	w steel	work (tv	VO Or mo	re coats)					:			
Fra	me wo	rk	<u> </u>	ic coals)	<del>-</del> -						-	· ·
			.00		_	~ <u></u>						
0	5 3.		.50		- - -	21.000				·		
				· - · · † -	+	6.125	· <del>-</del>	· ,— · · -	:			
Car	riage o	f the foll	OW/ina m	aterials f		27.125	27.13	$M^2$	M <sup>2</sup>	Rs.63.6	0	Re 1 705 45
	., 0.16	HICHIO	IDIO IOS/	14000	1 "					·		Rs.1,725.15
star	king at	work	site as	per spe	ooifie.	ng and				1.		i
								:	:	1 2 1		İ
(a) I	Bricks (	7 Km. F	ucca &	1 Km. Ka	chha	lead)						i
(b) (	Coarse	Sand (1	 00 Km I	== :::.;; ' <u>76</u> '	Ži ii ja	icau)		Nos.	%0 nos	Rs.606.10	o" -	Rs. 123.04
(c) S	Stone C	hips (15	0 V 1			i	0.860	$M^3$	P/ <b>M</b> <sup>3</sup>	Rs.1,221.09		
197	obal C	inha (12	v KM. le	ad) 📗	<u>L</u>		1.730	$M^3$	P/ <b>M</b> <sup>3</sup>	F	1	Rs.1, <b>0</b> 50.14
(4) L	opar 38	and ( 2 K	m. Pucc	a & 1 Km	ı Kac	hha lea	0.720			Rs.1,746.29		Rs.3,021.08
<del>-</del>			<u> - i</u>					iAI	P/M <sup>3</sup>	Rs.217.23		Rs.156.41
						·	:		•	TOTAL	_Rs	.1,28,521.72
						<del></del>		:		<u> </u>	Rs	1,28,500.00

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# GOVERNMENT OF BIHAR

PUBLIC HEALTH ENGINEERING DEPARTMENT

MODEL ESTIMATE

FOR

CONSTRUCTION OF RURAL PIPED WATER SUPPLY SCHEME FOR A WARD HAVING 200 HOUSE HOLDS

ESTIMATED COST-- Rs. 13.256 Lac

2017-18

### **GOVERNMENT OF BIHAR** Public Health Engineering Department ABSTRACT OF COST

## NAME OF WORK:- CONSTRUCTION OF RURAL PIPED WATER SUPPLY SCHEME FOR WARD HAVING 200 HOUSE HOLDS

	S.N.	Description	<del></del>
	1	Construction of 150mm x100mmx125m deep T/W for rocky strata etc.	Total Amount
		complete and as per direction of Et. (A.	all
Γ	2	complete and as per direction of E/I. (As per sub Estimate no1)  Constructing masonry Chamber 100x100x75 cm inside, in brick work	Rs.2,48,003.22
		cement mortar 1:4 (1 cement : 4 coarse sand) for Tube Well, and RC	in
		top slab 1:1.5:3 mix (1 cement : 1.5 coarse sand : 3 graded stor	C
		aggregate 20mm nominal size \ coarse sand : 3 graded stor	ne
	1	aggregate 20mm nominal size), necessary excavation, foundation	n
	ı	concrete 1:2:4(1 cement : 2 fine sand : 4 graded stone aggregate 20 mi	m
	[	nominal size) and inside plastering with cement mortar 1:3 (1 cement 3coarse sand) 12 mm thick with 500 size 5 in 1.3.	
	]:	3coarse sand) 12 mm thick with 5% cico fnished with a floating coat of the company of the plastories with a floating coat of the company of the plastories with the company of the plastories with the plastor	of
	-	neat cement, out side plastering with cement mortar 1:4 (1 cement 4coarse sand) 12 min thick seconds.	:
L	_	4coarse sand) 12 mm thick complete as per standard specifications a direction of E/I. (As per sub Estimate no2)	S.
	ין י	Toylung and Laving Distribution noticed 5 10	Rs.13,210.00
	15	staging etc all complete as per direction of E/I. (As per sub Estimate no.	3
	4 3	B) (As per sub Estimate no.	
'	4	Supply Installation, commissioning and testing of single phase 3 H.P.	Rs.5,26,592.09
	h	ubmersible pump set having discharging capacity 3.35 lps at a total	
	a	ead of 35 meter(approx) of KSB/ Kirloskar or equivalent make with all coessories & fittings etc. including leading.	i l
	0	ccessories & fittings etc including loading unloading and transportation	
	а	f the pump set to the work site with all required labour, materials, tools not tackles installation, testing & sample.	
		nd tackles installation, testing & commissioning as per standards pecifications and direction of E/I.	i
_	(/	\s per sub Estimate no - 4\	
5	P	roviding house connection for each house hold including quantities in	Rs.93,603.00
1	m	aterials, labours, tools and making ferrule connection with 20 mm dia	
	М	DPE and 15mm CPVC Pipes with all fittings etc all complete.	
	ĺα	s per sub Estimate no - 5)	
6	Pr	Oviding and erecting 3 M bigs at a constant and eventual	Rs.3,02,600.00
	-	oviding and erecting 3 M high staging of suitably designed MS section of	7-7-00:00
	an	gle, channel etc. as per drawing attached. (As per sub Estimate no 6)	
· -—-		TOTAL	Rs.1,28,500.00
		Add 1% Contingency	Rs.13,12,508.31
		G. TOTAL	Rs.13,125.08
		G. IUIAL	Rs.13,25,633.39
	(Rs	Say	Rs.13,25,600.00

(Rs. Thirteen Lakh Twenty five Thousand Six Hundred ) only

#### Note:

i) This model estimate has been prepared in the light of Guidelines of PRD, Bihar memo no. 6278 dt.23.09.2016. This estimate may not ensure standard pressure in the distribution network. Hence on the spot change in staging of storage tank may be required.

ii) Water quality testing of source should be done after construction of Tube well.

iii) Road cutting cost may increase or decrease as per local condition.

Technical approval accorded for Rs.13,25,600.00 (Rs. Thirleen Lakh Twenty five Thousand

Six Hundred ) only

Chief Engineer (Design)

Public Health Engineering Departme

Bihar, Patna

Sub Estimate-1

CONSTRUCTION OF 150MM X 100MM DIA & 125M DEEP TUBE WELL

S.N	(For Rocky strata inc	inging Rot	iders)		
1		Qty.	Uni	t Rate	Amount
•	Boring/drilling bore well of required dia for casing/straine	er	<del></del>	<del></del>	
	pipe, by suitable method prescribed in IS: 2800 (part I	),	* .		
	including collecting samples from different strata, preparing and submitting strata chart/ bore log, including hire a	g			
	running charges of all equipments, tools, plants &	<u> </u>			
	machineries required for the job, all complete as pe	S.			
	direction of Engineer -in-charge, upto 90 metre depth below	r			
	ground level. (Rocky stratz including Boulders)	V			
24.1,	1.2 (a) 350mm dia bore from G.L. to 30.0M	00.0.11			
	.1 (b) 300mm dia bore from 30.0 m to 60.0M	30.0 M	P/M	<b>Rs</b> .859.70	Rs.25,791.00
,		30.0 M	P/M	Rs.833.10	Rs. 24,993.00
	(c) 300mm dia bore from 60M to 90.0M	30.0 M	P/M	Rs.833.10	
24.2.	1 (d) 300mm dia bore from 90.0M to 150.0M	35.0 M			Rs. 24,993.00
2A	Supplying, assembling, lowering and fixing in vortices	1	P/M	Rs.881.20	Rs. 30,842.00
	position in pore well, unplasticized PVC (LIDVC) medicine				
	well casting (Civi) pipe of required dia conforming to 18.				
-	120 to, including required hire and labour charges, fittings &				
	accessories etc. all complete, for all depths, as per direction of Engineer-in-charge.				
2432	-				
	2 (a) 150 mm nominal size dia	30.0 M	P/M	Rs.615.30	Rs.18,459.00
24.3.1	(b) 100 mm nominal size dia	60.0 M	D/4.		
2 <b>B</b>	Supplying, assembling, lowering and fixing in vertical	00.0 10	P/M	Rs.444.20	Rs.26,652.00
-	position at bore well unplasticized PVC (LIPVC) modium				
	.well screen (RMS) pipes with ribs, conforming to 19: 12848				
	inclouring fille & labour charges, fittings & accessories etc.				
	all complete, for all depths, as per direction of Engineer-in-			0	
24.4.1	charge.				
3	The state of the s	30.0 M	P/M	Rs.468,80	Rs.14,064.00
Ü	Supplying the following fittings & fixing the same in position as per annuved lowering property.				113.14,004.00
	as per approved lowering assembly and strata chart including providing all equipments and welding the same on				
	process or lowering the assay etc. all complete as per S/D				
12.2	OI CII.				
14.2	(a) 150 mm dia well cap	1 No.	Each	Rs.205.10	Be 205 40
. (4.2	(b) 150 mm dia M.S. Clamp 1.6 M long (one Pair)	1 No.	Each	Rs.1,031.10	Rs.205.10
	(c) 150 mm dia center guide	4 Nos.	Each	Rs.150.00	Rs.1,031.10
	(d) 100 mm dia center guide	6 Nos.	Each	Rs.100.00	Rs.600.00 Rs.600.00
.15.1	(e) 150 mm x 100 mm dia 6mm wall thickness MS reducer	1 No.	Each	Rs.500.00	Rs.500.00
4a	(f) 100mm dia & 6mm thick M.S. well shoe plug	1 No.	Each	Rs.205.60	Rs.205.60
4.6	Providing all materials, labours, & equipments for fixing tube well with pea gravel of Dolbhymiast.				1.0.200,00
	well with pea gravel of Dalbhumigarh to size 4mm to 8mm				
	approx. as suitable for strata including carriage washing,				
	placing and packing the same in position around the tube well etc. all complete as per direction of E/I.		_		
b	Carriage of Pea Gravel from Dhalbhumigarh (taken av	9.0 M <sup>3</sup>	P/M <sup>3</sup>	Rs.917.00	Rs.8,253.00
•	distance 400km.)	9.0 M <sup>3</sup>	P/M <sup>3</sup>	D- 4 000 - 1	
		U.U 191	LAM	Rs.4,336.54	Rs.39,028.82

	<del></del>				
S.No.	Description	· · ·		*	•
5	Development of tube well in accordance with to	Qty.	_   Uni	t Rate	Amount
6	yield without sand content (beyond permissible limit), with required capacity air compressor, running the compressor for required time till well is fully developed, measuring yield of well by "V" notch method or any other approved method, measuring static level & draw down etc. by step draw down method, collecting water sampl &getting tested in approved laboratory, disinfection of tubewell, all complete, including hire & labour charges of air compressor, tools & accessories etc., all as per requirement and direction of Engineer-incharge.	24 Hrs.	Each	Rs.649.40	Am Ount
: V E	means including all cost of loading, unloading, placing at work site and back after completion of work as per S/D of	1 No.	Fact		(15, 15,585.6
<b>a</b> i	dupplying all materials and labours for arrangement for dditional water required during the drilling period for 70 Hrs site clearance & leveling etc. And providing the soap uster etc. to staff engaged in drilling etc. all complete work sper specification & direction of E.I.		Each	Rs.9,200.00	Rs.9,200.00
		1 No. TOTAL	Each	Rs.7,000.00	Rs. 7,000.00 Rs. 2,48,003.22

(Sub Estimate - 2)

Analysis of Chamber for TW

Supplying materials, labours and constructing chamber of following dimension having 250mm thick wall in C.M. (1:4) in 10mm dia lifting ring etc. all complete.

SIZE

	SIZE	1.1	00 M	<del></del>		00.44			
805				<u>x</u>		00 M	x 0.75	M deep	
S.O.R.	<u>Particulars</u>	No.	T.	1	7-		<del></del> -		
1			F	W	H	Qty.	<u>Unit</u>	Rate	Amount
S.O.R. N	Earth work in excavation	1	1.7	5 1.75	5 1.0	3.063	M <sup>3</sup> P/M <sup>3</sup>		
2	Sand filling						A. 1.11AI	Rs.230.50	Rs.705.91
S.O.R. No	o. 2.28	1	1.75	5 1.75	0.07	5 0.230 N	1 <sup>3</sup> P/M <sup>3</sup>	Rs.204.40	_
<u>3</u>	Brick flat soling	1	170		_			115.204,40	Rs.46.95
S.O.R. 11	.72	_	1.75	1.75	)	3.063 <sub>M</sub>	1 <sup>2</sup> P/M <sup>2</sup>	Rs.253.80	Rs.777.26
<u>4</u>	P.C.C. (1:2:4) in foundation	1	1.75	1 75	0.10	0.200	3		113.777.20
S.O.O. 4.1	1.3			0	0.10	0.306 <sub>M</sub>	<b>1</b> 3		
<u>5</u>	RAMorti in (4.4) O					0.306 M	<sup>3</sup> P/ <b>M</b> <sup>3</sup>	D- 2 055	
\$.O.R. No	B/Work in (1:4) C.M.	2	2.50	0.25	0.75	0.938 M		Rs.3,850.50	Rs.1,179.22
6	R.C.C. Cover slab(1:1.5:3)					000 104	<sup>3</sup> P/M <sup>3</sup>	Rs.4,724.40	Rs.4,429.13
	. 5.2.2 & 5.9.3	1	1.50	1.50	0.15	0.338 M	3 P/M <sup>3</sup>	Rs.5,139.70	_
	shuttering	2	1.50				( 2)41	73.5,159.70	Rs.1,734.65
Z	C.P. (1:3) with 5% Cico &	2	1.50	7.50	0.15	3.15 M	<sup>2</sup> P/M <sup>2</sup>	Rs.291.00	Rs.916.65
_ r	leat cement								Na.8 10.65
S.O.R. No.	Internal face	2	1.00	1.00	1.00	4.002			
13.17.1 E	Sed surface	1			1.00	4.00 M <sup>2</sup>			
+13.36.1		ı	1.00	1.00		1.00 M <sup>2</sup>			
. 5.65, 7						5.00 M²	P/M²	D. 400 00	
<u>8</u> C	.P. (1:4) out side of wall	_				4.55 IN	C/M1-	Rs.166.30	Rs.831.50
S.O.R. No.	13.11.2	2	1.50	1.50	0.75	4.5 M <sup>2</sup>	P/M <sup>2</sup>	Rs.114.70	D. 545
<u> </u>	mm dia T.S. Rod							. 10.114,70	Rs.516.15
S.O.R. No. 5	5.22.7A								
		0.338 p	43 x	K	<b>/g</b> /				
40 Lit	ting Ring of 10mm dia	U.U.U.	ΥI		<i>A</i> 3	23.625 Kg.	P/Kg	Rs.56.00	Rs.1,323.00
10 R	xd					4 N	_		13.1,023.00
44 -	•					4 No.	Each	Rs.30.00	Rs.120.00
<u>11</u> Ca	image of materials 5%							Total	Rs.12,580.41
									Rs.629.02
						e	Da 40 =		Rs.13,209.43
						Say	Rs.13,21	0.00	

		st. No. 3			
	WATER SUPPLY DIS	STRIBUTION	SYSTEM		
S.N.	Particulars	Quantity		Rate	Amount
1A	Earthwork in excavation over areas (exceeding 30 cm in	1	-		Amount
	depth 1.5 in width as well as 10 sqm on plan) including	)			
	disposal of excavated earth lead upto 50m and lift upto				
_	1.5m. disposal earth to be levelled and neatly dressed.		•		
	90mm dia Pipe 70.00 0.30 1.10 =	23.10		·	
	75mm dia Pipe 140.00 0.30 1.10 =	<del></del>	- ··· · · · · · · · · · · · · · · · · ·	· · · - · · · · · · · · · · · · · · · ·	
•	63mm dia Din-	46.20		· · · · · · · · · · · · · · · · · · ·	<b>- -</b>
	50mm dia Dia	69,30		1	
	10mm dia Dia	138.60			
-	40mm dia Pipe   560.00   0.30   1.10 =	184.80			
	Add 5% extra for fittings =	462.00 M <sup>3</sup>			
		23.10 M³			·
ΙB	Provision for PCC road cutting and its restoration	485.10 M <sup>3</sup>		Rs.230.50	Rs.1,11,815.5
2	Filling available excavated earth (excluding rock) in	15.75 M <sup>3</sup>	P/M <sup>3</sup>	Rs.4,428.80	Rs.69,753.6
	trenches, plinth, sides of foundations etc. in layers not		; ;	:	
İ	exceeding 20cm in depth, consolidating each deposited			:	
÷	layer by ramming and watering, lead up to 50 m and lift				
	upto 1.5 m.				
	Providing and laying High Density Polyethyene pipe	475.40 M <sup>3</sup>	P/M <sup>3</sup>	Rs.74.50	Rs.35,417.1
- 1	(HDPE pipe) of 20 mm to 225 mm OD and pressure 6.0.				e e e e e e e e e e e e e e e e e e e
l	Kg/cm2 and 10 Kg/cm2 sutable for water supply which		• :		
i	s available in all standard, like ISI-4984/1995 and				
·	various grades like PE-80, PE-100 including required				
íS	specials. Rates are inclusive of , all taxes and duties		1 .		
(	Exise duty @12.50% &CST @2% against Form 'C'),				
l	abour cess, contractor profit and overhead charges all	;			
c	complete as per direction of Engineer-in-charge.	į			
\ i	IDPE pipe of materials grade PE100- PN10 (dia in mm)	: -• :	<u> </u>	: 	
· -+-				÷	
7	5mm dia Pipe from PVC Tank to Distribution main	14.00 M	P/M	Pa 220 04	
	0mm dia Pipe	70.00 M	P/M	Rs.239.81	Rs.3,357.34
7	5mm dia Pipe			Rs.340.84	Rs.23,858.80
6	3mm dia Pipe	140.00 M	P/M	Rs.239.81	Rs.33,573.40
ы	DDE pipe of material	210.00 M	P/M	Rs.168.77	Rs.35,441.70
<u> </u>	DPE pipe of materials grade PE100- PN8 (dia in mm)	•			
	Omm dia Pipe	420.00 M	P/M	D- 80 00	· · · · <u>- · · · · · · · · · · · · · · ·</u>
_+_	Omm dia Pipe	560.00 M	P/M	Rs.89.99	Rs.37,795.80
50	Omm dia Pipe from T/well to PVC Tank	12.00 M	P/M	Rs.59.78	Rs.33,476.80
ļРг	oviding and fixing brass gate valve with C.I. wheel of			Rs.89.99	Rs.1,079.88
	proved quality (screwed end).			ļ.	
Jah	rom wa FIPE	2 Nos.	Each	Rs.2,016.50	Rs.4,033.00
90	· · · · · · · · · · · · · · · · · · ·		· · · · · · · · · · · · · · · · · · ·	The second of th	
90	mm dia Pipe	3 Nos.	Each	Rs.1.351.60	Re 4 054 00
90 75 63	mm dia Pipe mm dia Pipe	3 Nos. 2 Nos.	Each Each	Rs.1,351.60 Rs.1,351.60	Rs.4,054.80
90 75 63	mm dia Pipe			Rs.1,351.60 Rs.1,351.60 Rs.811.40	Rs.4,054.80 Rs.2,703.20 Rs.2,434.20

O

					,		1 8-3	
S.N.		Particulars			Quan	tity	Unit	Rate
	Constructing masonry brick work in cement sand) for sluice valve diameter, 160 mm bot inside) with chained licement: 2 coarse sa 20mm nominal size), concrete 1:5:10(1 cerstone aggregate 40 plastering with cement sand) 12 mm thick, fin cement complete as direction of E/I.  Work for additional dep	mortar 1:4 (1 with C.I. surfatom diameter d and RCC to and : 4 grade necessary ex nent : 5 fine mm nomina mortar 1:3 ( ished with a f per standar	cement: ace box 10 and 180 m op slab 1:2 ed stone a cavation, fo sand: 10 alsize) and 1 cement:	4 coarse 00mm top m deep ( :4 mix (1) ggregate bundation 0 graded d inside 3coarse t of neat			Each	Rs.5,807.50
			25 0.35	0.193		<u> </u>	<del> </del>	· 
-+	2		25 0.35	0.105		<u></u>	<del> </del>	
	Plaster (1:3)			0.298	3.273	CuM	CuM	Rs.4,724.40

0.35

3.08

33.88 SqM SqM

5000 Ltrs P/Ltr

each

each

2 Nos

1 No.

1.10

Providing and placing on terrace (at all floor levels)

polyethylene water storage tank, ISI: 12701 marked, with cover and suitable locking arrangement and making necessary holes for inlet, outlet and overflow pipes but

Providing and fixing PTMT extension nipple for water

without fittings and the base support for tank.

tank pipe, fittings of approved quality and colour.

Carriage 10% of item 5

<u>18.48</u>

50mm dia

75mm dia

**Amount** 

Rs.63,882.50

Rs.15,460.60

Rs.4 343.42

Rs. 8,368.65

Rs.33,000.00

Rs.500.00

Rs.400.00

Rs.5,26,592.09

Řs.128.20

Rs.6.60

Rs.250.00

Rs.400.00

TOTAL

Sub Est. No. 4

Model estimate for supply, installation & commissioning of single phase 3 H.P submersible motor pump set with all accessories including extension of L.T. line from nearest source up-to pumping station.

		station.			
il. No.	Particulars	Quantity	Unit	Rate	Amount
1					
	2 Supply Installation,	3	4	5	6
	commissioning and testing of	1 (one) job	p/job	Rs.42,700.00	Rs.42,700.00
	single phase 3 H.P. submersible			1	
ļ	pump set having discharging				
1	capacity 3.35 lps at a total head	İ			
],	of 35 meter(approx) of KSB/		}	1	
l	Kirloskar or equivalent make with				j
la	all accessories & fittings etc		1		
li	ncluding loading unloading and		ł		
t	ransportation of the pump set to	İ			
t	he work site with all required	1		1	l
la	abour, materials, tools and		1	ł	
ta	ackles installation, testing &				
C	ommissioning as per standards	1			
st	pecifications and direction of	}	ł	1	j
E/	/I.				
			1		
[(i)	50 mm dia x 3 mtrs long	i			
m	edium class G.I column pipe	ĺ	- 1		
bo	oth end thread and one end	}			1
SO	cketed- 6(six)nos		•	i	
(ii)	1x3x2.5 mm <sup>2</sup> flat copper	}			
coı	nductor submersible cable -40	ł	1		
J(to	rty) mtrs.				
(iii)	50 mm dia union socket-		1	1	
1(o	ine) no.				
(iv)	65 mm dia x 250 mm long G.I.	1			}
nip	ple- 1 (one) no.				
[(v) :	50 mm dia G.I Elbow—1(One)	1	l l		
no.					
	50 mm dia M.S.	ļ		}	1
cian	nps—2(Two) Pairs.	ļ	j		
(VII)	50 mmx 250 mm long G.I			}	j
(viii)	ile- 1(One) no.				
1/00	Tube well cap for T/Well – e) no.				
1-(01)	e, no.	ſ	- 1	[	1

j		(ix) 50 mm dia x 65 mm dia	1	í		ı	
		reducer socket -1(one) no.		ł			
- 1	[B]	Supply installation,	1 (one	e) job			
ŀ		commissioning and testing of	.   ± (OIR	#) JOB	p/job	Rs.45,500	00 Rs.45,500.0
		floor mounted outdoor type L.T		1		1	
		feeder pillar single phase starte	_	1			
		controll pannel operated on 220	,				
		V, 3 phase , 50 c/s for 3 HP	'	1			
		Submersible pump set made of					
ł		MS sheet (minimum 2 mm thick	,	1			
		duly spray power coated paintin	)				j
- 1		with following accessories made	g				
		of M.S sheet ( minimum 2mm		}			
		thick) duly spray powder coated		Ì		1	
		painting with following				1	
	1	accessories					
- [			•				
	Į.	(i) 90-220 V range single phase7.				1	
		5 KVA automatic voltage	1			1	
	1	stabilizer make- Sen & Pandit/	{			}	
	[	/ertex/ISI marked If any. 1 No.					
	la	i) Suitable single phase starter					1
-	c	ontrol panel for above motor of	}				
	В	CH /L&Tmake — 1(one) no.	<u> </u> 			}	
	C] S	upplying & fitting 2.5 mm <sup>2</sup>	30			<del></del>	
1	c	Opper service cable from power	20 mtrs	P/r	VIt	Rs.130.00	Rs.2,600.00
1	pi	pint from nearest source up-to	l		l		
1	ומ	imping station		-	1	1	
[[	D] Pr	oviding all materials and labour					
1	re	quired for doing earthing station	1 job	p	/job	Rs.2,803.00	Rs.2,803.00
1	wi	th G.I earth pipe of 40 mm dia			ł	1	
	х	4.5 mtrs 20fts. long G.I pipe			[	1	
ĺ	inc	cluding accessories excavation		ŀ	}		}
	of	earth , providing masonry		İ			
	end	closure with cover plate having			Í	1	
	loc	king arrangement and watering			- 1	j	1
	pip	e etc.with salt, charcoal, etc. as				}	1
	per	IE & IS specification.		1		1	ĺ
							ĺ
					T	otal Rs.	Rs.93,603.00

 $\circ$  :

Sub Est. No. 5

	Estimate for the work - Hou		ice con	nection	
S.No.	SUB-ESTIMA Description		<del></del>		
1A	Providing - 1 C:	Qt	y Uni	it Rate	Amount
	GradeCompound) pipes PN-12.5 (12.5kg/Sqcn	2)			
	as per ISO 4427 and specification for	27		]	
	waterapplication rates are inclusive of, taxes an	JI  -			
	duties (Exise duty @12.50% &CST @2% again	ct		1	
	[Form 'C'), labour cess, contractor profit an	d		-	
	overhead charges all complete asper direction of	νf.		ļ	
	Engineer-in-charge.complete.		İ	ļ	
<del></del>			ļ		
<del></del>	MDPE Pipe 20mm dia nominal bore	6.00	) PM	Rs.19.9	7
18	Providing and fixing Chlorinated Polyviny	11	-	1(3.19.9)	7 Rs.1 19.8
	Chloride (CPVC) pipes, having thermal stability	,,	j		
	for hot & cold water supply, including all CPVC	7			
	plain & brass threaded fittings, including fixing	,			
	the pipe with clamps at 1.00 m spacing This			İ	
	includes jointing of pipes & fittings with one ster	J	- [		
	CPVC solvent cement and testing of joints	s			
	complete as per direction of Engineer in Charge.		1		
	Internal work - Exposed on wal!	1			
18.7.1	15 mm nomonal bore	ļ 			
2	Earth work in excavation in foundation trenches	1.0	PM	Rs.138.70	Rs.138.70
_	or drains(not exceeding 1.5 m in width or 10 sqm		İ		
	on plan) including dressing of sides and amming	ĺ	i		
	of bottoms, lift upto 1.5 m. including getting out		1		
	the excavated soil and disposal of surplus				
	excavated soil as directed, within a lead of 50 m.				ļ
	All kinds of soil				
2.8.1	6.00 0.30 0.60 1.08	1.08	-	5 22	
3	Filling available excavated earth (excluding rock)	1.08	CuM	Rs.230.50	Rs.248.94
2.26	in trenches, plinth, sides of foundations etc. in				
	layers not exceeding 20 cm in denth.			D- 34 50	_
	consolidating each deposited layer by ramming			Rs.74.50	Rs.78.85
	and watering lead	1.06	CuM	·	
4	Providing and fixing brass ferrule with CI mouth	1.00	Culvi		
	cover incuding boring and tapping the main:				ł
.20.1	15mm nominal bore	1	Each	Rs.254.10	Rs.254.10
	Providing and fixing P.P. Black service Saddle (Brass threaded)				
5	Providing and fixing brass bib cock of approved	1	Each	Rs.400.00	Rs.400.00
	quality:		ļ.		
15.1	15mm nominal bore	-			
]	Total	1	Each	Rs.273.00	Rs.273.00
	Sav				Rs.1,513.41
	Total Nos. of House Holds= 200 N	os.	@	Rs.1,513.00	Rs.1,513.00 Rs.3,02,600.00

	<del></del>	Partic	uiare		1011110	FUR 5	000 LITE	R PVC TAN	IK	
<u>1</u>	Structural ste	el work rive	tod or t		<u> </u>	antity	Un	it Rat		Amou
<u>10.3</u>	- 4 0 0 ti Qi 13, Qi U	oess and i	romod						+	Amour
		IU.IIXIIIII IN I	200412		g	İ		-		
						ĺ		j	į	
	11011 310	WILLS WITH F	ai omble						- 1	
						Ì				
		gle, channe	d etc	/ designed MS as per drawing	S	İ	:	:	i	
· - <u>-</u> -							:	į	į	
2	Earth work in	excavation	in found	dation trenches		90 Kg	P/Kg	Rs.69	9.20	Rs.1,03,10
2.8.1	a.a.n.s(1)0( (	zkceemna i	5 m in	مد اللمان		1				10.1,00,10
	Picin inclui	annu recenta		± 1			İ	į	ī.	
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	- CACCITALE	u sou and	d.c	1	:	•		f :		
		as un ected	within :	- or surplus				į.	•	
				- read of 50 m.					1	
·i	base of footing					+			į	
	41.20	1.20 1.	425	= 8.20 <del>8</del>						
·i	For fixing Ladd	er	— <del>-</del>	0.208		-:	; = <u>-</u>		<del>-</del> +-	
	_ 1 1.00	0.50 <b>0</b> .	275			-;				
<u>:</u>				0.138					<del>-</del>	<u>-</u>
3- 3	Supplying and	filling in plint	th with t	8.346	8.346	<u>M</u> 3	P/M <sup>3</sup>	Rs.230.	50	Rs.1,923.
.28 լ	inder floors	including	- (materia) AAIIII ((							_ 1.3. 1,923.
c	onsolidating ar	nd dressine	waterin	9. ramming		i				
b	ase of footing	a diesaing (	ornplete	<del>2</del>				ļ	i	
		1.20	<u> </u>	- <del>-</del>		<del></del>		<del></del>	<del></del>	
L	anding Platefor	<u>!.42</u> <u>U.</u> rm	10 =	0.576	·			<u>+</u>		
	1 1.00	- <del></del>						<u>-1</u>		
		0.50 0.	10 =	0.050			· · · · ·		• • • • • •	· · · · · · · · · · · · · · · · · · ·
I- P	roviding docie			0.626	0.626	M3	P/M <sup>3</sup>	D- 001	_	·· ··-
1.0										
72 io	ints filled with	nation of 10	IOA Bric	k flat Soling		-14	VIAT	Rs.204.4	10	Rs. 127.9
	roviding designants filled with				. <u> </u>	eru	- 1.7141	Ks.204.4	10	Rs. 127.9
W	atering, taxes	o rovalty &	a includ		<u> </u>	-74	- 1,7141	KS.204.4	10	Rs. 127.9
w. sp	atering, taxes ecification & di	o rovalty &	a includ			- TE	- 1.7184	KS.204.4	10	Rs. 127.9
w: sp ba	atering, taxes ecification & di ise of footing	& royalty a	a includ		. <u></u>		_ 1,7141		<b>40</b> ]	Rs. 127.9
wa sp ba	atering, taxes ecification & di use of footing 4 1.20	& royalty a rection of E/	a includ		 					Rs. 127.9
wa sp ba	atering, taxes becification & di ise of footing 4 1.20 Inding Plateforr	& royalty a rection of E/	a includ	ling cost of plete as per		  	_ '	Ks.204.4	10 <sub>1</sub>	Rs. 127. <u>s</u>
wa sp ba	atering, taxes becification & di ise of footing 4 1.20 Inding Plateforr	& royalty a rection of E/	a includ	ling cost of plete as per 5.760			_ '_ <b>/ '''</b>	Ks.204.4	10 <sub>1</sub>	Rs. 127.9
wa sp ba La	atering, taxes pecification & dise of footing 4 1.20 nding Plateform 1 1.00	& royalty a rection of E/	a includ	olete as per 5.760						Rs. 127.9
wa sp ba La	atering, taxes pecification & dise of footing 4 1.20 nding Plateform 1 1.00	& royalty a rection of E/	a includ	olete as per 5.760	6.260 N		P/M <sup>2</sup>	Rs.204.4		
ba   La	atering, taxes becification & dise of footing 4 1.20 nding Plateform 1 1.00 oviding and lay	& royalty a rection of E/	a includant comp	5.760 0.500 6.260						Rs. 127.9
La Pro 2 of	atering, taxes becification & dise of footing 4 1.20 nding Plateform 1 1.00 oviding and lay specified grade	& royalty a rection of E/	a includable comp	5.760  0.500  0.260  nt concrete  of centring						
La Pro 2 of	atering, taxes becification & dise of footing 4 1.20 nding Plateform 1 1.00 oviding and lay specified grade shuttering-all	& royalty a rection of E/	o included in compile.	5.760  0.500 6.260 ont concrete of centring						
La Pro 2 of	atering, taxes becification & dise of footing 4 1.20 nding Plateform 1 1.00 oviding and lay specified grade shuttering-all	& royalty a rection of E/	o included in compile.	5.760  0.500 6.260 ont concrete of centring						
Pro 2 of ano 1:1.	atering, taxes becification & dise of footing 4   1.20   nding Plateform 1   1.00   incomplete to the control of the control o	& royalty a rection of E/	on ceme	5.760  0.500 6.260 ont concrete of centring						
Pro 2 of ano 1:1. stor	atering, taxes becification & dise of footing 4 1.20 nding Plateform 1 1.00 oviding and lay specified grade shuttering-all 1.5:3(1 Cement aggregate 2)	& royalty a rection of E/	on ceme	5.760  0.500 6.260 ont concrete of centring						
La Pro 2 of and 1:1. stor bas	atering, taxes becification & dise of footing 4 1.20 Inding Plateform 1 1.00 Inding and lay specified grade I shuttering-all 15:3(1 Cement aggregate 2) is of footing and lay the aggregate 2 in a ggregate 2	8 royalty a rection of E/ 1.20 n 0.50 ing in position excluding to work upto pl 1.1.5 coars 0 mm nomin	o included in compile.  In the cost inth leventer in the cost in t	5.760  0.500 6.260 ont concrete of centring						
Pro 2 of and 1:1. story bass 4	atering, taxes becification & dise of footing 4   1.20   nding Plateform 1   1.00   poviding and lay specified grade is shuttering-all 1.5:3(1 Cement ne aggregate 2)   e of footing   1.20   1.	8 royalty a rection of E/ 1.20 1.20 1.20 1.20 1.20 1.20 1.20 1.20	o included in compile.  In the cost inth leventer in the cost in t	5.760  0.500  0.260  nt concrete of centring  1.						
Pro 2 of ano 1:1. stor bas 4	atering, taxes becification & dise of footing 4 1.20 nding Plateform 1 1.00 poviding and lay specified graded shuttering-all 5:3(1 Cement aggregate 2) e of footing 1.20 1.	8 royalty a rection of E/ 1.20 1.20 1.20 1.20 1.20 1.20 1.20 1.20	o included in compile.  In the cost inth leventer in the cost in t	5.760  0.500 6.260 ont concrete of centring						
Pro 2 of and 1:1. story bass 4	atering, taxes becification & dise of footing 4 1.20 nding Plateform 1 1.00 oviding and lay specified grade 1 shuttering-all 15:3(1 Cement aggregate 2 e of footing 1.20 1.	& royalty a rection of E/ 1.20	on ceme the cost inth leve se sand all size)	5.760  0.500  0.500  6.260  nt concrete of centring  1. 3 graded						
Pro 2 of ano bas 4 For 4	atering, taxes becification & dise of footing 4 1.20 nding Plateform 1 1.00 poviding and lay specified grade 1 shuttering-all 5:3(1 Cement aggregate 2 e of footing 1.20 1. Grouting at bas 1.20 0.20 0.	& royalty a rection of E/ 1.20  n 0.50  ing in position of E/ work upto pl 1.1.5 coars mm nomin 20 0.100  se plate	on ceme he cost inth leve se sand	5.760  0.500  0.260  nt concrete of centring  1.						
Pro 2 of ano bas 4 For 4	atering, taxes becification & dise of footing 4   1.20   nding Plateform 1   1.00   oviding and lay specified grade   1.5:3(1 Cement aggregate 2)   1.20   1.   Grouting at bas   0.20   0.   ding Plateform	8 royalty a rection of E/ 1.20	on ceme the cost inth leve se sand all size)	5.760  0.500  0.500  6.260  nt concrete of centring  1. 3 graded						
Pro 2 of ano 1:1. storn bas. 4 For 4 Lance	atering, taxes becification & dise of footing 4 1.20 nding Plateform 1 1.00 poviding and lay specified grade 1 shuttering-all 5:3(1 Cement aggregate 2 e of footing 1.20 1. Grouting at bas 1.20 0.20 0.	8 royalty a rection of E/ 1.20 1.20 ing in position of E/ e exluding to the extending to th	on ceme the cost inth leve se sand all size)	5.760  0.500  6.260  nt concrete of centring 1. 3 graded  0.576						
Pro 2 of ano bas 4 For 4 Lano 1	atering, taxes becification & dise of footing 4   1.20   nding Plateform 1   1.00   oviding and lay specified grade   shuttering-all   5:3(1 Cement aggregate 2)   e of footing   1.20   1. Grouting at bas   0.20   0. ding Plateform   1.00   0.5	8 royalty a rection of E/ 1.20   n   0.50   ing in position of E/ work upto pl 1.20   0.100   ing in position of E/ 20   ing in position of E/ 20   ing in position of E/ 20   ing in position of E/ 20   ing in position of E/ 20   ing in position of E/ 20   ing in position of E/ 20   ing in position of E/ 20   ing in position of E/ 20   ing in position of E/ 20   ing in position of E/ 20   ing in position of E/ 20   ing in position of E/ 20   ing in position of E/ 20	on ceme the cost inth leve se sand all size)	5.760  0.500  0.500  6.260  nt concrete of centring  1.3 graded  0.576  0.008	6.260	<b>7</b> 2	P/M <sup>2</sup>			
Proving the state of the state	atering, taxes becification & dise of footing 4   1.20   nding Plateform 1   1.00   inding Plateform 1   1.00   inding Plateform 1   1.20   1.5:3(1   Cement aggregate 2)   inding Plateform 1.20   1.00   0.5   inding Plateform 1.00   0.5   inding Plateform 1.00   0.5   inding and leving and leving plateform 1.00   0.5   inding Plateform 1.00   0.5   inding and leving plateform 1.00   0.5   inding plateform 1.00   0.5   inding and leving plateform 1.00   0.5   inding plateform 1.00   inding plat	8 royalty a rection of E/ 1.20   n   0.50   ing in position of E/ work upto pl 1.5 coars 0 mm nomin 20   0.100 0.100 0.100 0.100 0.100 0.100	on ceme the cost inth leve se sand all size)	5.760  0.500  0.500  6.260  nt concrete  of centring  1.  3 graded  0.576  0.008  0.050  0.634  0		<b>7</b> 2	P/M <sup>2</sup>	Rs.253.80	) F	Rs.1,588.79
Proviof rei	atering, taxes becification & dise of footing 4 1.20 nding Plateform 1 1.00 pviding and lay specified grade 1 shuttering-all 5:3(1 Cement 1.20 1. Grouting at bas 0.20 0. ding Plateform 1.00 0.5 iding and laying inforced cemer 1.00 ding and laying and laying inforced cemer 1.00 ding	8 royalty a rection of E/ 1.20	on ceme the cost inth leve se sand all size)	5.760  0.500 6.260 int concrete of centring 1. 3 graded  0.576  0.008  0.050 0.634 0 ed grade	6.260	<b>7</b> 2	P/M <sup>2</sup>		) F	
Proviof rei of er	atering, taxes becification & dise of footing 4   1.20   nding Plateform 1   1.00   oviding and lay specified grade   1.5:3(1 Cement aggregate 2)   e of footing   1.20   1.   Grouting at base   0.20   0.   ding Plateform   1.00   0.5   ding and laying inforced cementaring, shuttering	8 royalty a rection of E/ 1.20 1.20 ing in position of E/ 20 0.100 se plate 20 0.050 g in position of E/ 20 0.100 g in position of E/ 20 0.100	on ceme the cost inth leve se sand all size)	5.760  0.500 6.260 int concrete of centring 1. 3 graded  0.576  0.008  0.050 0.634 0 ed grade	6.260	<b>7</b> 2	P/M <sup>2</sup>	Rs.253.80	) F	Rs.1,588.79
Proviof rei of er All wo	atering, taxes becification & dise of footing 4   1.20   nding Plateform 1   1.00   oviding and lay specified grade   1.5:3(1 Cement aggregate 2)   1.20   1.   Grouting at base   0.20   0.   ding Plateform   1.00   0.5   oviding and laying inforced cementaring, shuttering ork puto plinth is precification   1.00   0.5   oviding and laying inforced cementaring, shuttering ork puto plinth is precification   1.00   over the puto plinth is precifica	8 royalty a rection of E/ 1.20 1.20 1.20 1.20 1.20 1.20 1.20 1.20	n specific excluding and reinfo	5.760  0.500  0.500  6.260  nt concrete of centring  1. 3 graded  0.576  0.008  0.050  0.634 0 ed grade the cost	6.260	<b>7</b> 2	P/M <sup>2</sup>	Rs.253.80	D F	Rs.1,588.79
Provious endings of the control of t	atering, taxes becification & dise of footing 4   1.20   nding Plateform 1   1.00   nding Plateform 1   1.00   nding Plateform 1   1.20   1.00   nding Plateform 1.20   1.00   nding Plateform 1.00   0.50   nding Plateform 1.00   nding Plateform 1.00   nding shuttering, shuttering prik puto plinth in 3(1 cement: 1	8 royalty a rection of E/ 1.20   1.20	on ceme the cost inth leve se sand all size)  r specific excluding and reinfo	5.760  0.500  0.500  6.260  nt concrete of centring  1. 3 graded  0.576  0.008  0.050  0.634 0 ed grade the cost	6.260	<b>7</b> 2	P/M <sup>2</sup>	Rs.253.80	D F	Rs.1,588.79
Provious endings of the control of t	atering, taxes becification & dise of footing 4   1.20   nding Plateform 1   1.00   nding Plateform 1   1.00   nding Plateform 1   1.20   1.00   nding Plateform 1.20   1.00   nding Plateform 1.00   0.50   nding Plateform 1.00   nding Plateform 1.00   nding shuttering, shuttering prik puto plinth in 3(1 cement: 1	8 royalty a rection of E/ 1.20   1.20	on ceme the cost inth leve se sand all size)  r specific excluding and reinfo	5.760  0.500  0.500  6.260  nt concrete of centring  1. 3 graded  0.576  0.008  0.050  0.634 0 ed grade the cost	6.260	<b>7</b> 2	P/M <sup>2</sup>	Rs.253.80	D F	Rs.1,588.79
Prove of rei of er All words.	atering, taxes becification & dise of footing 4 1.20 nding Plateform 1 1.00 poviding and lay specified grade 1 shuttering-all 5:3(1 Cement 1.20 1.00 1.00 1.00 1.00 1.00 1.00 1.00	8 royalty a rection of E/ 1.20   1.20	on ceme the cost inth leve se sand all size)  r specific excluding and reinfo	5.760  0.500  0.500  6.260  nt concrete of centring  1. 3 graded  0.576  0.008  0.050  0.634 0 ed grade the cost	6.260	<b>7</b> 2	P/M <sup>2</sup>	Rs.253.80	D F	Rs.1,588.79
Prove of rei of er All words.	atering, taxes becification & dise of footing 4   1.20   nding Plateform 1   1.00   nding Plateform 1   1.00   nding Plateform 1   1.20   1.00   nding Plateform 1.20   1.00   nding Plateform 1.00   0.50   nding Plateform 1.00   nding Plateform 1.00   nding shuttering, shuttering prik puto plinth in 3(1 cement: 1	8 royalty a rection of E/ 1.20 1.20 1.20 1.20 1.20 1.20 1.20 1.20	on ceme the cost inth leve se sand all size)  r specific excluding and reinfo	5.760  0.500  0.500  6.260  nt concrete of centring  1. 3 graded  0.576  0.008  0.050  0.634 0 ed grade the cost	6.260	<b>7</b> 2	P/M <sup>2</sup>	Rs.253.80	D F	Rs.1,588.79

S.N.	ļ		Par	liculars							
<u> </u>	Colun	n belov	v GL		<del></del>	L	Quar	itity	Unit	Rate	
	4	0.20		0.05						Kate	Ameou
	Colum	n above		0.85	_= 0.1	136		_	<del>-</del>	<del> </del>	
	4	,						<del>+</del>	<u> </u>		
		0.20	0.20	0.25	=	40			<del>-</del>		
7-	<del></del>	; 	<u>i</u> _ [			76		; <del> -</del>	<del>-</del>		!
	Centrir	ng .	and	shuttering			1.376	M³	P/M <sup>3</sup>	Rs.4,530.3	- <del></del>
J. J.	struttin	g,propp	ing etc. a	nd removal	includi of form for.	ng					0Rs. <b>€</b> ,2
·- <b>-</b> <u> </u>	16	1.00	0.30	:					1 <u></u>		:
	16	0.20	0.85	— · · · · · · · · · · · · · · · · · · ·	4.80	00	/				<del> </del>
-	16	0.20		4 _	2.72	20	:		<del>-</del>	7	-:
			0. <b>2</b> 5		= 0.80	00.			·	· - ·	
8- F	Ceinfor	·		!	8.32	<del></del>	8.320 (			· •	
5.22 s	traiche	ement	for R	.C.C. wo			0.320	vi- - — :	P/M <sup>2</sup>	Rs. 169.00	Rs. 1,40
, –	nd biss	anng, ci	utting, bei	i	irk includin ing in positio	ອ n	:				- <u>10. 1,4</u>
					2 70000	.,					
<del>5</del>	Otal Da	io mm	tor steel			Ţ	·	· · <u>-</u>		3.	
· [·	orai ve	inforcer	ment.		·		- · · -	·i			···
9 Fi	lling -	OI VOI.	Of Concr	<b>e</b> te	=	. 8	6.00 K	a .	P/Kg.		
.26 in	iniy av	allable	excavated	d earth (exc	cluding rock			<u>-</u> :_	· ····································	Rs.56.00	Rs 4,816
روا	u ench Ære	es, plin	ith, sides	of ounda	cluding rock tions etc. in	/ 		į		·	<del></del>
ra)	uevijy- Veig (	iot ex	ceeding	20 cm	tions etc. in in depth:	1	÷		:	:	
				ited layer	in depth: by ramming		:	ļ			
10 Pro	<u>y water</u> Ovidina	ing lead	<u></u>			2	.086 M <sup>3</sup>		D 4 4 3	!	
	d 0 60 i	anu () 	ung anch	or bolt of	12 mm dia		IVI	- 🚣	P/M <sup>3</sup>	Rs.74.50	Rs. 155
all	Compl	ete se	ıın embec	lded in R.C	12 mm dia .C pedestal	!		ĺ	i		<u> </u>
cha	rge. @	4x2v∩ #	52201-	criou of E	ngineer in					:	
1- ∣Pai	nting	vith -			:	4.2	624∶Kg	-	Date:		
2.1 bra	nd and haa b⊓	mente mente	uy mixe	d paint of	approved to give an		~~ <u>~ rvg</u>	- :	P/kg	Rs.73.60	Rs.313.
	n shade		acture in	all shades	to give an			-			
New	/ stant	7. 					:	i		1	
Fran	ne work	ARIK (SW	o or more	e coats)				<u> </u>			
0.5						·· ·					·
0.5	., .,	2 100 100	00	= ·	21.000					·	
		<u>ا</u> عـــا	<b>5</b> 0		6.125			-			
Carri	200 06		i			 ファ・	10 . 2	;	1 2 1 14 2		
Work	aye 01 1	me tollo	owing mai	terials from			13 M²		M²	Rs.63.60	Rs 1 705 4
staki	oile oile	incingit	ng loadii	ng, unioad	quarry to			:	1		Rs.1,725.1
direct	ion of E	work s	site as p	ng, unload Der specifi	cation &				:		
(a) Br	icks / 7	Km D					!		į	•	
(b) C		<u> </u>	ucca & 1	Km. Kachh	a lead)	20	3 Nos	0/ 0	_ * + *		
- 1(-/	7G13E 3	ang (10	™ Km. lea	nd)	- · .;					₹s.606.10	Rs. 123.04
_(c) Sto	one Chi	ps (150	) Km la		*	0.86		P/			Rs 1 050
(d) Fo	cal San	d ( 2 Kr	n. Pucca	1) & 1 Km. Ka		1.730	$0 M_3$	P/I		4 - 4	Rs.1,050.14
	! <del>!</del>	T		<u>~</u>	cnna lea	0.720	$D M^3$	P/I	- <u>-</u> i	Rs.217.23	Rs.3,021.08
11 1			<del></del>	1.7		_					Rs. 156.41
		<del></del>	<del></del>	<del></del> -	<u> </u>		- 1 · · · · · · · · · · · · · · · · · ·			OTAL Rs.	,28,521.72
1										say Rs.1	,28,500.00

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An Journal



## GOVERNMENT OF BIHAR

PUBLIC HEALTH ENGINEERING DEPARTMENT

MODEL ESTIMATE

**FOR** 

CONSTRUCTION OF RURAL PIPED WATER SUPPLY SCHEME FOR A WARD HAVING 200 HOUSE HOLDS

ESTIMATED COST-- Rs. 11.713 Lac

2017-18

## **GOVERNMENT OF BIHAR** Public Health Engineering Department ABSTRACT OF COST

0

S.N.	E OF WORK:- CONSTRUCTION OF RURAL PIPED WATER SU D HAVING 200 HOUSE HOLDS  Description	<del></del>
1	Construction of 200/165 mm dia. 90 Mtr deep Drilled High Yield Tuber  By DTH RIG Machine with Blue seeing U.S. to Drilled High Yield Tuber	Total Amous
	By DTH RIG Machine with Blue seeing U.B. von Drilled High Yield Tuber	well
	By DTH RIG Machine with Blue casing U.P.V.C. Pipe etc. ail complete a sper direction of E/I. (As per sub Estimate no 1)	and
2	Constructing masonry Chamber 100+100-75	Rs.95,242
	Constructing masonry Chamber 100x100x75 cm inside, in brick work cement mortar 1:4 (1 cement : 4 coarse	in
- 1	cement mortar 1:4 (1 cement : 4 coarse sand) for Tube Well, and Retail to slab 1:1.5:3 mix (1 cement : 1.5 coarse)	cc
	aggregate 20mm; nominal size )	ne
Į.	concrete 1:2:4(1 cement : 2 fine sand : 4 =	ion
ļ	nominal size) and inside plastering with	nm
3	Booarse sand) 12 mm thick with 5% size ( in mortar 1:3 (1 cemen	t :
r	neat cement, out side plastering with cement mortar 1:4 (1 cement coarse sand) 12 mm thick complete as a second coarse.	cf
4	coarse sand) 12 mm thick complete as per standard specifications lirection of E/I. (As per sub Estimate no. 2)	: :
d	lirection of E/I. (As per sub Estimate no 2)	&
3 P	roviding and Laying Distrbution network of High Density Polyethyene pig	Rs.13,210.0
- (0	HDPE pipe) including 5000 liter by c. A. A. A.	oe
ا ا	HDPE pipe) including 5000 liter PVC tank installed at 3M high MS stagir	ng
ļsι	ibmersible pump set basing and testing of single phase 3 H.F.	Rs.5,26,592.0
lhe	ead of 35 meter (approx) of (Sp. 1819) capacity 3.35 lps at a total	ə <b>1</b> [
ac	cessories & fittings etc. including	u)
of	the pump set to the work are unloading and transportation	nl
an	d tackles installation, testing & commissioning as per standards	s
ISP	ecifications and direction of E/I.	S
Pro	s per sub Estimate no 4)	D
ma	oviding house connection for each house hold including supplying all terials, labours, tools and making ferrula connections.	Rs.93,603.00
MC	iterials, labours, tools and making ferrule connection with 20 mm dia	
(As	PE and 15mm CPVC Pipes with all fittings etc all complete.  per sub Estimate no 5)	
Pro	viding and erecting 3 M high stories (	Rs.3,02,600.00
1	viding and erecting 3 M high staging of suitably designed MS section of	
lang	le, channel etc. as per drawing attached. (As per sub Estimate no 6)	
	TOTAL	Rs.1,28,500.00
		Rs.11,59,748.00
	Add 1% Contingency	Rs.11,597.48
	G. TOTAL	
		Rs.11,71,345.48
(Rs	Eleven Lakh Seventy one Thousand Three Life Say	Rs.11,71,300.00

(Rs. Eleven Lakh Seventy one Thousand Three Hundred) only

### Note:

i) This model estimate has been prepared in the light of Guidelines of PRD, Bihar memo no. 6278 dt.23.09.2016. This estimate may not ensure standard pressure in the distribution network. Hence on the spot change in staging of storage tank may be required.

ii) Water quality testing of source should be done after construction of Tube well.

iii) Road cutting cost may increase or decrease as per local condition.

Technical approval accorded for Rs.11,71,300.00 (Rs. Eleven Lakh Seventy one Thousand

Chief Engineer (Design) Public Health Engineering Departmen

Bihar, Patna

Estimate no.- 1

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	DDEL ESTIMATE OF CONSTRUCTION OF 200/165 MM DIA. 9  DTH RIG MACHINE WITH BLUE C	ASING U.I	V.C. PIP	E	
. N					<del></del>
1	Drilling of 200mm x 165mm x 125 meter deep borewell	Quantity	unit	Rate	Amour
	in all kinds of soil and rock in rural area for installation	1			Airioui
	of pump set with History III	i		ł	
	of pump set with Hydaraulic DTH Rig machine, all		1	ł	
	complete including supplying all materials, tools, drilling			j	İ
	1. 8) All Compressor and equipments as well as the				-
	represents and cost of transportation of Pig and		1		
	and other venicles up to the site etc all complete as an				
	1 pecinication and direction of F/I			İ	
	(i) Up to 50 mtrs depth below GI				
	(ii) Beyond 50 mtrs. Up to 90 Mtrs	50	P/M	Rs.729.5	2 Rs.36,476
	Supplying, assembling, lowering and fine	40	P/M	Rs.867.88	
	I' SVIC WELL IMPLACTION AND THE				1
	I WCH COSINE (CM) pipe of .	İ			
	I """ b 19 J. J. 2018 (actualism as a second second	- 1			
	1 Clarkes, Illings & accessories at the	- 1		1	-
	The reputation of Engineer	1		1	
$\dashv$		24		}	
- 1	Supplying labour, cement and calcium chloride or		<u>P/M</u>	Rs.921.70	Rs.22,120.
Į	becomes solution and equipments for any	- 1		[ ]	
_	The control of the co	_			
- 1	THE OIL LOUIS LABORS and position	1	Each	Rs.51.01	Rs.51.0
	O TOTAL SECURIOR OF ALIVER A				
- 1 -	with and cled water / min are .	- 1		} }	
_		[	i		
13	upplying labors and equipments including 200	2.5	P/Hr	Rs.649.40	Rs.1 623.5
1''			j		
a	nd taking out as per direction of E/I.	1	1		
	v: c/1.	1	Each	Rs.256.40	Rs.256.40
		<del></del>			Rs.95,242.91

#### (Sub Estimate - 2) Analysis of Chamber for TW

0

Supplying materials, labours and constructing chamber of following dimension having 250mm thick wall in C.M. (1:4) in cluding 12mm C.P. (1:3) with punning inside, R.C.C. cover slab with C.I. Surface box , 20mm dia foot rest at 150mm interval 10mm dia lifting ring etc. all complete.

	SIZE	1.0	0 M	×	1.0	0 M X			,
			<u> </u>		1.0	<u> </u>	0.75	M deep	
<u>S.O.R.</u> No.	<u>Particulars</u>	No.	Ē	w	H	Qty.	Unit	Rate	Amount
<u>1</u>	Earth work in excavation	1	1.75	1.75	1.0	<u></u>			Amount
S.O.R. No		•	1.73	1.75	1.0	$3.063  \mathrm{M}^3$	P/M³	Rs 230.50	Rs.705.91
<u>2</u>	Sand filling	1	176	4 75	0.075				
S.O.R. No		ı	1.73	1.75	0.075	0.230 M <sup>3</sup>	P/M <sup>3</sup>	Rs 204.40	Rs.46.95
<u>3</u> S.O.R. 11	Brick flat soling	1	1.75	1.75		3.063 M <sup>2</sup>	P/M²	Rs.253.80	Rs.777.26
4									185.111.20
S.O.O. 4.	P.C.C. (1:2:4) in foundation	1	1.75	1.75	0.10	0.306 M <sup>3</sup>			
0.0.0.4.	1.5								
<u>5</u>	BANack in (1.4) O se	_				0.306 M <sup>3</sup>	P/M <sup>3</sup>	Rs.3.850.50	Rs.1,179.22
S.O.R. No	B/Work in (1:4) C.M.	2	2.50	0.25	0.75	0.938 M <sup>3</sup>		Rs.4,724.40	Rs.4,429.13
6									113.4,423.13
_	R.C.C. Cover slab(1:1.5:3) . 5.2.2 & 5.9.3	1	1.50	1.50	0.15	0.33 <b>8 M</b> 3	P/M <sup>3</sup>	Rs.5,139.70	Rs.1,734.65
	shuttering	_							143.1,7 04.00
_ (	C.P. (1:3) with 5% Cico &	2	1.50	1.50	0.15	3.15 M <sup>2</sup>	P/M²	Rs.291.00	Rs.916.65
<u>7</u>	neat cement							-	110.510.05
	Internal face	2	4.00						
No.		2	1.00	1.00	1.00	4.00 M <sup>2</sup>			
13.17.1 E	Bed surface	1	1.00	1.00		1.00 M <sup>2</sup>			
+13.36.1									
						5.00 M <sup>2</sup>	P/M <sup>2</sup>	Rs.166.30	Rs.831.50
<u>8</u> C	C.P. (1:4) out side of wall	2	1 50	1.50	<b></b> -				
S.O.R. No.		2	1.50	1.50	0.75	4.5 M <sup>2</sup>	P/M <sup>2</sup>	Rs.114.70	Rs.516.15
9 8 S.O.R. No.	mm dia T.S. Rod								
3.U.K. NO.	5.22.7A								
		0.338	8#3 x	70	(g/	22.000.44	_		
17	ifting Ring of 10mm dia	0.000	rvi	′′	<b>/</b> 13	23.625 Kg.	P/Kg	Rs.56.00	Rs.1,323.00
10 R	od cong or romm dis					4 <b>N</b> o.	C t-		
						4 NO.	Each	Rs.30.00	Rs.120.00
<u>11</u> C	arriage of materials 5%							Total	Rs.12,580.41
								·	Rs.629.02
						_	<b>-</b>		Rs.13,209.43
						Say	Rs.13,2	210.00	

	Sub Est. N	lo. 3		·			
	WATER SUPPLY DISTR		N SYS	TEM		· · · · · · · · · · · · · · · · · · ·	
S.N. 1A	Particulars		uantit		Jnit	D-4-	<del></del>
1/4	Earthwork in excavation over areas (exceeding 30 cm i	n		<del>'</del>		Rate	Amount
	depth 1.5 in width as well as 10 sqm on plan) including	g				:	
	disposal of excavated earth lead upto 50m and lift upto	0					
	1.5m, disposal earth to be levelled and neatly dressed	!	}				
	90mm dia Pipe 70.00 0.30 1.10 =	23		· · <u>- · · · · · · · · · · · · · · · ·</u>			<del>-</del>
-	75mm dia Pipe 140.00 0.30 1.10 =		5. <b>2</b> 0			· · ·—· <u>—</u>	<u> </u>
:	63mm dia Pipe 210.00 0.30 1.10 =	·			-	· · · ·	
_ :	50mm dia Pipe 420.00 0.30 1.10 =		6.60				
:	40mm dia Pipe 560.00 0.30 1.10 =		.80,		_	·	<u> </u>
			.00 M	<u>;</u> :			i <u> </u>
_ !	Add 5% extra for fittings =		10 M	1	-	· = ,	<del></del>
B [	Provision for PCC road cutting and its restoration		10 M		 M <sup>3</sup>	Rs 230 50	Rs.1,11,815.5
f	illing available excavated earth (excluding rock) in	15	75 M			Rs.4,428.80	Rs.69,753.60
t	renches, plinth, sides of foundations etc. in layers not			i			
e	exceeding 20cm in depth, consolidating each deposited			i			) 
lá	ayer by ramming and watering, lead up to 50 m and lift		÷	!			į
u	:ptO 1.5 m,						
P	Providing and laying High Density Polyethyene pipe	<u>475.</u>	40 M <sup>3</sup>	P/N	/ <sup>3</sup>	Rs.74.50	Rs.35,417,15
- ; 😯	TO E pipe) of 20 mm to 225 mm OD and process 6.0						· · · · · · · · · · · · · · · · · · ·
110	g/cm2 and 10 kg/cm2 sutable for water supply which						
į a	valiable in all standard, like ISL4984/1005						
9	ades like PE-80, PE-100 including required appoint	,					
	attoo are inclusive of , all taxes and duties /Evice of t						}
CO	212.50% &CST @2% against Form 'C'), labour cess,		1				
ре	ontractor profit and overhead charges all complete as er direction of Engineer-in-charge.					!	
HC	OPE pipe of materials grade PE100- PN10 (dia in mm)		:			:	
i	··· · · · · · · · · · · · · · · · · ·		•				
	MM dia Pine from DVC T						
75	Tank to Distribution main	14.0	 2.84			•	Rs.3,357.34
75 90	mm dia Pipe from PVC Tank to Distribution main mm dia Pipe	14.0		P/M		Rs.239.81	110,0,007,047
90	mm dia Pipe	70.0	) M	P/M P/M		Rs.239.81 Rs.340.84	Rs.23,858.80
90 75	mm dia Pipe mm dia Pipe		) M				Rs.23,858.80
90 75ı 63r	mm dia Pipe mm dia Pipe mm dia Pipe	70.0	) М Р.М	P/M	F	Rs.340.84 Rs.239.81	Rs.23,858.80 Rs.33,573.40
90 75ı 63r	mm dia Pipe mm dia Pipe mm dia Pipe	70.00	) М Р.М	P/M P/M	F	Rs.340.84	Rs.23,858.80
90 75 63r HD	mm dia Pipe mm dia Pipe mm dia Pipe mm dia Pipe PE pipe of materials grade PE100- PN8 (dia in mm) nm dia Pipe	70.00 140.00 210.00	D M D M	P/M P/M	F	Rs.340.84 Rs.239.81	Rs.23,858.80 Rs.33,573.40
90 75ı 63r HD	mm dia Pipe mm dia Pipe mm dia Pipe  PE pipe of materials grade PE100- PN8 (dia in mm)  nm dia Pipe  nm dia Pipe	70.00 140.00 210.00	M M M	P/M P/M	F	Rs.340.84 Rs.239.81	Rs.23,858.80 Rs.33,573.40 Rs.35,441.70
90 75 63r HD 50n 40n	mm dia Pipe mm dia Pipe mm dia Pipe  PE pipe of materials grade PE100- PN8 (dia in mm)  nm dia Pipe  nm dia Pipe  nm dia Pipe  nm dia Pipe from T/well to PVC Tank	70.00 140.00 210.00 420.00 560.00	O M O M O M	P/M P/M P/M	F	Rs.340.84 Rs.239.81 Rs.168.77	Rs.23,858.80 Rs.33,573.40
90 75 63r HD 50n 40n Prov	mm dia Pipe  mm dia Pipe  mm dia Pipe  PE pipe of materials grade PE100- PN8 (dia in mm)  nm dia Pipe  nm dia Pipe  nm dia Pipe  nm dia Pipe from T/well to PVC Tank  viding and fixing brass gate valve with C.I. wheel of	70.00 140.00 210.00	O M O M O M	P/M P/M P/M	F	Rs.340.84 Rs.239.81 Rs.168.77	Rs.23,858.80 Rs.33,573.40 Rs.35,441.70
90 75 63r HD 50n 40n 50rr	mm dia Pipe  mm dia Pipe  mm dia Pipe  PE pipe of materials grade PE100- PN8 (dia in mm)  nm dia Pipe  nm dia Pipe  nm dia Pipe  nm dia Pipe from T/well to PVC Tank  viding and fixing brass gate valve with C.I. wheel of	70.00 140.00 210.00 420.00 560.00	O M O M O M	P/M P/M P/M P/M	F	Rs.340.84 Rs.239.81 Rs.168.77 Rs.89.99 Rs.59.78	Rs.23,858.80 Rs.33,573.40 Rs.35,441.70 Rs.37,795.80 Rs.33,476.80
90 75 63r HD 50n 40n 50n Prov	mm dia Pipe mm dia Pipe mm dia Pipe  PE pipe of materials grade PE100- PN8 (dia in mm)  nm dia Pipe  nm dia Pipe  nm dia Pipe  nm dia Pipe from T/well to PVC Tank	70.00 140.00 210.00 420.00 560.00	M M M M	P/M P/M P/M P/M P/M	F	Rs.340.84 Rs.239.81 Rs.168.77 Rs.89.99 Rs.59.78 Rs.89.99	Rs.23,858.80 Rs.33,573.40 Rs.35,441.70 Rs.37,795.80 Rs.33,476.80
900 750 63r 50n 50nr Prov appi	mm dia Pipe mm dia Pipe mm dia Pipe  PE pipe of materials grade PE100- PN8 (dia in mm) nm dia Pipe nm dia Pipe nm dia Pipe nm dia Pipe from T/well to PVC Tank viding and fixing brass gate valve with C.I. wheel of roved quality (screwed end). m dia Pipe	70.00 140.00 210.00 420.00 560.00	O M O M O M	P/M P/M P/M P/M P/M	F	Rs.340.84 Rs.239.81 Rs.168.77 Rs.89.99 Rs.59.78	Rs.23,858.80 Rs.33,573.40 Rs.35,441.70 Rs.37,795.80 Rs.33,476.80
900 750 63r 50n 50n Prov appi 90m	mm dia Pipe mm dia Pipe mm dia Pipe  PE pipe of materials grade PE100- PN8 (dia in mm) nm dia Pipe nm dia Pipe nm dia Pipe nm dia Pipe from T/well to PVC Tank viding and fixing brass gate valve with C.I. wheel of roved quality (screwed end).	70.00 140.00 210.00 420.00 560.00 12.00	M M M M	P/M P/M P/M P/M P/M	F F F F F F F F F F F F F F F F F F F	Rs.340.84 Rs.239.81 Rs.168.77 Rs.89.99 Rs.59.78 Rs.89.99	Rs.23,858.80 Rs.33,573.40 Rs.35,441.70 Rs.37,795.80 Rs.33,476.80 Rs.1,079.88

S.N.	<del></del>	Particular	s			Quai	ntity	Unit	t Rate	
	50mm dia Pipe						3 Nos	<del></del>		Amo unt
	40mm dia Pipe			<del> </del>			+-			
5	Constructing masonry	Chamber	60x60x	75. cm	inside in	<del>-</del>	3 Nos	5.	Rs.613.	90 Rs.1, 841.7
18.33	Drick work in cement	mortar 1:4	(1 ce	ment ·	4 charse					
	sand) for sluice valve	with C.I. s	urface	box 10	Omm ton		1	ĺ		
	diameter, 160 mm bot	ttom diamet	ter and	180 m	m deen (			İ		
	finside) with chained fi	id and RCC	top s	lab 1.2	4 miv (1		ļ			1
	cement : 2 coarse s	and: 4 gr	raded s	stone a	ggregate					
	20mm nominal size )	necessary	excava	ation, fo	undation					1
	concrete 1:5:10(1 cem	ent : 5 fine	sand:	10 grad	led stone		i	i		
	aggregate 40 mm nom	inaisize) an	id inside	e plaste	ring with			•		:
	cement mortar 1:3 (1 thick, finished with a	floating	ocot c	sand)	12 mm		:	:		!
į	complete as per standa	rd specifica	tione &	dispetie	cement		:			1
	Work for additional dep	th	LIOTIS &	directio	on of E/I.	11	Nos.	Each	Rs.5,807.5	0 Rs.63,882.50
	Brick work (1:4) in found	dation	<del></del>		<u>;</u> .		<u></u>	.i .≟ .		
	2	1.10	0.25	0.35	0.193		<del>-</del>	• • •	·	
		0.60 <sub>i</sub>	0.25	0.35	0.105			4		·
			0.23	0.551	0.298	2 272	<u> </u>		·	
1	Plaster (1:3)			· -		J.273	CuM	CuM	Rs.4,724.40	Rs.15,460.60
·	8.	1.10	<del></del>	0.35	3.08				· · · · · · · · · · · · · · · · · ·	·
6 (	Carriage 10% of item 5					33.88	SqM	SqM	Rs.128.20	Rs.4,343.42
<u>7</u> 3.48	Providing and placing	on terrace	at a	ll floor	levels)	<del> </del>	-			Rs.8,368.65
, <del>, , ,</del> p	olyethylene water stora	ige tank, ISI	l : 1270	1 mark	ed with					
C	cover and suitable loc	king arran	gemen	and	makina					
n	ecessary holes for inle	et. outlet an	nd over	flow pir	making					
w	vithout fittings and the b	ase support	for ton	r. now bit	des but					1
2 /5	roviding and fixing PI	MT extens	ion nic	nle for	:	5000	Ltrs.	P/Ltr.	Rs.6.60	Rs.33,000.00
	and pipe, addings of appr	oved quality	and co	olour.	Water			;		
50	0mm dia		<del></del>	— <del>—</del> .	! <u></u>	 2 !	 Nos.		D- 050 051	· · · · · · · · · · · · · · · · · · ·
7	5mm dia				· - · · · · · · · · · · · · · · · · · ·			each	Rs.250.00	Rs.500.00
	- <del>-</del>					ן ו	<b>N</b> o.	each	Rs.400.00	Rs.400,00
									TOTAL	Rs.5,26,592.09

C

Sub Est. No. 4

Model estimate for supply, installation & commissioning of single phase 3 H.P submersible motor pump set with all accessories including extension of L.T. line from nearest source up-to pumping station.

Sl. No.	Particulars	Quantity	Unit	Rate	Amount
1					
	Supplied a stall at	3	4	5	6
1	Supply Installation, commissioning and testing of single phase 3 H.P. submersible pump set having discharging capacity 3.35 lps at a total head of 35 meter(approx) of KSB/ Kirloskar or equivalent make with all accessories & fittings etc including loading unloading and transportation of the pump set to the work site with all required labour, materials, tools and tackles installation, testing & commissioning as per standards specifications and direction of	1 (one) job	p/job	Rs.42,700.00	Rs.42,700.00
() r b s (i) (i) (i) (i) (i) (v) (v) (v) (v) (v)	i) 50 mm dia x 3 mtrs long medium class G.I column pipe both end thread and one end ocketed- 6(six)nos ii) 1x3x2.5 mm² flat copper onductor submersible cable -40 forty) mtrs. ii) 50 mm dia union socket-(one) no. v) 65 mm dia x 250 mm long G.I. ipple- 1 (one) no. v) 50 mm dia G.I Elbow—1(One) o. ii) 50 mm dia M.S. amps—2(Two) Pairs. iii) 50 mmx 250 mm long G.I pple- 1(One) no. iii) Tube well cap for T/Well — one) no.				

(ix) 50 mm dia x 65 mm dia	1	ł		ļ	1
reducer socket –1(one) no.  [B] Supply Installation, commissioning and testing of floor mounted outdoor type L.T feeder pillar single phase starte controll pannel operated on 220 V, 3 phase, 50 c/s for 3 HP Submersible pump set made of MS sheet (minimum 2 mm thick	0	ne) job	p/job	Rs.45,500.00	Rs.45,500.0O
duly spray power coated painting with following accessories made of M.S sheet (minimum 2mm thick) duly spray powder coated painting with following accessories  (i) 90-220 V range single phase7.  5 KVA automatic voltage stabilizer make- Sen & Pandit/ Vertex/ISI marked If any. 1 No.	g				
(ii) Suitable single phase starter control panel for above motor of BCH /L&Tmake – 1(one) no.					
Copper service cable from power point from nearest source up-to pumping station  [D] Providing all materials and labour	20 mtrs	P/N	Λt	Rs.130.00	Rs.2,600.00
required for doing earthing station with G.I earth pipe of 40 mm dia x 4.5 mtrs 20fts. long G.I pipe including accessories excavation of earth, providing masonry enclosure with cover plate having locking arrangement and watering pipe etc. with salt, charcoal, etc. as per IE & IS specification.	l job	p/	/job F	Rs.2,803.00	Rs.2,803.00
			Tota	Rs.	Rs.93,603.00

Sub Est. No. 5

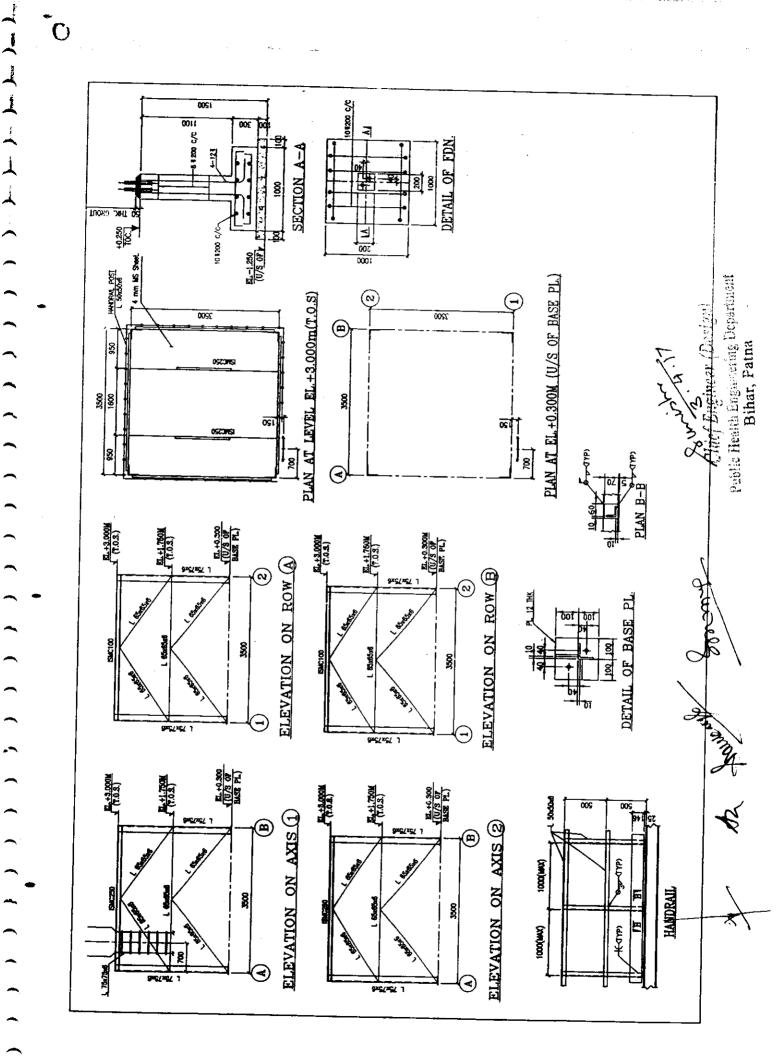
<del>-</del>	Estimate for the work - Hou	ise ser	vice cor	nection	
S.No.	SUB-ESTIM	ATE		Ancetton	
1A	Description	Q	ty Un	it Rate	Amous
177	Providing and fixing MDPE (PE	80			Amount
	GradeCompound) pipes PN-12.5 (12.5kg/Sqci	m)	-		
	as per 150 4427 and specification 4		1		
	waterapplication rates are inclusive of, taxes at	nd			
	duties (Exise duty @12.50% &CST @2% again	C.			
	1 on Ch. labour cess, contractor profit of	اد۔			
	lovernead charges all complete asper direction.	of			
	Engineer-in-charge.complete.				
	MDPE Pipe 20mm dia nominal bore	<del></del>			
1B	Providing and fixing Chlorinated Polyving	6.0	0 PM	Rs.19.9	7 Rs.1 19.8
	Chloride (CPVC) pipes, having thermal stabilit	y1			
	for hot & cold water supply, including all CPV	У	İ		
	plain & brass threaded fittings, including fixin	C	1		
	the pipe with clamps at 1.00 m spacing. This	g			
	includes jointing of pipes & fittings with one ste	S			
	CPVC solvent cement and testing of joint	р		1	
	complete as per direction of Engineer in Charge.	S	İ		
	Internal work - Exposed on wall	ł			,
	osed on wan	1			
8.7.1	15 mm nomonal bore	1.0	<del> </del>		
2	Earth work in excavation in foundation trenches	,	PM	Rs.138.70	Rs.138.70
	or drains(not exceeding 1.5 m in width or 10 same	.]	ļ		
	on plan) including dressing of sides and ammine	.[			
	101 bottoms, HR upto 1.5 m including gatting and	, I			
	file excavated soil and disposal of surplus	1	ľ		
j	excavated soil as directed, within a lead of 50 m	1		1	
	All kinds of soil		1		
.8.1	6.00 0.30 0.60 1.08	1.00		<u> </u>	
3	Filling available excavated earth (excluding rook)	1.08	CuM	Rs.230.50	Rs.248.94
20	in uchcles, plinth, sides of foundations etc. in			}	
ſ	tayers not exceeding 20 cm in denth-		}		}
[	consolidating each deposited layer by ramming			Rs.74.50	Rs.78.85
1	and watering lead	1.00			}
4	Providing and fixing brass ferrule with CI mouth	1.06	CuM		`
ļ.	cover incuding boring and tapping the main:			ļ	
	Fring the man.				
20.1	15mm nominal bore	1	Each	Rs.254.10	
1	Providing and fixing P.P. Black service Saddle				Rs.254.10
	Diass ureaded)	1	Each	Rs.400.00	Rs.400.00
	Providing and fixing brass bib cock of approved				
	uality:	[		i	
	5mm nominal bore	1	Each	Rs.273.00	Rs.273.00
$\Box \Box$	Total Say				Rs.1,513.41
T	otal Nos. of House Holds= 200 N	os '	@	Ps 1 542 00	Rs.1,513.00
	200 14	(	₩	Rs.1,513.00	Rs.3,02,600.00

<u>S.N.</u> 1		2 M LIGE	OLEELS	TRUCTURE STA	GING FOR 5	000 LITE	R PVC TANK	·— -— ·—
	Structural					Unit	Rate	
<u>10.3</u>	Sections	steel work	riveted or	bolted in built up			Nate	Am <b>⊙</b> unt
	Cutting bois	dusess a	na framed	work, including	)	!	1	•
	Driming cos	at of appro	in positio	n and applying a	ı		1	•
- <del>-</del>	8M high s	taging wi	vea prime	r all complete.	··			!
	electric sw	itch nand	lof outto	closure to house	!-			<del></del>
	section of	angle ch	n Or Sultat	oly designed MS as per drawing	i j			
	attached.	ungic, cris	airrer, ecc	as per drawing			ļ	i 
2	Earth work	in excava	ation in for	indation trenches	1490 Kg	P/Kg	Rs.69.20	Rs.1,03,108.0
.8.1	ju diams(no	πexceedii	na 1.5 m∙ir	width or 10 ac-				
	Jori bian) ind	iuaina res	ssing of sig	tes and rommin-				
	OF DOLLOWS.	iiπ upto 1	.5 m incl	uding gotting and				
	rice excava	nea soil	and disn	osal of curplus			:	
	excavated 2	ioii as dire	cted, within	n a lead of 50 m.		:		
· <b>_</b>	TAIL KINGS OF	SOII		u loca of 50 fff.				
- <del>-</del>	base of footi			<u>                                     </u>		- <del>:</del> - · · · · ·	=	
	4 1.20		1.425	8.208		<del></del>		
	For fixing La	<del></del>			:	<del>-</del>		
	1 1.00	0.50	0.275	= 0.138	·	<u> </u>	<del>-</del>	····
	<u>L</u>			8 346	8.346 M <sup>3</sup>	P/M <sup>3</sup>	De 220 50	
-	Supplying an	nd filling in	plinth with	h local sand and	101	+ P/W_	Rs.230.50	Rs 1,923.64
-0	unger 1100f	s includ	ing wate	ring ramming		!	:	
	consolidating	and dres	sing compl	lete.	!	;	•	
	base of footing	ng	T	<del></del>	· <u></u> _	<del>-</del>		
1	4 1.20	1.20	0.10	0.576			 - +	· · · · · · · · · · · · · · · · · · ·
_ [	Landing Plate	eform	<del> </del>			<del>-</del>		
	1 1.00	0.50	0.10	= 0.050	+ <del>- +</del>	· ·	F	
- 1				0.636	0.626 M <sup>3</sup>	J	- <u></u>	
-  F	Providing de:	signation	of 100A E	trick flat Soline	0.020 19	<u> P/M³</u>	Rs.204.40	Rs. 127.95
·	ours illed A	MITU IOCAI	Sand inc	fuding cost of		: 		
	vatenng, tax	es & roy	altv all co	mplete as per				}
	becincation (	s direction	of E/I.	•				Ì
Ľ	ase of footing					-		
- 4	4 4 4 4	4 22		= 5.760	- 2		•	
-	4 1.20	1.20	——— — i	3.700				
-   L	anding Plate	form	———— ;		· · · · · · · 4		:	
_  L		form 0.50	— — — — ; — — — — -	= 0.500	· · · · · · · · · · · · · · · · · · ·		**************************************	
_	anding Plate 1 1.00	form 0.50	— — — — ; — — — — ;	= 0.500	6.260 M <sup>2</sup>	––––––––––––––––––––––––––––––––––––––		
-  -  -	anding Plate 1 1.00	form 0.50	position ce	= 0.500	6.260 M <sup>2</sup>	P/M <sup>2</sup>	Rs.253.80	Rs.1,588.79
P	anding Plate 1 1.00 roviding and	form 0.50 laying in		= 0.500 6.260 ement concrete	6.260 M²	P/M <sup>2</sup>	Rs.253.80	Rs.1,588.79
P	anding Plater  1 1.00  roviding and specified gr	form 0.50 laying in	ding the co	= 0.500 6.260 ement concrete ost of centring	6.260 M <sup>2</sup>	P/M <sup>2</sup>	Rs.253.80	Rs.1,588.79
P	anding Plated 1 1.00  roviding and f specified good	laying in	ding the county	= 0.500 6.260 ement concrete ost of centring	6.260 M <sup>2</sup>	P/M²	Rs.253.80	Rs.1,588.79
P of	anding Plated 1 1.00  roviding and f specified grand shuttering-1.5:3(1 Cert	laying in rade exluderall work unent :1.5	ding the control plinth I coarse s	= 0.500 6.260 ement concrete ost of centring evel.	6.260 M <sup>2</sup>	P/M²	Rs.253.80	Rs.1,588.79
P 2 of ar 1:	anding Plated 1 1.00  roviding and f specified grad shuttering-1.5:3(1 Cerrone aggregate)	laying in rade exturing the rate and the rat	ding the control plinth I coarse s	= 0.500 6.260 ement concrete ost of centring evel.	6.260 M <sup>2</sup>	P/M <sup>2</sup>	Rs.253.80	Rs.1,588.79
P 2 ol aı 1:	anding Plated 1 1.00  roviding and f specified good	laying in rade exturing the rate and the rat	ding the control plinth I coarse s	= 0.500 6.260 ement concrete ost of centring evel.	6.260 M²	P/M <sup>2</sup>	Rs.253.80	Rs.1,588.79
P 2 of ar 1:	anding Plated 1 1.00  roviding and f specified grad shuttering-1.5:3(1 Cerrone aggregate)	laying in rade exluderall work unent :1.5	ding the couple of the course something in the course something in the couple of the c	= 0.500 6.260 ement concrete ost of centring evel. and:3 graded ze)	6.260 M <sup>2</sup>	P/M²	Rs.253.80	Rs.1,588.79
P 2 of ar 1: st	anding Plater 1 1.00  roviding and f specified grand shuttering 1.5:3(1 Cerrone aggregates of footing 4 1.20	laying in rade exluderall work unent :1.5 te 20 mm	ding the couple of the plant of	= 0.500 6.260 ement concrete ost of centring evel.	6.260 M <sup>2</sup>	P/M²	Rs.253.80	Rs.1,588.79
P 2 of 1: st ba	anding Plate  1 1.00  roviding and f specified grad shuttering 1.5:3(1 Cerrone aggregates of footing 4 1.20 or Grouting at	laying in rade exludent :1.5 te 20 mm	ding the coupto plinth I coarse s nominal size	= 0.500 6.260 ement concrete ost of centring evel. and:3 graded ze) 0.576	6.260 M <sup>2</sup>	P/M²	Rs.253.80	Rs.1,588.79
P oi ai 1: st ba	anding Plater 1 1.00  roviding and specified grad shuttering 1.5:3(1 Cerrone aggregates of footing 4 1.20 or Grouting at 4 0.20	laying in rade exluded exluderated exluder	ding the coupto plinth I coarse s nominal size	= 0.500 6.260 ement concrete ost of centring evel. and:3 graded ze)	6.260 M <sup>2</sup>	P/M²	Rs.253.80	Rs.1,588.79
P of ar 1: st ba	anding Plater 1 1.00  roviding and specified grad shuttering 1.5:3(1 Cerrone aggregates of footing 4 1.20 or Grouting at 4 0.20 Inding Plater	laying in rade exturnal work unent :1.5 te 20 mm	ding the course something the	= 0.500 6.260 ement concrete ost of centring evel. and:3 graded ze) 0.576	6.260 M <sup>2</sup>	P/M²	Rs.253.80	Rs.1,588.79
P of ar 1: st ba	anding Plater 1 1.00  roviding and specified grad shuttering 1.5:3(1 Cerrone aggregates of footing 4 1.20 or Grouting at 4 0.20	laying in rade exluded exluderated exluder	ding the couple plinth I coarse sometimes in the coars	= 0.500 6.260 ement concrete ost of centring evel. and:3 graded ze) 0.576	6.260 M <sup>2</sup>	P/M²	Rs.253.80	Rs.1,588.79
P oi ai 1: st ba	anding Plater 1 1.00  roviding and specified grad shuttering 1.5:3(1 Cerrone aggregates of footing 4 1.20 or Grouting at 4 0.20 Inding Plater 1.00	laying in rade exluded all work under the contract of the cont	ding the coupled plant I be course so nominal size 0.100 e 0.050	= 0.500 6.260 ement concrete ost of centring evel. and:3 graded ze) 0.576 = 0.008				
Problem Proble	anding Plater 1 1.00  roviding and specified grad shuttering 1.5:3(1 Cerrone aggregates of footing 4 1.20 or Grouting at 4 0.20 anding Platefol 1.00	laying in rade exludent: 1.5 te 20 mm  1.20 to base plate 0.20 to base plate 0.50 to base	ding the coupled plant I coarse sometime size 0.100 co.050 co.10 c	= 0.500 6.260 ement concrete ost of centring evel. and:3 graded ze) = 0.576 = 0.008 = 0.050 0.634	6.260 M <sup>2</sup>		Rs.253.80	Rs.1,588.79
Proof	anding Plater 1 1.00  roviding and f specified grad shuttering 1.5:3(1 Cerrone aggregates of footing 4 1.20  or Grouting at 4 0.20  nding Plater 1.00  oviding and I reinforced ce	laying in rade exturnate e	ding the couple of the coarse something in the coarse	= 0.500 6.260 ement concrete ost of centring evel. and:3 graded ze) - 0.576 = 0.008 = 0.050 0.634 ecified grade				
Proof of	anding Plater 1 1.00  roviding and roviding and shuttering 1.5:3(1 Cerrone aggregates of footing 4 1.20 or Grouting at 4 0.20 rding Platero 1 1.00  oviding and reinforced ce entring, shutter	laying in rade exluded all work unent :1.5 te 20 mm  1.20 to base plate 0.20 to base plate 0.50 to base plat	ding the couple of the coarse something in the coarse	= 0.500 6.260 ement concrete ost of centring evel. and:3 graded ze) - 0.576 = 0.008 = 0.050 0.634 ecified grade				
Pro of All	anding Plater 1 1.00  roviding and roviding and shuttering 1.5:3(1 Cerrone aggregates of footing 4 1.20 or Grouting at 4 0.20 anding Platerone 1 1.00  reinforced ce entring, shutte work puto plice in the shutter of t	laying in rade exluded all work under the contract of the cont	ding the coupto plinth I coarse s nominal size 0.100 e 0.050 0.10 e cosition specrete excluding and reference of the control o	= 0.500 6.260 ement concrete ost of centring evel. and:3 graded ze) = 0.576 = 0.008 = 0.050 0.634 ecified grade iding the cost einforcement-				
Proof of All	anding Plater 1 1.00  roviding and roviding and shuttering 1.5:3(1 Cerrone aggregates of footing 4 1.20 or Grouting at 4 0.20 anding Plater 1 1.00  reinforced ceentring, shutter work puto plii:5:3(1 cernen	laying in rade exluded and exluded exl	ding the couple plant I coarse some nominal size 0.100 e 0.050 cosition specrete excluding and resessand 3	= 0.500 6.260 ement concrete ost of centring evel. and:3 graded ze) - 0.576 - 0.008 - 0.050 0.634 ecified grade iding the cost einforcement-				
Proof of All sto	anding Plater 1 1.00  roviding and specified grad shuttering 1.5:3(1 Cerrone aggregates of footing 4 1.20 or Grouting at 4 0.20 anding Platero 1 1.00 oviding and I reinforced ce entring, shutte work puto plii:5:3(1 cemente aggregate	laying in rade exluded and exluded exl	ding the couple plant I coarse some nominal size 0.100 e 0.050 cosition specrete excluding and resessand 3	= 0.500 6.260 ement concrete ost of centring evel. and:3 graded ze) - 0.576 - 0.008 - 0.050 0.634 ecified grade iding the cost einforcement-				
Proof of All sto	anding Plater 1 1.00  roviding and roviding and shuttering 1.5:3(1 Cerrone aggregates of footing 4 1.20 or Grouting at 4 0.20 anding Platerone 1 1.00  reinforced ce entring, shutte work puto plice in the shutter of t	laying in rade exluded and exluded exl	ding the couple plant I coarse some nominal size 0.100 e 0.050 cosition specrete excluding and resessand 3	= 0.500 6.260 ement concrete ost of centring evel. and:3 graded ze) - 0.576 - 0.008 - 0.050 0.634 ecified grade iding the cost einforcement-				
Proof of All sto	anding Plater 1 1.00  roviding and roviding and shuttering 1.5:3(1 Cerrone aggregates of footing 4 1.20 or Grouting at 4 0.20 anding Platerone aggregates entring, shutte work puto plies:5:3(1 cerrone aggregates of footing and less aggregates of footing and less aggregates of footing and less aggregates aggr	laying in rade exturnate e	ding the couple plant I coarse some nominal size 0.100 e 0.050 cosition specrete excluding and resessand 3	= 0.500 6.260 ement concrete ost of centring evel. and:3 graded ze)  = 0.576  = 0.050 0.634 ecified grade iding the cost einforcement- graded e)				

<u>S.N.</u>	Particulars Particulars						Quantity		Unit	Rate	Am
		n below					1	<del></del>	- 01111	Kate	Am-ount
	4	0.20	0.20	0.85	=	0.136	3			<del></del>	
	Colun	n above	GL		<del> -</del>		-	<b>-</b> <del> </del>			 
	4	0.20	0.20	0.25	=	0.040	1				··— ·· <del>-</del> —·
				<del> </del>	+-+	1.376		′6 M <sup>3</sup>	P/M <sup>s</sup>		— ·-· · · =
7-	Centri		and	shutteri	ng 	including		OIN	- P/M	Rs.4,530.30	Rs.6,233.69
5.9.1	struttir	ig,proppi	ing etc. a	and remo	val of	form for.	'				
	16	1.00	0.30		=	4.800					—·- · , .
_	16	0.20	0.85	<del>-</del> — — - –	+ - +		<del></del>		- · <del>· ·</del> -		
	16	0.20	0.25		<del></del> -	2.720	<del></del>	·	<del></del>	<u> :</u>	
	<del> </del>		0.20	ļ — ——-		0.800	<del></del>		· — · — ·		
_ <del>_</del>	Reinfo	rcement	for	B-C-C-	L	8.320	i	0 M <sup>2</sup>	P/M²	Rs.159.00	Rs. 1,406.08
5.22				ending n	work	including in position		:			
	and bir	nding all	complete		-acing	in bosition		1		:	
	8 mm t	o 16 mm	tor stee	<u> </u>	, !			i		· · · · · · · · · · · · · · · · · · ·	
	Total R	einforce	ment.		- • • • 💠 •		L	- i	<u>-</u>		- · · · · <u></u>
	@0.80	% of Vol.	Of Con	crete	į	=	86.00	J.Kg.	P/Kg.	Rs.56.00	Rs.4,816.00
9	Filling a	available	excavat	ed earth	(exclu	iding rock)		·			
2.20	m vend	cnes, pii	nth. side	es of ou	ndatic	ine oto ini		:			
į.	iayeis	пот е	xceeding	ar 20 a	cm i	n donth:		:	i		j
['	COLISON	dating ea <u>tering</u> lea	ach dep	osited lay	yer by	ramming			:	Ė	1
10	Providir	ering lea	ivina on	obor b-1		2 mm dia	2.086	∯ <b>M</b> 3	P/M <sup>3</sup>	Rs.74.50	Rs . 155.43
	and 0.6	0 Mtr len	ivicià aii	eddod in	OT 1.	2 mm dia 2 pedestal		:			
l	all com	plete as	s per d	lirection	n.u.u	pedestall		:			
.   (	marge.	(0)4XZXU	).5328ka			4	4 2024	1/			
11- jr	Painting	with re	eady mi	ixed nair	nt of	approved	4.2624	Ng	P/kg	Rs.73.60	Rs. 313.71
≀.82.1 Ł	orand a	nd manu	ıfacture	in all sha	ides t	o give an					
	even sn	ade:				o give an					
	lew ste	el work (	two or m	ore coats	 s)			-			
·	rame w	/OFK								· · · · · i =	·
		14.00			= [	21.000					
<del>-</del> -	0.5	3.50	3.50	·	=	6.125					· · · · · · · · · · ·
12 0						27.125	27.13	M <sup>2</sup>	M <sup>2</sup>	Rs.63.60	Po 1 705 45
<u>12</u>   0	amage	of the fo	ollowing	materials	from	quarry to			· <del>  </del>	113.00.00	Rs.1,725.15
27	ork Si Skina	re incin	iding lo	ading, ι	inload	ing and	j				į
di	rection	αι w∪rκ ∩f⊏/I	site a	ıs per s	pecifi	cation &					
(a	) Bricks	6 ( 7 Km	Pucca 8	8.1 Km k	Cachh						
(b	Coars	e Sand	(100 Km	e jead) E i ižili ti	vaci ili	a lead)			%0 nos.	Rs.606.10	Rs. 123.04
							0.860		P/M <sup>3</sup>	Rs.1,221.09	Rs.1,050.14
(0	) I ocal	Sand ( o	150 Km.	iead)	, a <u>-</u>	- [-]	1.730		P/M <sup>3</sup>	Rs.1,746.29	Rs.3,021.08
	,	Janu ( 2	AIII. PU	cca & 1 k	m. Ka	achha lea	0.720	M <sup>3</sup>	P/M <sup>3</sup>	Rs.217.23	Rs.156.41
i-/-	+					;					s.1,28,521.72
<del> +</del>		!-	<del></del>		<u>!</u>						s.1,28,500.00

3/4/17

My Jacutents



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