

CONSTRUCTION OF BOREHOLE WITH HAND PUMP
BILL OF QUANTITIES A NO. FULLY-PENETRATING BOREHOLES (APPROX. 60M DEEP)

CONTRACTUAL PROVISION PER SITE

ITEM	DESCRIPTION	UNIT	QUANTITY	FREQUENCY	UNIT PRICE GH¢	TOTAL AMOUNT GH¢
1	Mobilization to sites (includes moving, setting up, mounting and dismounting the equipment and cleaning the site)					
1.1	Preliminary Mobilization to District	Lump Sum	1	1		
1.2	Demobilization from Drilling Area	Lump Sum	1	1		
1.3	Mounting & Dismounting at Each Drill Site	No	1	1		
1.4	provision of Environmental permit acquisition	Lump Sum	1	1		
SUB-TOTAL I						
2	Borehole drilling using down-the-hole hammer equipment as follows:					
2.1	Drilling through overburden and highly weathered rock for completion of 125mm diameter boreholes in any type of rock	Meter	6	1		
2.2	Drilling through fresh rock with DTH for completion of 125mm in basement rock	Meter	100	1		
SUB-TOTAL 2						
3	<u>Borehole Lining and Installation</u>					
3.1	Supply and Install temporary casings (PVC or steel)	Meter	10	1		
3.2	Supply and installation of 125mm PVC casing with flush threaded joints	Meter	100	1		
3.3	Supply and installation of 125mm PVC screens. Slot 0.5mm to 1mm with flush threaded joints	Meter	5	1		

3.4	Supply and installation of centralizers for 125mm casing and 125mm screen	Item	1	1		
3.5	Supply and install of bail plug	Item	1	1		
3.6	Supply and place 2-4mm of gravel pack	meters	10	1		
3.7	Supply and place 1-2mm gravel pack	meters	10	1		
3.8	Supply Cement mix and place above gravel packing	meters	1	1		
3.9	Backfilling	meters	36	1		
3.10	Supply cement, mix and place grout seal above gravel	meters	4	1		
SUB-TOTAL 3						
4	<u>Cleaning, Development & Pumping Test</u>					
4.1	Cleaning and development by air-lift (3 hours per borehole)	Hrs	3	1		
4.2	Pumping test (drawdown, pump in use; 6 hours per borehole)	Hrs	24	1		
4.3	Pumping test (recovery, pump stopped; 3 hours per borehole)	Hrs	12	1		
4.4	Installation and removal of pump test unit at site	Each	1	1		
4.5	Water quality analysis (Physico Chemical and Baterialogical)	Sample	1	1		
4.6	Supply and fix protection cap on boreholes	Each	1	1		
SUB-TOTAL 4						
5	Unsuccessful boreholes					
5.1	Backfill boreholes with drill cuttings and cement grout	Item	36	1		

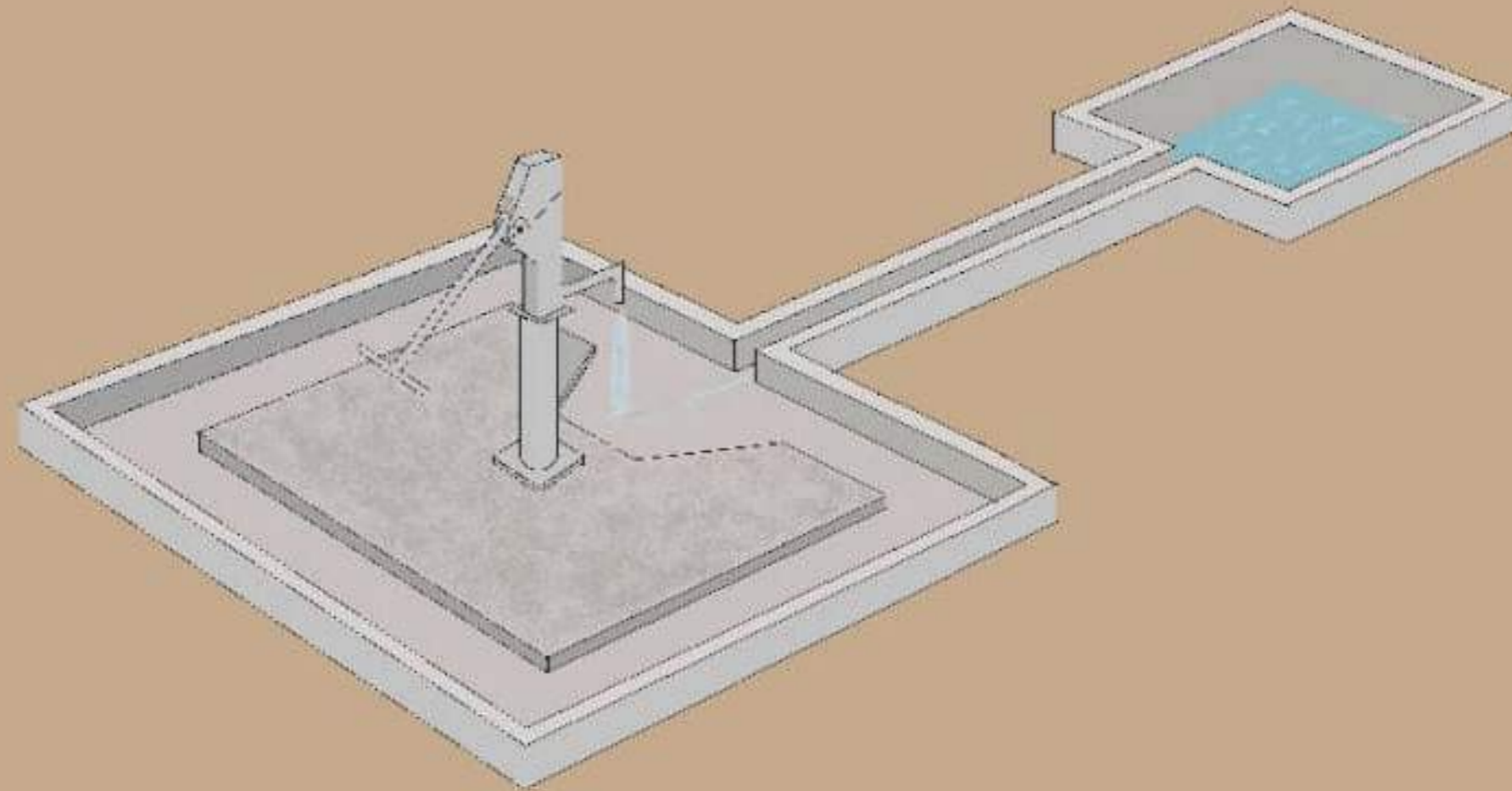
SUB-TOTAL 5					
5.2	HAND PUMPS				
	Supply and install Indian mark II hand pumps with 51m riser mains and rods	item	1	1	
5.3	CONCRETE PAD. Constructe concrete pad of suitable dimensions of 3.6m x 2.9m im mass concrete mix ratio of 3;4;6	item	1	1	
6	Training of WASH Committee				
6.1	Provide a Facility Management Training (FMT) to members of the WASH committee.	Hrs	1	1	
SUB-TOTAL 6					

TOTAL FOR DRILLING

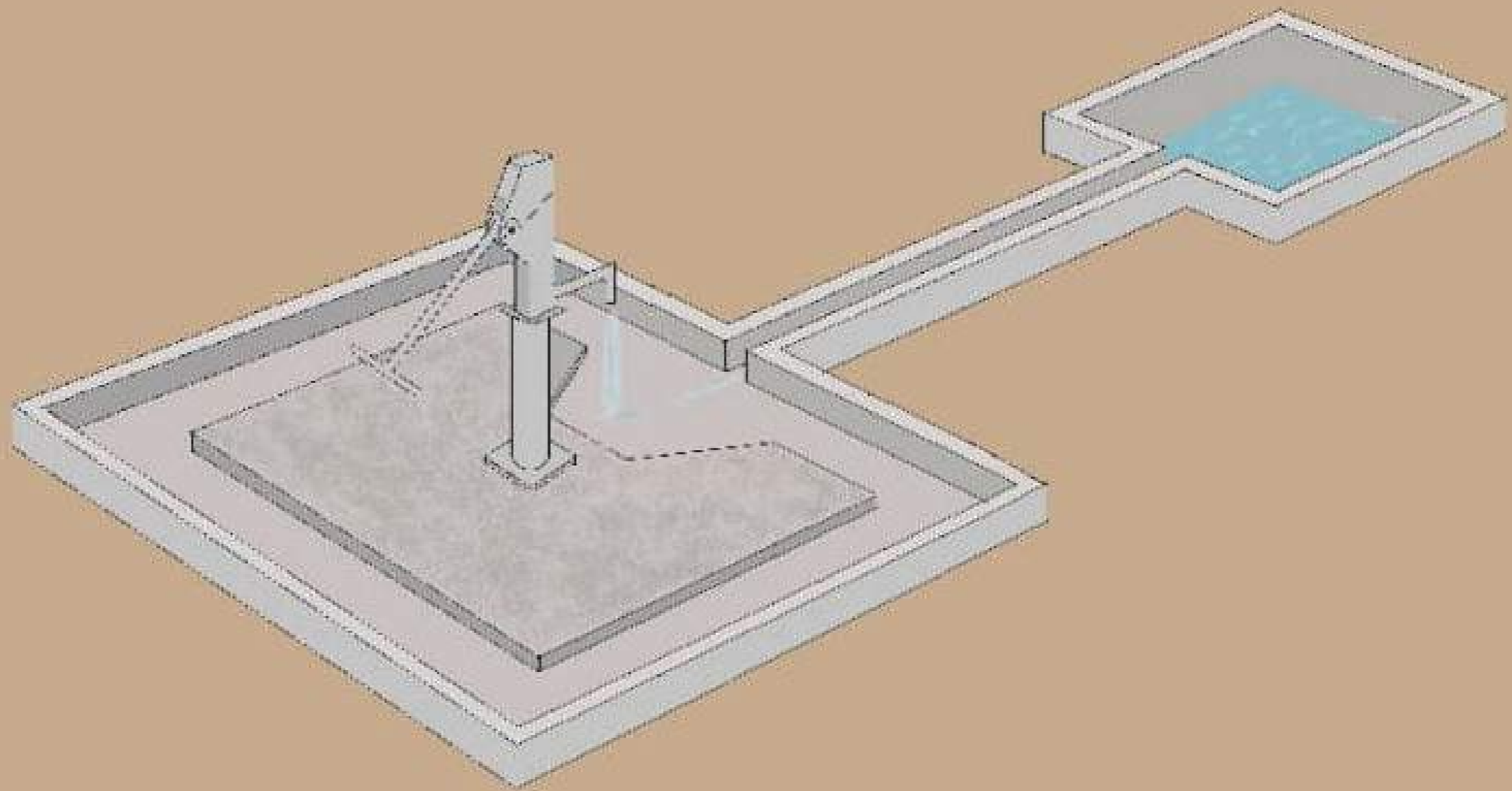
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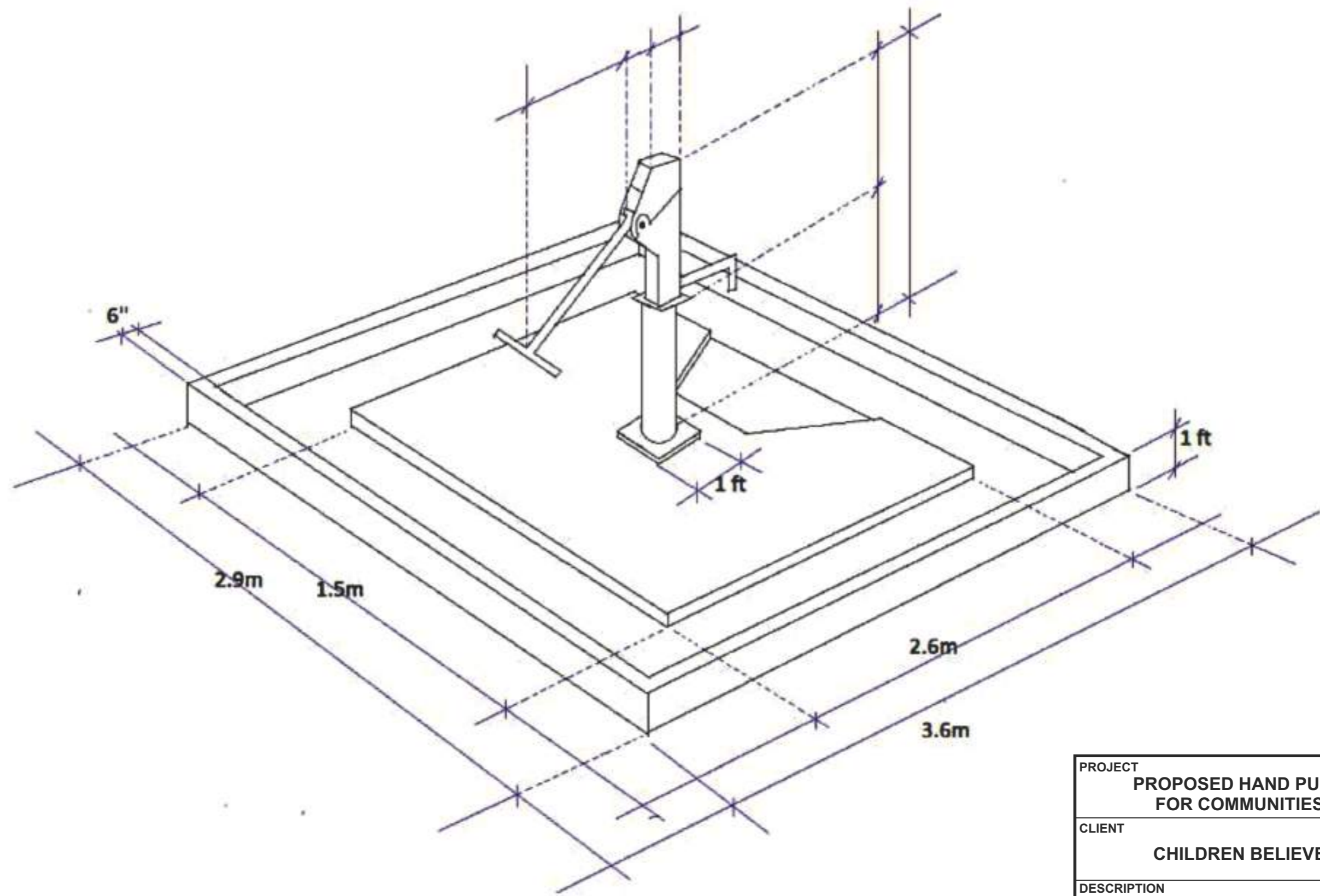
UNIT COST PER SITE

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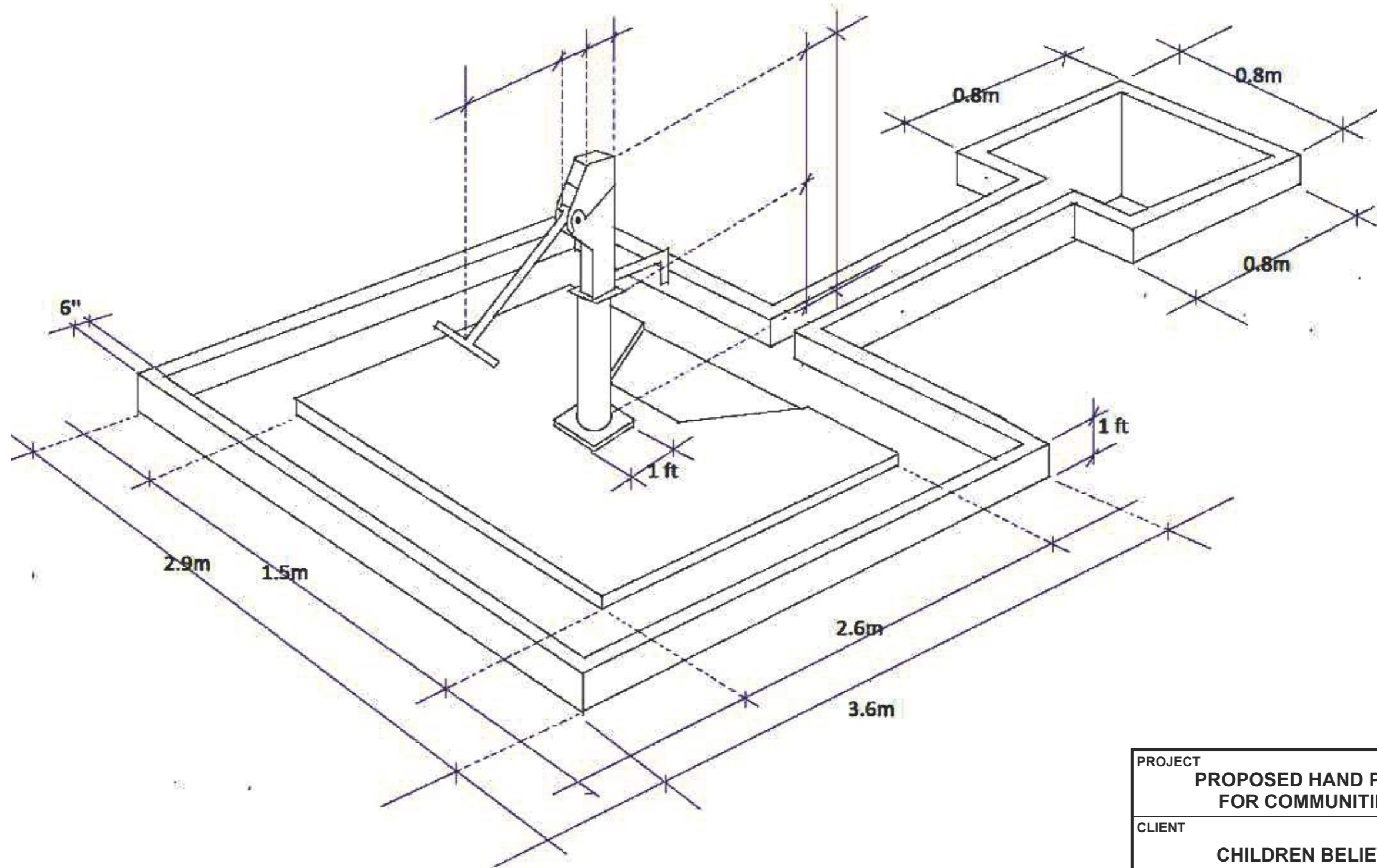


**PROPOSED HAND PUMP BOREHOLE
FOR CHILDREN BELIEVE**

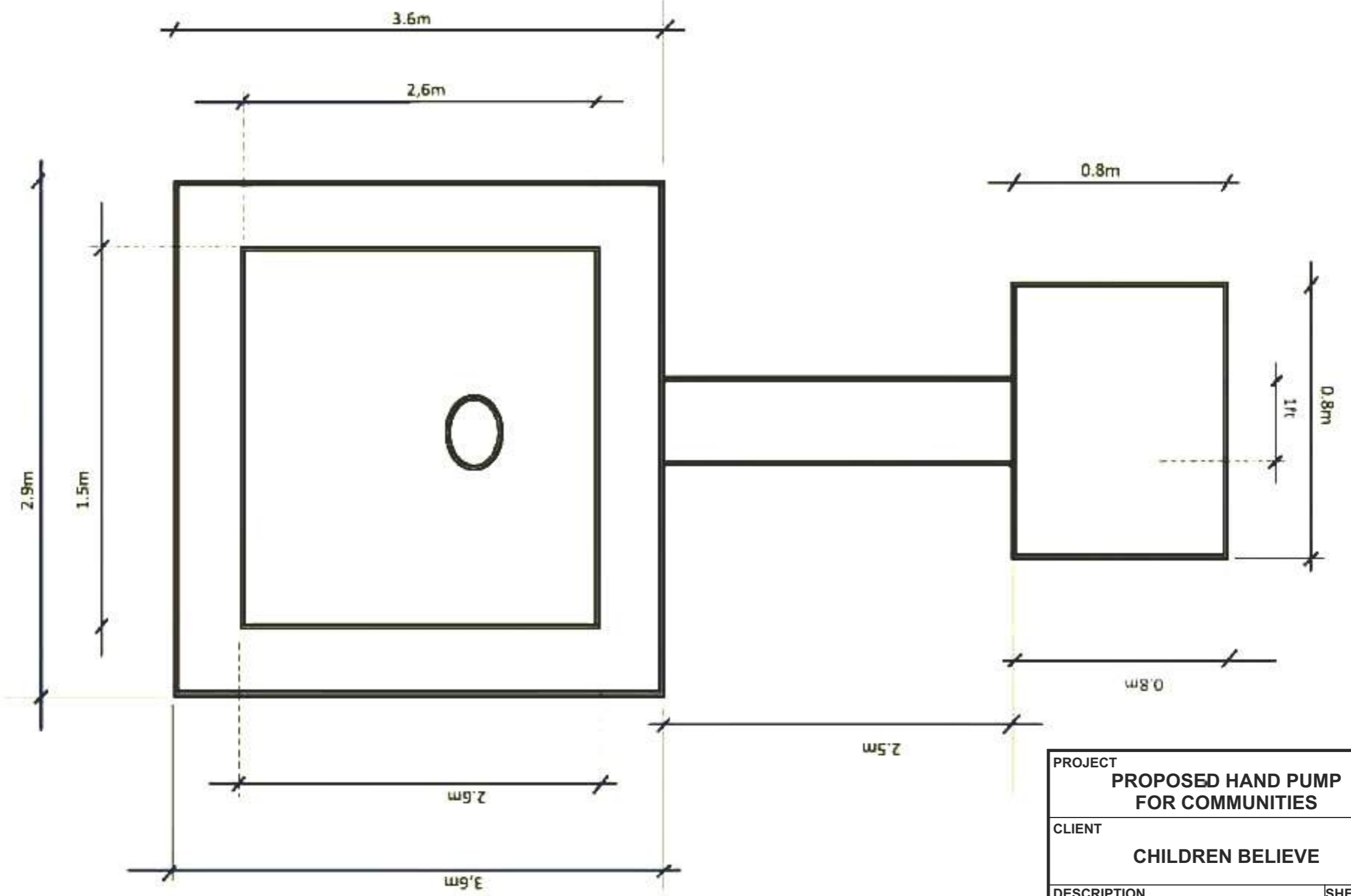




PROJECT	PROPOSED HAND PUMP FOR COMMUNITIES	
CLIENT	CHILDREN BELIEVE	
DESCRIPTION	WATER PUMP PLAN	SHEET No. 1



PROJECT	PROPOSED HAND PUMP FOR COMMUNITIES	
CLIENT	CHILDREN BELIEVE	
DESCRIPTION	WATER PUMP PLAN	SHEET No. 2



PROJECT	PROPOSED HAND PUMP FOR COMMUNITIES	
CLIENT	CHILDREN BELIEVE	
DESCRIPTION	WATER PUMP PLAN	SHEET No. 3