

# **RURAL SANITATION PROJECT**

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IRC International Water  
and Sanitation Centre  
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**HOUSEHOLD SANITATION FACILITIES**

**&**

**SCHOOL LATRINES-CUM-URINALS**

**( COST ESTIMATE & DRG. )**

**July' 1993**

Items of Household Sanitation Facilities :

Twin Pit Pour Flush Sanitary Latrine

Bathing Platform

Smokeless Chulha

Compost Pit

Soakage Pit

**INSTITUTE OF ENGINEERING & RURAL TECHNOLOGY**

**26, CHATHAM LINES, ALLAHABAD-211 002**

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# L. 3 TWIN PIP FOUR FLUSH SANITARY LATRINE:

## A. UP TO FIFTH LEVEL :

S. No.	Item	Quantity	Rate	Amount
<b>Material</b>				
1.	Bricks	600 Nos.	800.00 for 1000 Nos.	480.00
2.	Cement	1 Bag	96.00	96.00
3.	Sand	0.424 m <sup>3</sup>	176.88/m <sup>3</sup>	75.00
4.	W.C. pan, trap & foot rest (glazed Sanitary ware)	1 Set	200.00/ Set	200.00
5.	Pit cover	2 Nos.	120.00 Each	240.00
6.	A.C. Pipe (3" dia)	3.05 m	9.83/m	30.00
7.	Brick ballast	0.169 m <sup>3</sup>	177.51/m <sup>3</sup>	30.00
<b>Labour</b>				
1.	Mason	2 No.	60.00/ Days	120.00
2.	Helper	4 No.	30.00/ Days	120.00
<b>Sub Total</b>				<b>1391.00</b>

## B. SUPER STRUCTURE :

S. No.	Item	Quantity	Rate	Amount
<b>Material</b>				
1.	Bricks	400 Nos.	800.00 for 1000 Nos.	320.00
2.	Cement	2 Bags	96.00/ Bag	192.00
3.	M.S. Bar 10 mm dia	5 Kg	11.00/ Kg	55.00
4.	Sand	0.283 m <sup>3</sup>	176.67/m <sup>3</sup>	50.00
5.	Door with fittings	1 No.	200.00/ Set	200.00
<b>Labour</b>				
1.	Mason	1 No.	60.00/ Day	60.00
2.	Helper	2 Nos.	30.00/ Day	60.00
<b>Sub Total</b>				<b>937.00</b>

## C. OVER HEAD CHARGE :

Total (A) + (B) + (C) Rs.	2,478.00
Say Rs.	2,500.00

## II. BATHING PLATFORM SIZE : 1.20 × 1.20 × 0.10M :

S. No.	Item	Quantity	Rate	Amount
<b>Material</b>				
1.	Bricks	130 Nos.	800.00 for 1000 Nos.	104.00
2.	Sand	6 Bags	4.00/ Bag	24.00
3.	Cement	1 Bag	96.00/ Bag	96.00
4.	Moorum	1 Bag	5.00/ Bag	5.00
5.	Soil	1.82 m <sup>3</sup>	3.29/ m <sup>3</sup>	6.00
<b>Labour</b>				
1.	Mason	1/2 No.		30.00
2.	Helper	1/2 No.		15.00
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			May	280.00
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## III. SMOKELESS CHULHA :

S. No.	Item	Quantity	Rate	Amount
<b>Material</b>				
1.	Bricks	14 Nos.	800.00 for 1000 Nos.	11.20
2.	A.C. Pipe 3" dia.	3.05 m	13.11/ m	40.00
3.	Cowl	1 No.	5.00/ No.	5.00
<b>Labour</b>				
1.	Helper	1/2 No.	30.00/ Day	15.00
				-----
			Total Rs.	70.50
			Say Rs.	70.00

**IV. COMPOST PIT**

Size : 1.00 M × 1.00 M × 0.80 M

Cost : Rs. 30.00\*

\*Only Labour work is involved. Rs. 30.00

**V. SOAKAGE PIT :**

**A. EARTH WORK EXCAVATION :**

0.75 × 0.75 × 0.75 M = 0.410 Cu. m.

@25.00/ Cum. Rs. 10.00

Size of Brick ballast (Over burnt bricks)

1. 100 mm to 150 mm
2. 60 mm to 100 mm
3. 30 mm to 50 mm

**B.**

S. No.	Item	Quantity	Rate	Amount
1.	Brick (over burnt)	150 Nos,	500.00	for 75.00
			1000 Nos.	
	Labour for brick ballast	1 No.	30.00/ Day	30.00
2.	Red Clay Pot 2 Lit	1 No.	5.00/ No.	5.00
3.	Tin Can 1 Lit	1 No.	3.00/ No.	3.00
4.	Empty Cement Bag	2 Nos.	2.00/ No.	4.00
5.	Moorum	0.0283 m <sup>3</sup>	176.67/ m <sup>3</sup>	5.00

**Labour**

1.	Helper	1 No.	30.00/ Day	30.00
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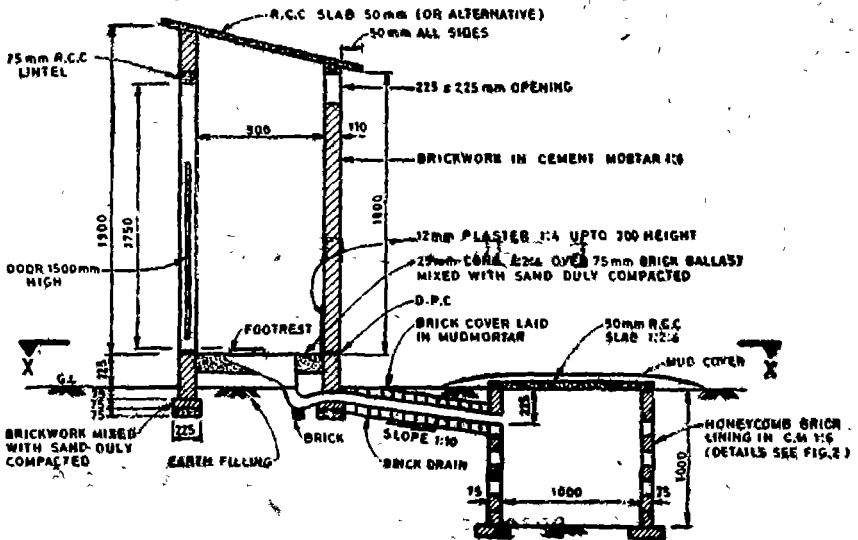
**Total Rs. 152.00**

Total (A+B)      Rs. 162.00  
Say                      Rs. 160.00

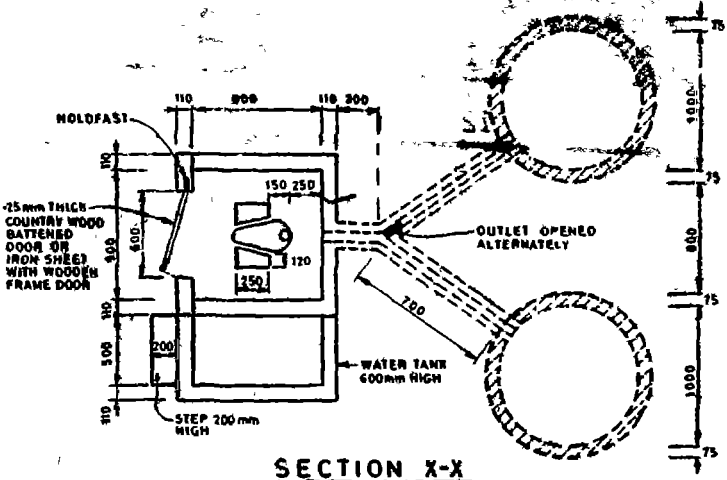
## VI. SCHOOL LATRINES-CUM-URINALS

Material	Unit.	Qty.	Rate	Amount
Bricks	Nos.	3285	750.00/1000 Nos.	2463.75
Cement	Bags	20.00	96.00/bag	1920.00
Local Sand	Cum.	3.05	130.00/cum.	396.50
Coarse Sand	Cum.	0.44	160.00/cum.	70.40
Brick ballast	Cum.	0.83	160.00/cum.	132.80
Stone ballast	Cum.	0.43	450.00/cum.	193.50
G.I. Corrugated Sheet (Size $6' \times 2\frac{1}{2}'$ ) 26 gauge for doors.	Nos.	4	300 00/No.	1200.00
AC Corrugated Sheets (Size $8' \times 3'$ )	Nos.	3	300.00/No.	900.00
M.S. Bars and angle iron for Chaukats.	Kg.	29.00	16.00/Kg.	464.00
Mild Steel hold Parts	No.	8	12.00/No.	96.00
Angle iron for doors (Size $30 \times 30 \times 3$ mm)	Kg.	32.00	16.00/Kg.	512.00
Paint	Litres	2.00	135.00/litres	270.00
Plastic reinforced fibre glass bar and Trap.	No.	2.00	275.00/No.	550.00
Damp proof Course 20 mm thick (Cement Conc.)	Sq. m.	1.70	36.00/Sq. m.	61.20
Mason	Max. days	20	70/day.	1400.00
Unskilled labour	Max. days	25	30/days.	750.00
<b>Total Rs.</b>				<b>11,380.15</b>
10% contingency				1,138.00
<b>G.T.</b>				<b>12,518.15</b>

# DUAL PIT WATER SEAL LATRINE



**SIDE - VIEW SECTION.**

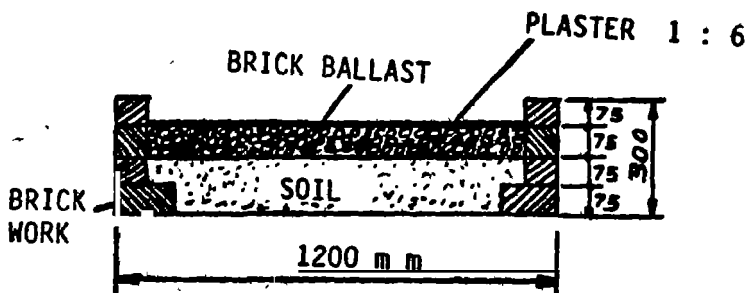


**SECTION X-X**

- NOTES :-**
- 1) DEPTH OF FOUNDATION VARIABLE TO SUIT SOIL CONDITIONS
  - 2) ALL DIMENSIONS ARE IN mm

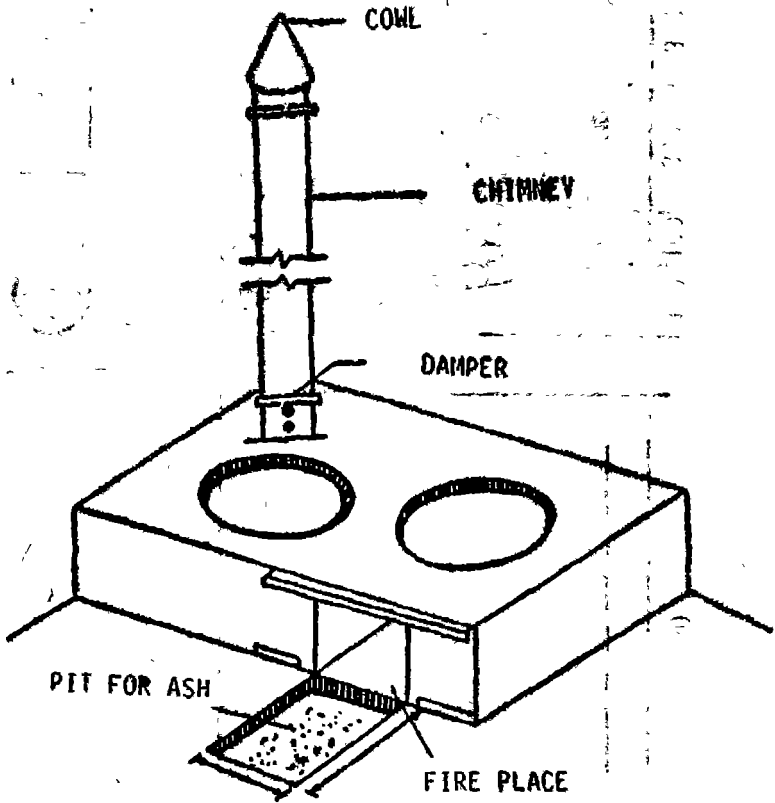
**UNICEF  
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## BATHING PLATFORM

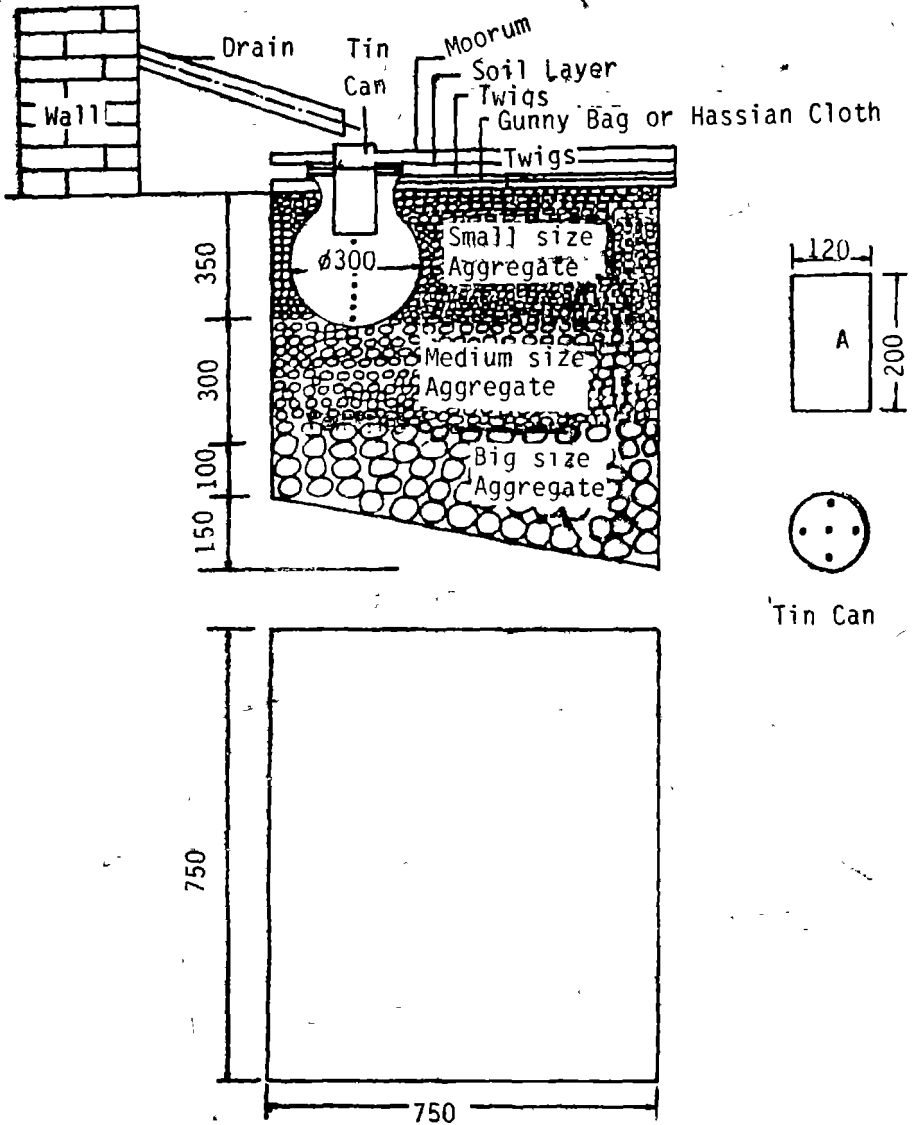




# SMOKELESS CHULHA



# SOAKAGE PIT



All Dimension in mm.



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**FOR FURTHER INFORMATION CONTACT :**  
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