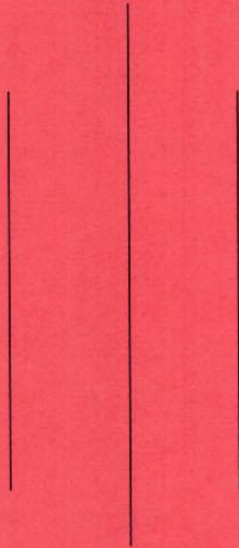


Drinking Water Project



Financial Proposal For Implementation
With
Design Estimates & Drawings
For
Bhangre Jhayaure Water Supply And Sanitation Project

Submitted By:

**Rotary Club of Dhulikhel
Dhulikhel ,Nepal**

Bhangre Jhayaure Water Supply And Sanitation Project
Bardibas,Nepal
Financial Proposal For Implementation Phase

Scheme:- Bhangre Jhayaure WS

Municipality:- Bardibas Municipality-10,11 District:- Mahottari

Present Population:- 1185 Design Population:-1561

S.No.	Description	Total Estimated Cost
(1).	Construction Cost	
(A)	For Water Supply	5448513.61
(B)	Costs Of Demanded Tools	734400.00
(2).	Technical Assistance Costs	
	(a) Technical Staff	
(A)	Engineer	360000.00
(B)	Technician	180000.00
(C)	Software Staff	180000
	(b) Training	
(A)	WSUC Training	3600.00
(B)	VMW Training	5400.00
(C)	Reporting And Photocopy	5400.00
	Total	6917313.61
(3).	Contingency Work (2.5% Of Total Cost) [DPR]	
	Detailed Field Survey,Data Collection,Design and Estimation Work,preparation Project Report	172932.84
	Grand Total	7090246.45

Bhangre Jhayaure Water Supply And Sanitation Project
Bardibas, Nepal
Summary Of Technical Assistance Cost

Scheme:- Bhangre Jhayaure WS

Municipality:- Bardibas Municipality

District.....Mahottari

S.No.	Description	No.	Days	Month	Rate (Rs.)	Total Amount
Technical Staff						
(1).	Engineer	1		6	60000.00	360000.00
(2).	Technician	1		6	30000.00	180000.00
(3).	Software Staff	1		6	30000.00	180000.00
Training						
(1).	WSUC Training	1	2		1800.00	3600.00
(2).	VMW Training	1	3		1800.00	5400.00
(3).	Reporting And Photocopy	1	3		1800.00	5400.00
Total						734400.00

Bhangre Jhayaure Water Supply And Sanitation Project
Bardibas, Nepal
Scheme Summary Information Sheet

Scheme Code :	Scheme Name : Bhangre Jhayaure WS
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General Information

District : Mahottari
VDC/Municipality : Bardibas Municipality
Ward No. : 10 & 11
Community Name :
Support Organization : Rotary Club

Survey/Design Information

Number Of Households : 194
Present Population : 1185
Male:- 515
Female:- 670
Design Population : 1561
Population Growth Rate : 2.23
Design Period (Yr) : 15 Years
Number Of School : 1 (Shree Laxmibas Madhyamik Bidhyalai)
Number Of Students : 235

Demand Information

Total Daily Demand (Ipd) : 55000
Other Institutional Demand (Ltr) : 2350
Per Capita Daily Demand(Ipcd) : 45 Ltrs.

Scheme Type

Gravity Flow System

Occupation:- Agriculture

Proposed Source Information

Source Name	Source Type	Source Yield
Banjan Taar	Spring	1.5

Income Status:- Poor

Education Status:- Medium

Existing Water Problem

(1) Source Location Is Very Far From The Households.
(2) Source Capacity Is Much Lower Than The Needs.

Structural Information

Name Of Structure	No. Of Structures	Remarks
(1) Intake	1.00	INTS001
(2) Air Valve	1.00	AV001
(3) Wash Out	1.00	WO100
(4) Reservoir Tank	1.00	RVTB001
(5) Cable Crossing	4.00	SUSPENDE 511
(6) Section Valve Chamber	1.00	SVC001
(7) PipeLine		Total Approximated Pipeline length is 10000 meter
(8) Private Tap	194.00	For 194 Households
(9) School Tap	1.00	Main School Tap Equals to one

Bhangre Jhayaure Water Supply And Sanitation Project
Bardibas, Nepal
Structure Wise Detail Cost

Structure:- Intake Structure
 Type of Structure:- INTS001

Number of Structures:- 1

Description	Unit	Quantity	Rate (Rs.)	Amount (Rs.)
Unskilled Labour For Local Materials				
Aggregate	CuM	0.84	2500.00	2100.00
Sand	CuM	2.98	1800.00	5364.00
Stone	CuM	6.06	1500.00	9090.00
Sub Total				16554.00
Skilled Labour				
Skilled Labour	MD	33.05	1200.00	39660.00
Sub Total				39660.00
Unskilled Labour For Construction				
Unskilled Labour	MD	40.06	700.00	28042.00
Sub Total				28042.00
Cement				
Cement	Bag	20.99	885.00	18576.15
Sub Total				18576.15
Other Construction Materials				
Angle Post For Fencing	Pc	12.00	1350.00	16200.00
Doorbolt (hasp) 8"	Pc	1.00	50.00	50.00
Metal Gate For Fencing	Pc	1.00	4200.00	4200.00
Lock Key	Pc	1.00	57.00	57.00
Re bar (10mm)-TOR	Kg	82.43	105.00	8655.15
Wire barbed (12SWG)	Kg	40.00	140.00	5600.00
Sub Total				34762.15
GI Pipes				
GI Pipe Medium duty 3"	Mtr	1.50	2100	3150.00
Sub Total				3150.00
Pipe Fittings and Valves				
End Plug GI 3"	Pc	1.00	450.00	450.00
Flange Set 3"	Pc	1.00	3400	3400.00
Socket GI 3"	Pc	1.00	600.00	600.00
Strainer GI 3"	Pc	1.00	2700.00	2700.00
Binding Wire	Kg	3.00	130.00	390.00
Sub Total				7540.00
Total				148284.30

Bhangre Jhayaure Water Supply And Sanitation Project
Bardibas, Nepal
Structure Wise Detail Cost

Structure:- Reservoir Tank (RVT)
 Type of Structure:- RVT1

Number of Structures:- 1

Description	Unit	Quantity	Rate (Rs.)	Amount (Rs.)
Unskilled Labour For Local Materials				
Aggregate	CuM	22.26	2500.00	55650.00
Bamboo	Pc	15.00	300.00	4500.00
Sand	CuM	17.77	1800.00	31986.00
Stone	CuM	5.00	1500.00	7500.00
Wood	CuM	1.20	29166.67	35000.00
Sub Total				134636.00
Skilled Labour				
Skilled Labour	MD	37.41	1200.00	44892.00
Sub Total				44892.00
Unskilled Labour For Construction				
Unskilled Labour	MD	325.60	700.00	227920.00
Sub Total				227920.00
Cement				
Cement	Bag	211.00	885.00	186735.00
Sub Total				186735.00
Other Construction Materials				
70x70 cm Slab Frame with Manhole Cover	Set	1.00	3600.00	3600.00
Angle Post For Fencing	Pc	20.00	1350.00	27000.00
Doorbolt (hasp) 8"	Pc	1.00	50.00	50.00
Metal Gate For Fencing	Pc	1.00	4200.00	4200.00
Lock Key	Pc	1.00	57.00	57.00
Nails 3"	Kg	15.00	95.00	1425.00
Re bar (10mm)-TOR	Kg	2740.57	105.00	287759.85
Wire barbed (12SWG)	Kg	105.00	140.00	14700.00
White Cement	Kg	20.00	50.00	1000.00
Wire binding	Kg	40.00	130.00	5200.00
Sub Total				344991.85
GI Pipes				
GI Pipe Medium duty ½"	Mtr	3.50	290.00	1015.00
GI Pipe Medium duty 3"	Mtr	0.70	2100.00	1470.00
GI Pipe Medium duty 4"	Mtr	3.00	2682.00	8046.00
Sub Total				10531.00
Pipe Fitting and Valves				
Flange Set 3"	Pc	1.00	3400.00	3400.00
Flange Set 4"	Pc	1.00	4750.00	4750.00
Elbow 3"	Pc	1.00	980.00	980.00
Elbow 4"	Pc	1.00	1750	1750.00
Nipple 4" (4" Long)	Pc	5.00	880	4400.00
Unequal Tee (4"x4"x½")	Pc	1.00	2300.00	2300.00
Gate Valve 4"	Pc	2.00	35230.00	70460.00
Flange Set 4"	Pc	2.00	4750.00	9500.00

Socket 4"	Pc	1.00	950.00	950.00
Strainer 4"	Pc	1.00	4300.00	4300.00
½" Elbow	Pc	2.00	45.00	90.00
½" Socket	Pc	2.00	35.00	70.00
½" Tee	Pc	1.00	70.00	70.00
½" Nipple (6" Long)	Pc	2.00	45.00	90.00
	Sub Total			103110.00
	Total			1052815.85

Bhangre Jhayaure Water Supply And Sanitation Project
Bardibas, Nepal
Structure Wise Detail Cost

Structure:- Suspended Crossing

Number of Structures:- 4

Type of Structure:- Suspended 511

Description	Unit	No.	Quantity	Rate (Rs.)	Amount (Rs.)
Unskilled Labour For Local Materials					
Sand	CuM	1	0.55	1800.00	990.00
Stone	CuM	1	0.95	1500.00	1425.00
Sub Total					2415.00
Skilled Labour					
Skilled Labour	MD	1	2.00	1200.00	2400.00
Sub Total					2400.00
Unskilled Labour For Construction					
Unskilled Labour	MD	1	5.60	700.00	3920.00
Sub Total					3920.00
Cement					
Cement	Bag	1	3.25	885.00	2876.25
Sub Total					2876.25
Other Construction Materials					
Buildog grip 8mm	Pc	1	6.00	45.00	270.00
Cable Steel 8mm	Mtr	1	75.00	170.00	12750.00
Re bar (6mm)-MS	Kg	1	5.48	83.00	454.84
Re bar (10mm)-TOR	Kg	1	0.75	80.00	60.00
Thimble 8mm	Set	1	2.00	67.80	135.60
Sub Total					13670.44
Total					25281.69
No. of Structure		4		25281.69	
Total					101126.76

Bhangre Jhayaure Water Supply And Sanitation Project
Bardibas, Nepal
Structure Wise Detail Cost

Structure:- Section Valve Chamber
 Type of Structure:- SVC001

Number of Structures:- 1

Description	Unit	Quantity	Rate (Rs.)	Amount (Rs.)
Unskilled Labour For Local Materials				
Aggregate	CuM	0.52	2500.00	1300.00
Sand	CuM	2.73	1800.00	4914.00
Stone	CuM	7.02	1500.00	10530.00
Re-bar (10mm)	kg	33.12	105.00	3477.60
Sub Total				16744.00
Skilled Labour				
Skilled Labour	MD	14.74	1200.00	17688.00
Sub Total				17688.00
Unskilled Labour For Construction				
Unskilled Labour	MD	36.91	700.00	25837.00
Sub Total				25837.00
Cement				
Cement	Bag	16.54	885.00	14637.90
Sub Total				14637.90
Fittings and Valves				
Gate Valve (32 mm)	Pc	1.00	3322.00	3322.00
Gate Valve (40 mm)	Pc	1.00	4650.00	4650.00
Nipple GI 1¼"	Pc	2.00	90.00	180.00
Nipple GI 1½"	Pc	2.00	170.00	340.00
Union Brass 1¼"	Pc	2.00	923.00	1846.00
Union Brass 1½"	Pc	2.00	1187.00	2374.00
Sub Total				12712.00
Total of Structure				87618.90

Bhangre Jhayaure Water Supply And Sanitation Project
Bardibas, Nepal
Structure Wise Detail Cost

Structure:- PipeLine

Number of Structures:- 1

Type of Structure:- PipeLine

Description	Unit	Quantity	Rate (Rs.)	Amount (Rs.)
Unskilled Labour For Pipe Line				
Unskilled Labour	RM	10000.00	50.00	500000.00
Excavation Work				
Labour Cost	RM	7000.00	80.00	560000.00
Sub Total				1060000.00
HDPE Pipes				
HDPE Pipe 20 mm (10 kg/cm ²)	Mtr	3000.00	39.66	118980.00
HDPE Pipe 25 mm (10 kg/cm ²)	Mtr	1500.00	61.11	91665.00
HDPE Pipe 32 mm (6 kg/cm ²)	Mtr	265.00	68.75	18218.75
HDPE Pipe 32 mm (10 kg/cm ²)	Mtr	235.00	99.30	23335.50
HDPE Pipe 40 mm (6 kg/cm ²)	Mtr	375.00	105.76	39660.00
HDPE Pipe 40 mm (10 kg/cm ²)	Mtr	625.00	153.65	96031.25
HDPE Pipe 50 mm (10 kg/cm ²)	Mtr	1000.00	237.99	237990.00
HDPE Pipe 63 mm (6 kg/cm ²)	Mtr	375.00	259.13	97173.75
HDPE Pipe 63 mm (10 kg/cm ²)	Mtr	125.00	373.10	46637.50
HDPE Pipe 75 mm (4 kg/cm ²)	Mtr	240.00	240.00	57600.00
HDPE Pipe 90 mm (4 kg/cm ²)	Mtr	225.00	338.00	76050.00
HDPE Pipe 110 mm (4 kg/cm ²)	Mtr	730.00	497.00	362810.00
HDPE Pipe 75 mm (6 kg/cm ²)	Mtr	260.00	367.25	95485.00
HDPE Pipe 90 mm (6 kg/cm ²)	Mtr	275.00	525.45	144498.75
HDPE Pipe 110 mm (6 kg/cm ²)	Mtr	770.00	776.50	597905.00
Sub Total		10000.00		2104040.50
Total				3164040.50

Bhangre Jhayaure Water Supply And Sanitation Project
Bardibas, Nepal
Structure Wise Detail Cost

Structure:- Wash Out

Number of Structures:- 1

Type of Structure:- WO100

Description	Unit	Quantity	Rate (Rs.)	Amount (Rs.)
Unskilled Labour For Local Materials				
Aggregate	CuM	0.52	2500.00	1300.00
Sand	CuM	2.73	1800.00	4914.00
Stone	CuM	7.02	1500.00	10530.00
Re-bar (10mm)	kg	33.12	105.00	3477.60
Sub Total				16744.00
Skilled Labour				
Skilled Labour	MD	14.74	1200.00	17688.00
Sub Total				17688.00
Unskilled Labour For Construction				
Unskilled Labour	MD	36.91	700.00	25837.00
Sub Total				25837.00
Cement				
Cement	Bag	16.54	885.00	14637.90
Sub Total				14637.90
Fittings and Valves				
Flange Set 3"	Pc	2.00	3400.00	6800.00
Gate Valve 3"	Pc	1.00	18312.00	18312.00
Nipple GI 3" (4" Long)	Pc	2.00	880.00	1760.00
Sub Total				26872.00
Total of Structure				101778.90

Bhangre Jhayaure Water Supply And Sanitation Project
Bardibas, Nepal
Structure Wise Detail Cost

Structure:- Air Valve

Number of Structures:- 1

Type of Structure:- AV001

Description	Unit	Quantity	Rate (Rs.)	Amount (Rs.)
Unskilled Labour For Local Materials				
Aggregate	CuM	0.52	2500.00	1300.00
Sand	CuM	2.73	1800.00	4914.00
Stone	CuM	7.02	1500.00	10530.00
Re-bar (10mm)	kg	33.12	105.00	3477.60
Sub Total				16744.00
Skilled Labour				
Skilled Labour	MD	14.74	1200.00	17688.00
Sub Total				17688.00
Unskilled Labour For Construction				
Unskilled Labour	MD	36.91	700.00	25837.00
Sub Total				25837.00
Cement				
Cement	Bag	16.54	885.00	14637.90
Sub Total				14637.90
Fittings and Valves				
Flange Set 3"	Pc	2.00	3400.00	6800.00
Air Valve ½"	Pc	1.00	6256.00	6256.00
Nipple GI 3" (4" Long)	Pc	2.00	880.00	1760.00
Unequal Tee (3"x3"x½")	Pc	1.00	1650.00	1650.00
GI Pipe	Mtr	0.90	290.00	261.00
Sub Total				16727.00
Total of Structure				91633.90

Bhangre Jhayaure Water Supply And Sanitation Project
Bardibas, Nepal
Private Tap Detail Estimate & Cost

Description	Unit	No.	Quantity	Rate (Rs.)	Amount (Rs.)
Skilled Labour					
Skilled Labour	MD		0.00	1200.00	0.00
Sub Total					0.00
Unskilled Labour For Construction					
Unskilled Labour	MD		0.00	700.00	0.00
Sub Total					0.00
Fittings and Valves					
Meter	Pc	194.00	1.00	1450.00	281300.00
Elbow	Pc	194.00	2.00	45.00	17460.00
Nipple (6" Long)	Pc	194.00	2.00	45.00	17460.00
Nipple 90 cm Long	Pc	194.00	1.00	270.00	52380.00
Ferrol	Pc	194.00	1.00	590.00	114460.00
Saddle	Pc	194.00	1.00	350.00	67900.00
Thread Steel Tap (Big)	Pc	194.00	1.00	45.00	8730.00
Tap Brass Ns	Pc	194.00	1.00	650.00	126100.00
Sub Total					685790.00
Total of Structure					685790.00

Bhangre Jhayaure Water Supply And Sanitation Project
Bardibas, Nepal
School Tap Detail Estimate & Cost

Description	Unit	No.	Quantity	Rate (Rs.)	Amount (Rs.)
Skilled Labour					
Skilled Labour	MD		4.00	1200.00	4800.00
Sub Total					4800.00
Unskilled Labour For Construction					
Unskilled Labour	MD		10.00	700.00	7000.00
Sub Total					7000.00
Fittings and Valves					
Meter	Pc	1.00	1.00	1450.00	1450.00
Elbow	Pc	1.00	2.00	45.00	90.00
Nipple (6" Long)	Pc	1.00	2.00	45.00	90.00
Nipple 120 cm Long	Pc	1.00	1.00	360.00	360.00
Ferrol	Pc	1.00	1.00	590.00	590.00
Saddle	Pc	1.00	1.00	350.00	350.00
Thread Steel Tap (Big)	Pc	1.00	1.00	45.00	45.00
Tap Brass Ns	Pc	1.00	1.00	650.00	650.00
Sub Total					3625.00
Total of Structure					15425.00

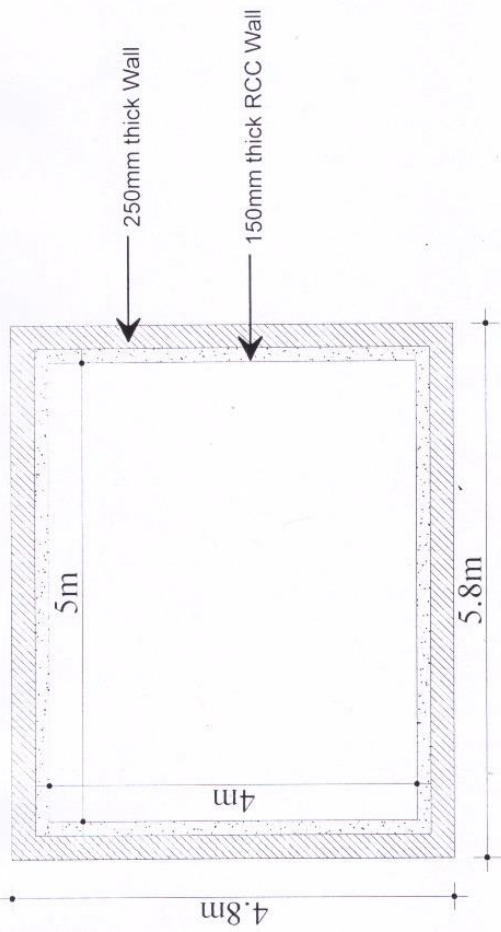
Bhangre Jhayaure Water Supply And Sanitation Project
Bardibas,Nepal
Cost of Demanded Tools

Scheme:- Bhangre Jhayaure WS

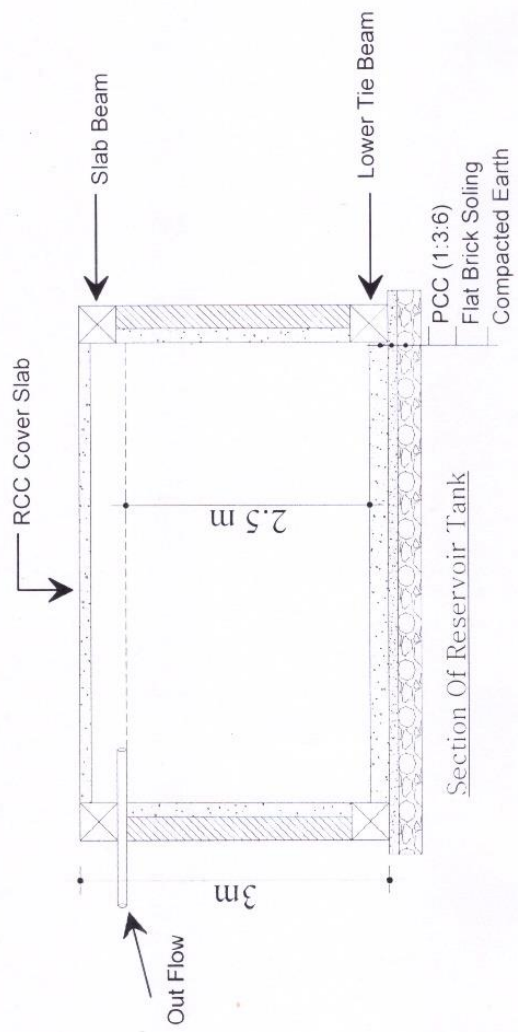
Municipality:- Bardibas Municipality-10&11

District.....Mahottari

Description	Unit	Quantity	Rate	Amount	Unit Wt.	Total Weight
Adjustable Spanner-10" Chrome Coated	Pc	1.00	425.00	425.00	0.75	0.75
Tool box with lock & Key	Pc	1.00	1675.00	1675.00	2.00	2.00
Steel brush	Pc	1.00	120.00	120.00	0.10	0.10
Blow torch	Pc	1.00	1550.00	1550.00	0.50	0.50
Combination pliers - no 7	Pc	1.00	230.00	230.00	0.25	0.25
Carpenter Saw 18"	Pc	1.00	250.00	250.00	0.25	0.25
Chain Wronch - 6"	Pc	2.00	4500.00	9000.00	3.00	6.00
Die Set ½" - 1" with Spare die teeth (Rachet - Type)	Set	1.00	4500.00	4500.00	2.00	2.00
Die Set 1¼" - 2" with Spare die teeth (Rachet - Type)	Set	1.00	9100.00	9100.00	2.50	2.50
Open ended Spanner 19/20	Pc	1.00	120.00	120.00	0.10	0.10
Open ended Spanner 21/22	Pc	1.00	130.00	130.00	0.15	0.15
Die teeth ½" Separate	Set	1.00	950.00	950.00	0.30	0.30
Finishing Trowel	Pc	8.00	150.00	1200.00	0.20	1.60
Geberit Knife	Pc	3.00	50.00	150.00	0.05	0.15
Hacksaw blade	Pc	48.00	20.00	960.00	0.02	0.96
Hacksaw frame	Pc	2.00	180.00	360.00	0.50	1.00
Heating plate 8"	Pc	2.00	5500.00	11000.00	2.00	4.00
20 lt. Kerosene jerrycan	No	1.00	350.00	350.00	0.02	0.02
Measuring tape - 3m - metal	Pc	1.00	80.00	80.00	0.05	0.05
Measuring tape (30m) - Fibre glass	Pc	1.00	500.00	500.00	0.20	0.20
Claw headed hammer	Pc	1.00	280.00	280.00	0.50	0.50
Plumb bob line	Pc	1.00	150.00	150.00	0.20	0.20
Pipe Cutter ½" - 2"	Set	1.00	1300.00	1300.00	1.50	1.50
Pointing trowel	Pc	3.00	90.00	270.00	0.10	0.30
Pipe Viso ½"-2"	Set	1.00	2200.00	2200.00	5.00	5.00
Pipe Wrench - 14"	Pc	1.00	550.00	550.00	1.50	1.50
Pipe Wrench - 36"	Pc	1.00	3650.00	3650.00	5.00	5.00
Stone Chisel 12"x1"	Pc	2.00	450.00	900.00	1.20	2.40
Screw driver 12"	Set	1.00	120.00	120.00	0.05	0.05
Smooth Steel File (Half Round)	Pc	1.00	350.00	350.00	0.20	0.20
Sledge Hammer 5 Kg	Pc	3.00	1100.00	3300.00	5.00	15.00
Stone Cutter Hammer 1 Kg	Pc	2.00	280.00	560.00	1.00	2.00
Spirit Level (Metal - 18")	Pc	1.00	525.00	525.00	0.50	0.50
Sand Sieve: Frame 1x1,2 mm mesh	Set	3.00	509.00	1527.00	2.50	7.50
Mason String	Pc	4.00	20.00	80.00	0.05	0.20
Shovel (1.5 Kg)	Pc	8.00	350.00	2800.00	1.50	12.00
Building Trowel	Pc	2.00	105.00	210.00	0.20	0.40
Thermocrome	Pc	4.00	550.00	2200.00	0.03	0.12
Thread Soal Tape - Small 10m roll	Roll	300.00	20.00	6000.00	0.02	6.00
Total of Tools				69622.00		83.25



Plan Of Reservoir Tank



Section Of Reservoir Tank

