

SHALLOW WELLS: WORK PLAN

1. Fabrication of block moulds.

Placed an order on 7/6/93 for 10 block making moulds. Initial two sample moulds to be delivered by 18/6/93 and balance by 30/6/93.

2. Building equipment.

Purchase of necessary equipment for well construction. These include:

	Ksh.
Building line	45
2 construction karais @ 40.00 each	80
2 shovels @ 120 each	240
2 water buckets @ 300 each	600
muttock	350
Rope manila 20m @ 17 p/m	350
Wheelbarrow	1700
Water drum (210l)	500
Mason hammer	180
Chisel	35
Building trowel	100
Spirit level	350
Square	180
Plumb line	120
Steel flute	350
Tape measure 2m steel	60
Polythene sheet	450
Pliers	120
Jembe	120
Panga	120
Block moulds 2 x 250	500
Total	6,550

This equipment is necessary for each Fundi (construction site). 5 full sets of equipment are required.

Estimated total expenditure on equipment is 25,000. This equipment should last the duration of the project barring breakages and losses.

3. Materials.

Construction materials for the two training wells should be at the

construction site by 1/7/93.

a. Purchase material

Cement	1 ton	6700
Galvanised wire	15kg	1500
Steel bar	1 1/2 length	700
Total		8900

b. Liaise with parents at Unyaa to collect sand and hardcore (ballast) at site by 30/6/93.

c. Subsequent construction sites will be alerted to start collection and assembling of material at least a month prior to the expected date of start of collection.

4. Protective clothing.

Mud boots and aprons are a requirement for this construction. These are necessary to prevent damp and the excessive abrasion of clothing as a result of working in confined space.

Mud boots	6 pairs	3000
Aprons	6 x 2 pairs	8400
Total		11,400.

5. Transport

a. The well rings have been constructed at the Kitui Polytechnic. To avoid breakage these have to be transported by tractor trailer filled with sand to the site of construction. Costs will be variable depending on the distance of the construction site from the Kitui polytechnic. To minimise this charge several rings to adjacent construction sites will be transported on a trip.

b. Materials eg cement, iron bars and galvanised wire will be transported by the supplier whenever possible. The routes will be planned to take several sites at once.

c. Surplus material will have to be transported together with equipment from a completed site to a new construction site. This will be by hired lorry.

6. Recruitment of Fundis

Invitation of Fundis will start now for screening on 30/6/93. Proven experience in construction of waterworks will be the overriding criteria in selection.

7. Training and Trials.

Selected Fundis will start on site training exercise with D. Kithuku on 1/7/93. This will include block making at site and building two complete wells.

The wells at Unyaa and Issaangwa Primary Schools will serve as the instructional sites.

After the training each Fundi will be in charge of their own constructional site. D. Kithuku will be the supervisor in charge of the complement of 5 Fundis engaged. Thus there will be 5 sites continuing at any particular time.

8. Construction schedules.

From start to completion a duration of 21 working days is deemed adequate for a normal shallow well, that is up to 13m deep. Most of the shallow wells in Kitui are within this range. It is anticipated 5 wells would be constructed per month.

With a period of 4 months from August to November, therefore a complement of 20 wells would thus be constructed.

December maybe too wet and the wells too full for construction.

9. Stock control

By virtue of owning the store in the school the Headmaster of the school should keep custody of the materials. The Fundi together with the Headmaster should sign for all receipts and withdrawals.

All stocks should be accounted for daily. The log should be examined weekly by the supervisor and assessed in comparison with work done. A sample stock control card is shown below.

Date	Receipts	Stock	W.D	H.M.	Fundi	No.pple	T.S	T.F
								Sign. at Site

Note:

W.D	Withdrawal
H.M	Headmaster
T.S	Time started
T.F	Time finished.