

ITEM No	DESCRIPTION	UNIT	QNTY	RATE	AMOUNT
	BILL 1:PRELIMENARIES & GENERAL				
	Mobilization and demobilization				
A1.1	Allow for mobilisation to site	Sum			
A1.2	Allow for demobilisation from site	Sum			
	Resources/Temporary Works and Services				
A1.3	Allow for site offices	Sum			
A1.4	Allow storage of materials	Sum			
A1.5	Allow for Sanitary Accomodation	Sum			
A1.6	Allow for				
	i.Water	Sum			
	ii.Electricity	Sum			
	iii.Communication	Sum			
	Prevention of Damage				
A1.7	Damage to services	Sum			
A1.8	Fire precautions	Sum			
A1.9	Damage to services	Sum			
	Accuracy/Setting out				
A2.0	Set out the works	Sum			
	Facilities for the Engineer				
A2.1	Allow for the project management fuel	litre			
A2.2	Provide for ink A3 colour printer,scanner and copier	no			
A2.3	Provide monthly airtime and bundle				
A2.4	Provide for monthly stationery				
	i.Bond paper	box			
	ii.Pen	no			
	iii.USB Flash disk(64gig)	no			
	iv.Printer Catridges	sets			
A2.5	Providefor lunch for every site visit for 5 Engineers				
	Insurance				
A2.6	Provide for insurance for all works	Sum			
A2.6	Provide for insurance for occupational health and safety	Sum			
	Total of Bill no. 1 carried to summary				

ITEM No	DESCRIPTION	UNIT	QNTY	RATE	AMOUNT
B	BILL NO.2 WATER RETICULATION FOR UNIVERSITY OF ZIMBABWE VET LAB				
	Site Clearance				
B1.1	Clear vegetation and trees of girth up to 1m,measuring 1m above ground level (width of line maximum 1m)	m ²	145		
B2.1	Excavation Excavation in all materials for trenches backfill and compact depth between 0.5m-1.5m for pipes i.50mm PVC class 12 pipes	m ³	31		
B2.2	Extra-over all excavations For i.Hard material excavations ii.Rock excavations	m ³ m ³	4 2		
B2.3	Pipe Bedding Supply and place bedding material as directed by the Engineer and measured compacted for i.Selected granular/sand material.	m ³	18		
B2.4	Backfill with excavated trench material(free from stones with sharp edges),tamping at each 300mm layer.Backfill volume is measured as compacted.	m ³	19		
B2.5	Allow for carting away and disposing of unsuitable or surplus material from trench	m ³ /km	18		
B2.6	Allow for pumping of trenches to remove excess water in excavations	sum	1		
B2.7	Pipe Laying Supply,handle and lay Pvc pipes complete with fluid-tight joints i.50mm PVC class 12 pipes	m	145		
	FITTINGS Supply,lay,bed and joint,including cut pipes to length where required,test and include for CISC joints Supply and fix the following fittings:				
B2.8	Gate valves clockwise closing i.50mm dia	No			
B2.9	Fire Hydrant i.50mm dia	No	1		
B3.0	PVC Bends i.50*90 degree bends ii.50*45degree bends iii.50*22.5degree bends iv.50*11.25 degree bends	No No No No	6 1		
	Total carried forward				

ITEM No	DESCRIPTION	UNIT	QNTY	RATE	AMOUNT
	Total brought forward				
B3.0	PVC tees i.50mm*50mm equal tees.	No	0		
B3.1	End Caps i.50mm PVC class 12 pipes	No	1		
B3.2	50mm Non-return valve	No			
B3.3	Supply and fix precast chambers as detailed for the following fittings with C.I covers i.Fire hydrant	No	1		
B3.4	Supply and fix marker posts for the following fittings as detailed. i.Fire hydrant	No	1		
B3.5	Allow a provisional sum for any other fittings not specified above	SUM	1		
	Water Tank and Concrete Plinth				
B3.6	Supply and construct 3m*3m concrete plinth with S245 wiremesh.	SUM	1		
B3.7	Supply and fix 10 000litre plastic water tank with necessary fittings	SUM	1		
B3.8	Supply and instal 1 solar pump houses with neccessary fittings	SUM	1		
B3.9	Allow for palisade fence to protect the solar system	SUM	1		
	Ancillaries				
B4.0	Anchor/Thrust blocks and pedestals including formwork where required i.Grade 20 concrete	m ³	0.5		
	Pressure testing of water mains				
B4.1	Allow for all costs for pressure testing as specified or directed by the Engineer.	SUM	1		
	Disinfect pipelines				
B4.2	Allow for all cost of flushing and sterilizing of pipelines as specified or directed by the Engineer	SUM	1		
	Borehole Drilling				
B4.3	Site and Install boreholes with all necessary fittings	No	1		
B4.3	Allow for water quality test for boreholes	No	1		
B4.4	Allow for all cost for water quality test for boreholes	No	1		
	Total of Bill no.2 carried to summary				

ITEM No	DESCRIPTION	UNIT	QNTY	RATE	AMOUNT
C	BILL NO.3 WATER RETICULATION FOR PARIRENYATWA LAB				
	Site Clearance				
C1.1	Clear vegetation and trees of girth up to 1m,measuring 1m above ground level (width of line maximum 1m)	m ²	267		
C2.1	Excavation Excavation in all materials for trenches backfill and compact depth between 0.5m-1.5m for pipes i.50mm PVC class 12 pipes	m ³	40		
C2.2	Extra-over all excavations For i.Hard material excavations ii.Hard rock excavations	m ³ m ³	5 2		
C2.3	Pipe Bedding Supply and place bedding material as directed by the Engineer and measured compacted for i.Selected granular/sand material.	m ³	21		
C2.4	Backfill with excavated trench material(free from stones with sharp edges),tamping at each 300mm layer.Backfill volume is measured as compacted.	m ³	26		
C2.5	Allow for carting away and disposing of unsuitable or surplus material from trench	m ³ /km	21		
C2.6	Allow for pumping of trenches to remove excess water in excavations	sum	1		
C2.7	Pipe Laying Supply,handle and lay Pvc pipes complete with fluid-tight joints i.50mm PVC class 12 pipes	m	267		
	FITTINGS Supply,lay,bed and joint,including cut pipes to length where required,test and include for CISC joints Supply and fix the following fittings:				
C2.8	Gate valves clockwise closing i.50mm dia	No	3		
C2.9	Fire Hydrant i.50mm dia	No	2		
C3.0	PVC Bends i.50*90 degree bends	No	12		
C3.1	PVC tees i.50mm*50mm equal tees.	No	5		
	Total carried forward				

ITEM No	DESCRIPTION	UNIT	QNTY	RATE	AMOUNT
	Total brought forward				
C3.2	End Caps i.50mm PVC class 12 pipes	No	2		
C3.3	50mm Non-return valve	No	2		
C3.4	Supply and fix precast chambers as detailed for the following fittings with C.I covers i.Gate valves ii.Non-return valve iii.Fire hydarnt	No No No	0 2 2		
C3.5	Supply and fix marker posts for the following fittings as detailed. i.Gate valves ii.Non-return valve iii.Fire hydarnt	No No No	0 2 2		
C3.6	Allow a provisional sum for any other fittings not specified above	SUM	1		
	Water Tank and Concrete Plinth				
C3.7	Supply and construct 3m*3m concrete plinth with S245 wiremesh.	SUM	1		
C3.8	Supply and fix 10 000litre plastic water tank with necessary fittings	SUM	1		
C3.9	Supply and instal 2 solar pump houses with necessary fittings	No	1		
C3.10	Allow for palisade fence to protect the solar system	SUM	1		
	Ancillaries				
C4.0	Anchor/Thrust blocks and pedestals including formwork where required ii.Grade 20 concrete	m ³	0.5		
	Pressure testing of water mains				
C4.1	Allow for all costs for pressure testing as specified or directed by the Engineer.	SUM	1		
	Disinfect pipelines				
C4.2	Allow for all cost of flushing and sterilizing of pipelines as specified or directed by the Engineer	SUM	1		
	Borehole Drilling				
C4.3	Site and Install boreholes with all necessary fittings	No	1		
C4.4	Allow for water quality test for boreholes	No	1		
C4.5	Allow for all cost for water quality test for boreholes	No	1		
	Total for Bill no.3 carried to summary				

ITEM No	DESCRIPTION	UNIT	QNTY	RATE	AMOUNT
D	BILL NO.4 WATER RETICULATION FOR HARARE HOSPITAL VETERINARY LAB				
	Site Clearance				
D1.1	Clear vegetation and trees of girth up to 1m,measuring 1m above ground level (width of line maximum 1m)	m ²	300		
D2.1	Excavation Excavation in all materials for trenches backfill and compact depth between 0.5m-1.5m for pipes i.50mm PVC class 12 pipes	m ³	52		
D2.2	Extra-over all excavations For i.Hard material excavations ii.Hard rock excavations	m ³ m ³	6 2		
D2.3	Pipe Bedding Supply and place bedding material as directed by the Engineer and measured compacted for i.Selected granular/sand material.	m ³	22		
D2.4	Backfill with excavated trench material(free from stones with sharp edges),tamping at each 300mm layer.Backfill volume is measured as compacted.	m ³	38		
D2.5	Allow for carting away and disposing of unsuitable or surplus material from trench	m ³ /km	22		
D2.6	Allow for pumping of trenches to remove excess water in excavations	sum	1		
D2.7	Pipe Laying Supply,handle and lay Pvc pipes complete with fluid-tight joints i.50mm PVC class 12 pipes	m	300		
	FITTINGS Supply,lay,bed and joint,including cut pipes to length where required,test and include for CISC joints Supply and fix the following fittings:				
D2.8	Gate valves clockwise closing i.50mm dia	No	1		
D2.9	Fire Hydrant i.50mm dia	No	1		
D3.0	PVC Bends i.50*90 degree bends	No	5		
D3.1	PVC tees i.50mm*50mm equal tees.	No	2		
	Total carried forward				
ITEM No	DESCRIPTION	UNIT	QNTY	RATE	AMOUNT

	Total brought forward				
D3.2	End Caps i.50mm PVC class 12 pipes	No	1		
D3.3	50mm Non-return valve	No			
D3.4	Supply and fix precast chambers as detailed for the following fittings with C.I covers				
	i.Gate valves	No	1		
	ii.Non-return valve	No	0		
	iii.Fire hydrant	No	1		
D3.5	Supply and fix marker posts for the following fittings as detailed.				
	i.Gate valves	No	1		
	ii.Non-return valve	No	0		
	iii.Fire hydrant	No	1		
D3.6	Allow a provisional sum for any other fittings not specified above	SUM	1		
	Water Tank and Concrete Plinth				
D3.7	Supply and construct 5.6m*5.6m concrete plinth with S245 wiremesh.	SUM	1		
D3.8	Supply and fix 10 000litre plastic water tank with necessary fittings	SUM	1		
D3.9	Supply and instal 1solar pump houses with neccessary fittings	SUM	1		
D3.10	Allow for palisade fence to protect the solar system	SUM	1		
	Ancillaries				
D4.0	Anchor/Thrust blocks and pedestals including formwork where required				
	ii.Grade 20 concrete	m ³	0.5		
	Pressure testing of water mains				
D4.1	Allow for all costs for pressure testing as specified or directed by the Engineer.	SUM	1		
	Disinfect pipelines				
D4.2	Allow for all cost of flushing and sterilizing of pipelines as specified or directed by the Engineer	SUM	1		
	Borehole Drilling				
D4.3	Site and Install boreholes with all necessary fittings	No	1		
D4.4	Allow for water quality test for boreholes	No	1		
D4.5	Allow for all cost for water quality test for boreholes	No	1		
	Total of Bill no.4 carried to summary				

ITEM No	DESCRIPTION	UNIT	QNTY	RATE	AMOUNT
E	BILL NO.5 WATER RETICULATION FOR GOVERNMENT ANALYTICAL LAB				
	Site Clearance				
E1.1	Clear vegetation and trees of girth up to 1m,measuring 1m above ground level (width of line maximum 1m)	m ²	102		
E2.1	Excavation Excavation in all materials for trenches backfill and compact depth between 0.5m-1.5m for pipes i.50mm PVC class 12 pipes	m ³	21		
E2.2	Extra-over all excavations For i.Hard material excavations ii.Hard rock excavations	m ³ m ³	3 1		
E2.3	Pipe Bedding Supply and place bedding material as directed by the Engineer and measured compacted for i.Selected granular/sand material.	m ³	13		
E2.4	Backfill with excavated trench material(free from stones with sharp edges),tamping at each 300mm layer.Backfill volume is measured as compacted.	m ³	12		
E2.5	Allow for carting away and disposing of unsuitable or surplus material from trench	m ³ /km	13		
E2.6	Allow for pumping of trenches to remove excess water in excavations	sum	1		
E2.7	Pipe Laying Supply,handle and lay Pvc pipes complete with fluid-tight joints i.50mm PVC class 12 pipes	m	102		
	FITTINGS Supply,lay,bed and joint,including cut pipes to length where required,test and include for CISC joints Supply and fix the following fittings:				
E2.8	Gate valves clockwise closing i.50mm dia	No	1		
E2.9	Fire Hydrant i.50mm dia	No	1		
E3.0	PVC Bends i.50*90 degree bends	No	3		
E3.1	PVC tees i.50mm*50mm equal tees.	No	4		
	Total carried forward				

ITEM No	DESCRIPTION	UNIT	QNTY	RATE	AMOUNT
	Total brought forward				
E3.2	End Caps i.50mm PVC class 12 pipes	No	1		
E3.3	50mm Non-return valve	No			
E3.4	Supply and fix precast chambers as detailed for the following fittings with C.I covers				
	i.Gate valves	No	1		
	ii.Non-return valve	No	0		
	iii.Fire hydarnt	No	1		
E3.5	Supply and fix marker posts for the following fittings as detailed.				
	i.Gate valves	No	1		
	ii.Non-return valve	No	0		
	iii.Fire hydarnt	No	1		
E3.6	Allow a provisional sum for any other fittings not specified above	SUM	1		
	Water Tank and Concrete Plinth				
E3.7	Supply and construct 3m*3m concrete plinth with S245 wiremesh.	SUM	1		
E3.8	Supply and fix 10 000litre plastic water tank with necessary fittings	SUM	1		
E3.9	Supply and instal 1 solar pump houses with neccessary fittings	SUM	1		
E3.10	Allow for palisade fence to protect the solar system	SUM	1		
	Ancillaries				
E4.0	Anchor/Thrust blocks and pedestals including formwork where required				
	ii.Grade 20 concrete	m ³	0.5		
	Pressure testing of water mains				
E5.0	Allow for all costs for pressure testing as specified or directed by the Engineer.	SUM	1		
	Disinfect pipelines				
E5.1	Allow for all cost of flushing and sterilizing of pipelines as specified or directed by the Engineer	SUM	1		
	Borehole Drilling				
E5.2	Site and Install boreholes with all necessary fittings	No	1		
E5.3	Allow for water quality test for boreholes	No	1		
E5.4	Allow for all cost for water quality test for boreholes	No	1		
	Total of Bill no.5 carried to summary				

ITEM No	DESCRIPTION	UNIT	QNTY	RATE	AMOUNT
F	BILL NO.6 WATER RETICULATION FOR BEATRICE INFECTIOUS LAB				
	Site Clearance				
F1.1	Clear vegetation and trees of girth up to 1m,measuring 1m above ground level (width of line maximum 1m)	m ²	143		
F2.1	Excavation Excavation in all materials for trenches backfill and compact depth between 0.5m-1.5m for pipes i.50mm PVC class 12 pipes	m ³	21		
F2.2	Extra-over all excavations For i.Hard material excavations ii.Hard rock excavations	m ³ m ³	3 1		
F2.3	Pipe Bedding Supply and place bedding material as directed by the Engineer and measured compacted for i.Selected granular/sand material.	m ³	14		
F2.4	Backfill with excavated trench material(free from stones with sharp edges),tamping at each 300mm layer.Backfill volume is measured as compacted.	m ³	11		
F2.5	Allow for carting away and disposing of unsuitable or surplus material from trench	m ³ /km	14		
F2.6	Allow for pumping of trenches to remove excess water in excavations	sum	1		
F2.7	Pipe Laying Supply,handle and lay Pvc pipes complete with fluid-tight joints i.50mm PVC class 12 pipes	m	143		
	FITTINGS Supply,lay,bed and joint,including cut pipes to length where required,test and include for CISC joints Supply and fix the following fittings:				
F2.8	Gate valves clockwise closing i.50mm dia	No	1		
F2.9	Fire Hydrant i.50mm dia	No	1		
F3.0	PVC Bends i.50*90 degree bends	No	5		
F3.1	PVC tees i.50mm*50mm equal tees.	No	3		
	Total carried forward				

ITEM No	DESCRIPTION	UNIT	QNTY	RATE	AMOUNT
	Total brought forward				
F3.2	End Caps i.50mm PVC class 12 pipes	No	2		
F3.3	50mm Non-return valve	No			
F3.4	Supply and fix precast chambers as detailed for the following fittings with C.I covers				
	i.Gate valves	No	1		
	ii.Non-return valve	No	0		
	iii.Fire hydrant	No	1		
F3.5	Supply and fix marker posts for the following fittings as detailed.				
	i.Gate valves	No	1		
	ii.Non-return valve	No	0		
	iii.Fire hydrant	No	1		
F3.6	Allow a provisional sum for any other fittings not specified above	SUM	1		
	Water Tank and Concrete Plinth				
F3.7	Supply and construct 3m*3m concrete plinth with S245 wiremesh.	SUM	1		
F3.8	Supply and fix 10 000litre plastic water tank with necessary fittings	SUM	1		
F3.9	Supply and instal 1 solar pump houses with neccessary fittings	SUM	1		
F3.10	Allow for palisade fence to protect the solar system	SUM	1		
	Ancillaries				
F4.0	Anchor/Thrust blocks and pedestals including formwork where required				
	ii.Grade 20 concrete	m ³	0.5		
	Pressure testing of water mains				
F5.0	Allow for all costs for pressure testing as specified or directed by the Engineer.	SUM	1		
	Disinfect pipelines				
F5.1	Allow for all cost of flushing and sterilizing of pipelines as specified or directed by the Engineer	SUM	1		
	Borehole Drilling				
F5.2	Site and Install boreholes with all necessary fittings	No	1		
F5.3	Allow for water quality test for boreholes	No	1		
F5.4	Allow for all cost for water quality test for boreholes	No	1		
	Total for Bill n0.6 carried forward				

ITEM No	DESCRIPTION	UNIT	QNTY	RATE	AMOUNT
G	BILL NO.7 WATER RETICULATION FOR CENTRAL VET LAB				
	Site Clearance				
G1.1	Clear vegetation and trees of girth up to 1m,measuring 1m above ground level (width of line maximum 1m)	m ²	113		
G2.1	Excavation Excavation in all materials for trenches backfill and compact depth between 0.5m-1.5m for pipes i.50mm PVC class 12 pipes	m ³	20		
G2.2	Extra-over all excavations For i.Hard material excavations ii.Hard rock excavations	m ³ m ³	2 1		
G2.3	Pipe Bedding Supply and place bedding material as directed by the Engineer and measured compacted for i.Selected granular/sand material.	m ³	8		
G2.4	Backfill with excavated trench material(free from stones with sharp edges),tamping at each 300mm layer.Backfill volume is measured as compacted.	m ³	11		
G2.5	Allow for carting away and disposing of unsuitable or surplus material from trench	m ³ /km	8		
G2.6	Allow for pumping of trenches to remove excess water in excavations	sum	1		
G2.7	Pipe Laying Supply,handle and lay Pvc pipes complete with fluid-tight joints i.50mm PVC class 12 pipes	m	113		
	FITTINGS Supply,lay,bed and joint,including cut pipes to length where required,test and include for CISC joints Supply and fix the following fittings:				
G2.8	Gate valves clockwise closing i.50mm dia	No	1		
G2.9	Fire Hydrant i.50mm dia	No	1		
G3.0	PVC Bends i.50*90 degree bends	No	3		
G3.1	PVC tees i.50mm*50mm equal tees.	No	2		
	Total carried forward				

ITEM No	DESCRIPTION	UNIT	QNTY	RATE	AMOUNT
	Total brought forward				
G3.2	End Caps i.50mm PVC class 12 pipes	No	1		
G3.3	50mm Non-return valve	No	1		
G3.4	Supply and fix precast chambers as detailed for the following fittings with C.I covers				
	i.Gate valves	No	1		
	ii.Non-return valve	No	1		
	iii.Fire hydarnt	No	1		
G3.5	Supply and fix marker posts for the following fittings as detailed.				
	i.Gate valves	No	1		
	ii.Non-return valve	No	1		
	iii.Fire hydarnt	No	1		
G3.6	Allow a provisional sum for any other fittings not specified above	SUM	1		
	Water Tank and Concrete Plinth				
G3.7	Supply and construct 3m*3m concrete plinth with S245 wiremesh.	SUM	1		
G3.8	Supply and fix 10 000litre plastic water tank with necessary fittings	SUM	1		
G3.9	Supply and instal 1 solar pump houses with neccessary fittings	SUM	1		
G3.10	Allow for palisade fence to protect the solar system	SUM	1		
	Ancillaries				
G4.0	Anchor/Thrust blocks and pedestals including formwork where required				
	ii.Grade 20 concrete	m ³	0.5		
	Pressure testing of water mains				
G5.0	Allow for all costs for pressure testing as specified or directed by the Engineer.	SUM	1		
	Disinfect pipelines				
G5.1	Allow for all cost of flushing and sterilizing of pipelines as specified or directed by the Engineer	SUM	1		
	Borehole Drilling				
G5.2	Site and Install boreholes with all necessary fittings	No	1		
G5.3	Allow for water quality test for boreholes	No	1		
G5.4	Allow for all cost for water quality test for boreholes	No	1		
Total Bill no.7 carried to summary					

ITEM No	DESCRIPTION	UNIT	QNTY	RATE	AMOUNT
H	BILL NO.8 WATER RETICULATION FOR CENTRAL VET LAB				
H1.1	Supply and fix water purifier	No	1		
Total Bill no.8 carried to summary					

COST ESTIMATES FOR CIVIL WORKS

SECTION	DESCRIPTION				AMOUNT
BILL 1	PRELIMINARY & GENERAL				
BILL 2	WATER RETICULATION FOR UNIVERSITY OF ZIM LAB				
BILL 3	WATER RETICULATION FOR PARIRENYATWA LAB				
BILL 4	WATER RETICULATION FOR HARARE HOSP				
BILL 5	WATER RET FOR GOVERNMENT ANALYTICAL LAB				
BILL 6	WATER RET FOR BEATRICE INFECTIOUS LAB				
BILL 7	WATER RET FOR CENTRAL VETERINARY				
BILL 8	WATER RET FOR EMA LABORATORY				
	SUBTOTAL				
	Add 10% Contingency				
	SUBTOTAL				
	ADD 15% VAT				
	TOTAL COST				

