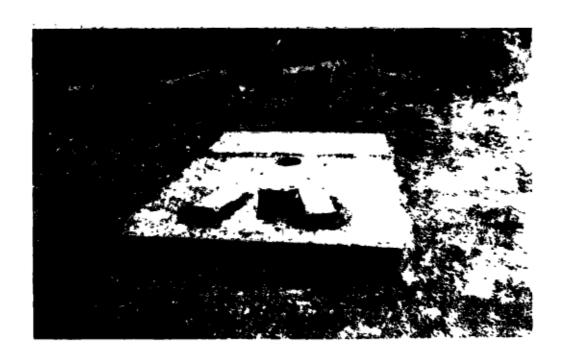
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## MODIFIED VIP LATRINE

**CONSTRUCTION GUIDE** 



# Jordan Milkov

WHO Sanitary Engineer







MONROVIA, 1987

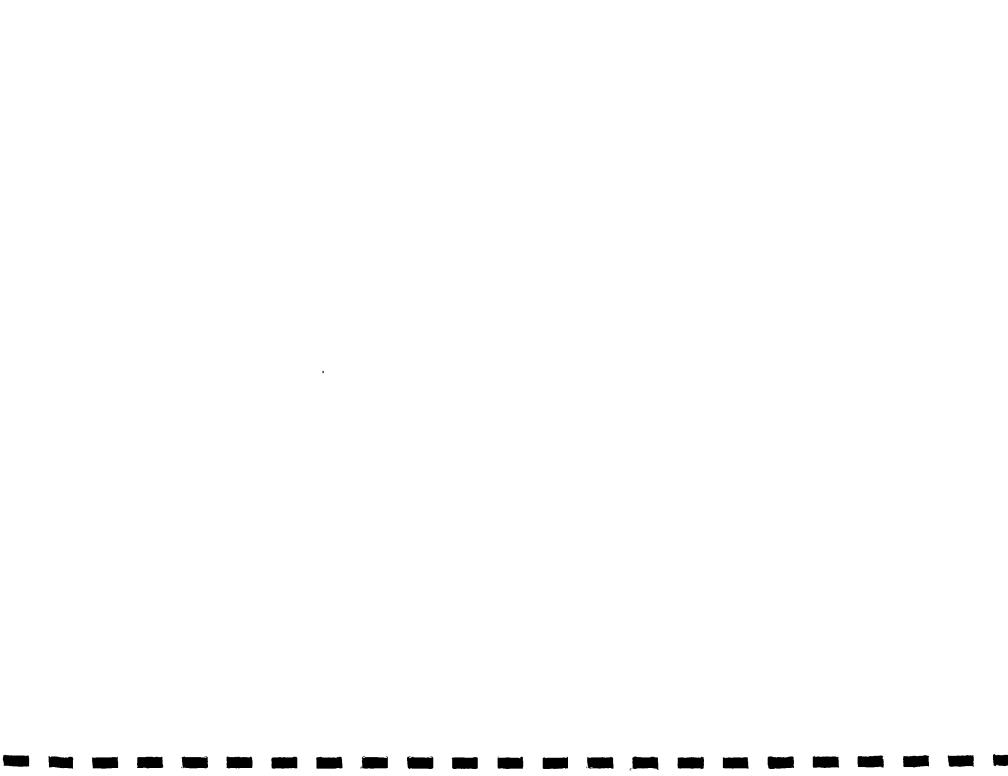
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### MODIFIED VIP LATRINE

VIP Latrine was modified and adapted to the The local construction practice. The walls are made of sticks and mud and various dimensions have been changed accordingly. One of the main advantages of this type latrine is that it does not require door. This allows the superstructure to be made light, which substantially reduces the cost. In areas with intensive breeding of domestic animals, a simple door 3 feet high can provided. An alternative construction with full size door is shown on a separate sheet.

The construction starts with making the ringbeam and the slabs (Fig. 1). As shown in the drawings a trench is dug around the future pit and the ringbeam is made with light reinforcement. Then the reinforcement bars for the slabs are cut, arranged and tied together by the wire. The bars are removed from the frames and the first 1" of dry-mix concrete is laid and compacted. the Then reinforcement is placed back and the concrete work is finished with very good compacting. The slabs are covered with banana leaves or wet rugs. Three days after the ringbeam is made, digging of the pit can start. The slabs



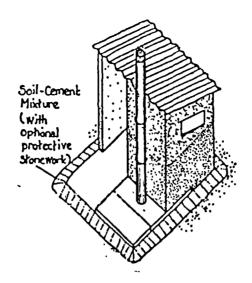
are moved on the ringbeam after a week (Fig. 2) and the foot rests fixed with cement. The construction can start immediately.

One end of the vertical sticks should be sharp, so that they can easily be driven by hammer in the ground (wet the ground in advance). The top sides of the sticks are cut to size and the 2" x 2" planks nailed on top. The zinc sheets are nailed on the planks. The inside floor of the latrine is leveled with the slabs by light soil-concrete mixture (Fig. 3 and Fig. 4). When the mixture is dry enough, the walls can be completed and the vent pipe fixed. Fig. 5 shows completed latrine just before the final plastering.

This unit has been developed in the scope of project LIB/CWS/001. The experiments have been jointly financed by WHO and UNICEF and have been carried out with an active participation of the Ministry of Health and Social Welfare. Printing of this paper was possible through a grant provided by UNICEF.

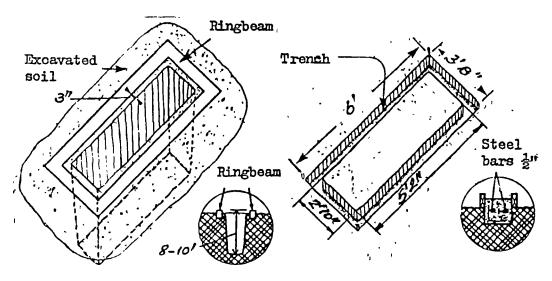
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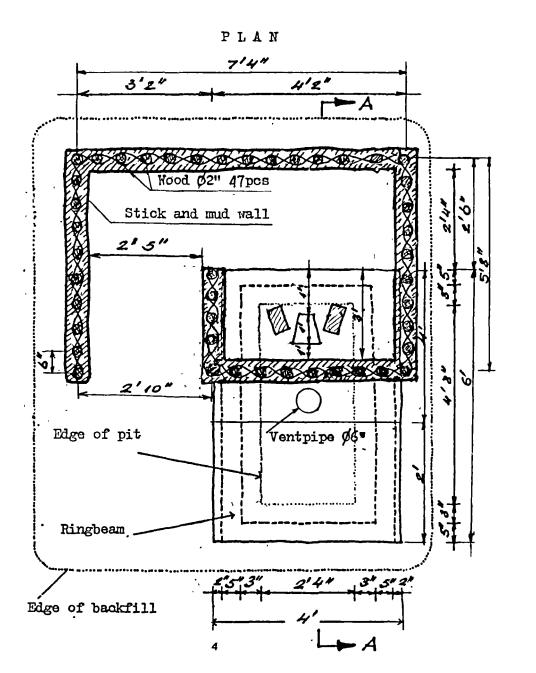
# MODIFIED VIP LATRINE GENERAL VIEW



# Approx 6'9" Window 1'x1½' Ringbeam Fixed Slabs Pit

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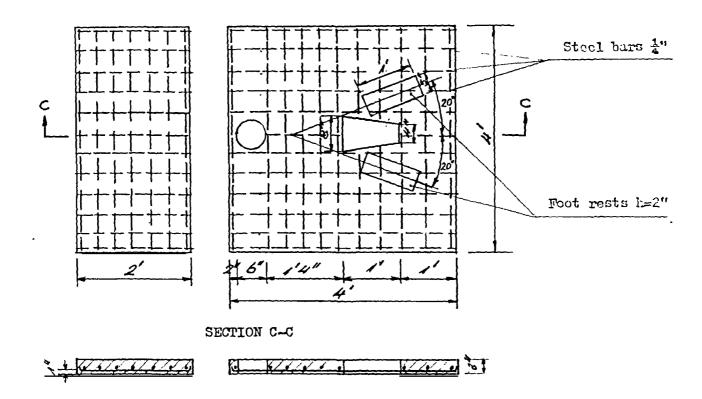




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SLABS

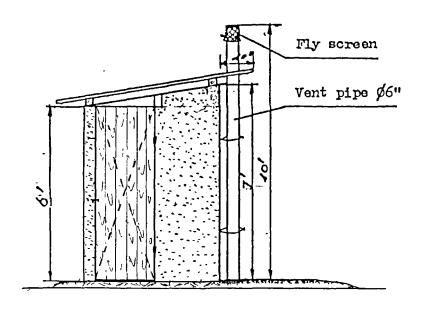
PLAN 1:20

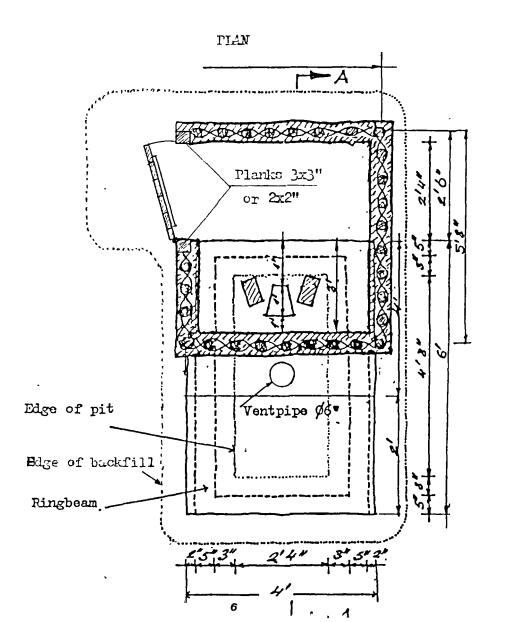


Concrete for the ringbeam: 1 part cement, 2.5 parts sand, 2.5 parts gravel
Concrete for the slabs: 1 bag (50kg) cement, 7 buckets sand, 8 buckets
gravel.

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### SIDE VIEW







### MATERIALS NEEDED FOR

### ONE VIP LATRINE

1.	Cement 1 1/2 bags \$11.00
2.	PVC pipe 6", 10 feet (1/2 length) 27.50
з.	Tie wire 1/2 roll 0.50
4.	Planks 2" x 2" x 9' 2 pcs for the roof
	2" x 2" x 6' 3 pcs for the roof
	1" x 2" x 3' 1 pc for the roof
	1" x 2" x 4' 3" 1 pc for the roof
	1" $\times$ 1" $\times$ 3' 2 pcs. (for fixing the
	lower side of the
	sticks above the slab
	1" x 3" x 8' 1 pc (for the frames of the
	foot rests and the hole)
	1" x 3" x 4' 1" 6 pcs for the slab frames
	1" ж 3" ж 2' 1" 2 pcs for the slab frames
	TOTAL FOR PLANKS \$12.00
5.	Corrugated zinc sheets 5 pcs 17.50
6.	Zinc nails 1/2 pack 0.50
7.	Nails 3" and 4" 1 pack each 1.50
8.	Steel rods 1/4", 160 feet 10.00
9.	Synthetic mosquito screen 1 foot 0.40
10.	A piece of nylon string 0.20
	TOTAL 81.10

(Prices in Monrovia)

Local Materials: Wood, sand, gravel



### MATERIALS NEEDED FOR ONE VIP LATRINE

### ALTERNATIVE WITH DOOR

1.	Cement 1 1/2 bag \$11.00
2.	PVC pipe 6", 10 feet (1/2 length) 27.50
з.	Tie wire 1/2 roll 0.50
4.	Planks 2" x 2" x 6' 5 pcs for the roof
	2" x 2" x 7' or 3" x 3" x 7' 2 pcs for
	the door frame
	2" $\times$ 2" $\times$ 3' 2 pcs for the door frame
	1/2" x 8" x 6' 2 pcs for the door
	1/2" x 3" x 3' 3 pcs for the door
	1" $\times$ 1" $\times$ 4' 2 pcs. (for fixing the lower side
	of the sticks above the
	slab)
	1" $\times$ 3" $\times$ 9' 1 pc. (for the frames of the foot
	rests and the hole)
	1" $\times$ 3" $\times$ 4' 1" 6 pcs for the slab frames
	1" $\times$ 3" $\times$ 2' 1" 2 pcs for the slab frames
	TOTAL FOR PLANKS 30.00
5.	Corrugated zinc sheets 5 pcs 10.50
6.	Zinc nails 1/2 pack 0.50
7.	Nails 3" and 4" 1 pack each 1.50
8.	Steel rods 1/4", 160 feet 10.00
9.	Synthetic mosquito screen 1 foot
	TOTAL 91.60
(Pr	ices in Monrovia)

Local Materials: Wood, sand, gravel

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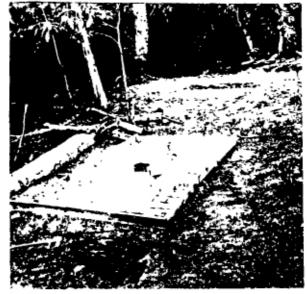


fig. 1

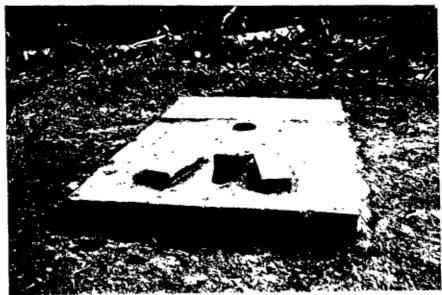


fig.2

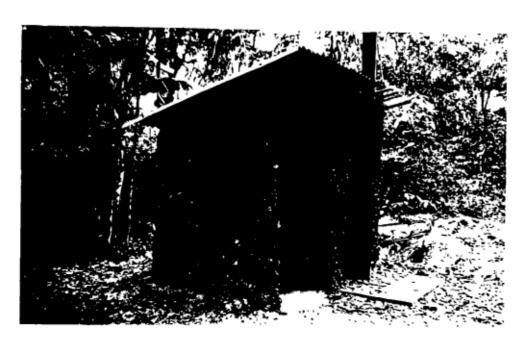


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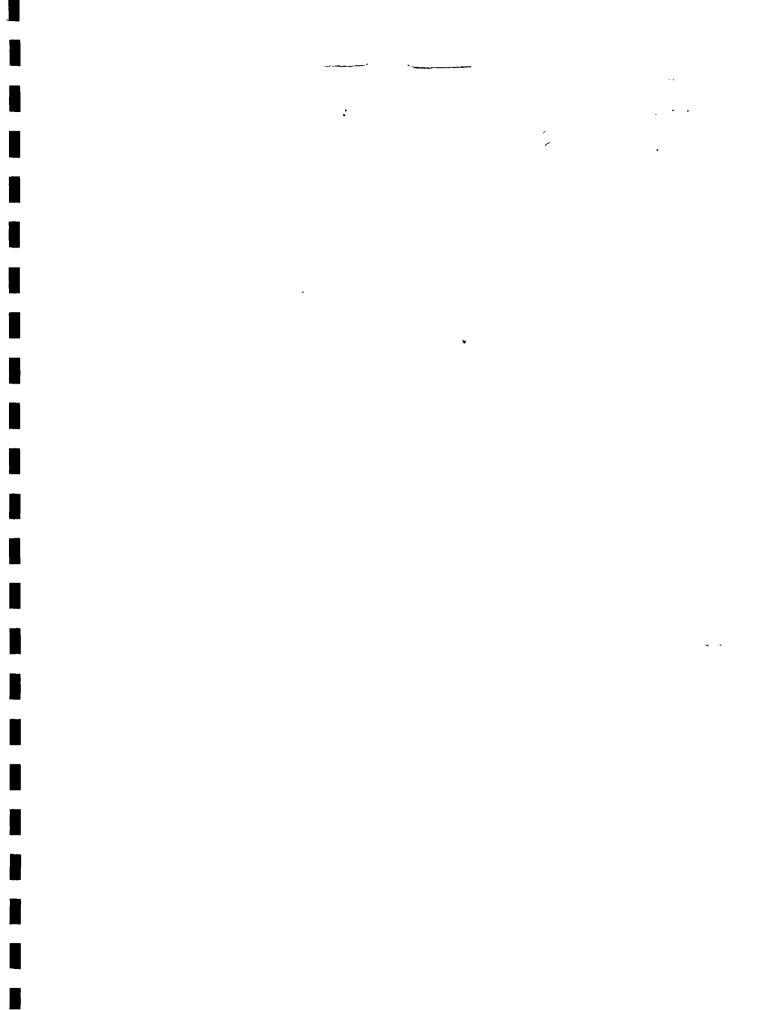
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