PROJECT PROPOSAL FOR INDIA DEVELOPMENT FOUNDATION OF OVERSEAS INDIANS FUND (IDF-OI)

DISTRICT: NADIA

নির্মল বাংলা

MISSION NIRMAL BANGLA (SWACHH BHARAT MISSION(GRAMIN))
IN NADIA DISTRICT

Introductory Note:

The main objective of the PROJECT PROPOSAL FOR INDIA DEVELOPMENT FOUNDATION OF OVERSEAS INDIANS FUND (PIP) is to provide a definite direction to the programme for creation and sustenance of an ODF Society and Nirmal Grams.

Concept Note of Sabar Shouchagar i.e. Toilet for All

A district level initiative to stop open defecation

Up keeping and maintenance of Community Health is a constitutional right of Panchayati Raj System. During post-independence era, several schemes were undertaken by Central and State Govt to eradicate the curse of poor condition of community health in India. The main idea behind the schemes were to save the environment from water and sewage borne disease, by creating awareness among people and to give access to household latrine in every household and educational institutions etc. in order to build a pollution free society. In early '90s, Rural Sanitation Programme was introduced in West Bengal, which was later converted to Total Sanitation Campaign in the year 2002-03 and finally got the shape of "Swachh Bharat Mission (Gramin)" and ultimately into Mission Nirmal Bangla.

India shares the largest proportion (60%) nearly six hundred million people defecating in open out of 1.20 billion people defecating in open globally. Recognize the biggest shame. District Administration in Nadia took a note of the poor sanitation and hygiene situation in Nadia district as a priority in a mission mode, even before the launch of the national programme i.e. Swacch Bharath Mission. The district leadership took a collective decision on 2nd October 2013 and launched an innovative" Sabar Shouchagar" (Toilet for all) movement, with the pledge to transform Nadia into an Open Defecation Free district by 31st March, 2015 which had about 33% of Open Defecation at the beginning of 2013.

Thus, in just one and a half years' time, the district made remarkable progress by accelerating the pace of service delivery and covered over 100% families and aims to ensure 100% saturation by April 2015. A positive and enabling environment have encouraged and motivated the stakeholders for effective service delivery and people at large have become aware and started realizing that a new social norm towards stopping open defecation is doable and has to be ensured. The organized network of women Self Help Groups (SHG) and school children has played a major role in generating awareness, behavior change and demand and supply response is coordinated by District Administration and Zilla Parishad through Block Development Officers & Panchayati Raj Institutions. This transformation and turnaround in behavior change among people is the most important outcome of the innovative communication strategy coupled with close

and effective monitoring of the programme enabled optimum resource mobilization for accomplishing the mission successfully.

Highlighted Activities: At a glance:

- Generation of awareness and enabling behaviour change through Mass Mobilization of School Children, Teachers, Anganwadi & ASHA Workers, all other Health Workers, Women Self-help Groups, Faith Organizations, Elected Representatives of Local Self Govt. Bodies etc. and Public in general through both direct inter-personal communication and other different tools like Banner, Posters, Mass Rallies, Road Shows, Mass Regular Oath Taking at Schools etc.
- Total mobilization of elected representatives towards sanitation practices
- Mobilization of Women for Strategic partnership with organized women groups, sensitization of women through village level meeting, awareness workshops and involvement to contact drive through inter personal communication towards stopping open defecation.
- Mobilization of Community through Faith based organisations to spread the message of cleanliness.
- Developed innovative approaches and communication tools to reach the community at large and inform them about the programme, the community dialogues were held using all forums such as local festival, wall painting, banners and hoardings.
- Innovative IEC to communicate masses directly and spread the message of sanitation practices like faith rally, mini marathon, human chain against open defecation, posters and banners. *'Sabar Shouchagar'* express etc.
- Convergence: Sensitized and engaged actively all development programme officials to join hands, assigned additional responsibilities to report on how they can contribute towards the mission for elimination of open defecation, resource mobilization for existing national flagship programmes especially the national rural employment guarantee programme, national rural livelihood programmes.
- Women SHGs as Rural Sanitary Marts (RSMs) - NRLM Convergence: As a strategic decision we identified, trained and nurtured women SHG groups to set up production centers and actually execute the programme. Thus we have 47 SHG groups' clusters functioning as RSMs.
- Service delivery: The programme did a bottleneck analysis, oriented NGO partners, established few permanent training center for masons training, developed technical skills of women SHGs leaders for establishing new sanitary marts for decentralized service delivery at Gram Panchayat level.
- Monitoring: Regular review meetings were held at all levels to assess the programme implementation, quality of construction. The institutions and officials that spearheaded the process were Village Health and Sanitation Nutrition Committees (VHSNC) at GP level, Block Development Officers at block, Sub Divisional Magistrate and Additional District Magistrate at Sub-Division and district level. The monitoring was done both directly and on cascading mode regularly and vigorously.

Final Result:

During this tenure the district administration was able to provide 3, 55,609 toilets with near 100% usage as found out in final survey conducted by UNICEF which is attached herewith. Besides, district administration was also able to provide 100% access of Sanitary Toilets to all the Schools, ICDS centres and all others fringe areas of the District through providing community toilets complexes or through special interventions like Cluster Toilets as in Market Places, Roadside Dhabas, Slums etc. Finally Hon'ble Chief Minister, West Bengal Smt .Mamata Banerjee declared Nadia the 1st open defecation free (ODF) district in India on 30th April, 2015. Finally Nadia district received as the First Place Winner for the 2015 United Nations Public Service Award in the category of 'Improving the Delivery of Public Services' for the initiative 'Sabar Shouchagar',

Enforcement of ODF status:

For the sustainability of ODF status, 'Para Najardari Committee' a community level vigil/enforcement teams formed in every hamlet areas to keep watch on enforcement of ODF and to take care of defaulters, if any. The Nadia model has demonstrated that Open Defecation Free status is achievable and doable within a specific timeframe. This movement also resulted into positive health indicators as apparent with reduction of water borne diseases, Infant mortality rates etc. Most importantly it has brought about a collective behavioral change in usage of toilets which hopefully will make the initiative sustainable in the long run.

Sabar Shouchagar – "Toilets for All" – is a unique model developed to generate awareness, improve access to sanitary toilets, and bring substantial health improvement through improved sanitation. The model focused on mass mobilization and effective behavior change communications along with strengthening the existing service delivery system. Mobilization of key stake holders, especially women and school children and involvement of faith based organization helped in mobilizing the community within short period of time. The project outcomes include increased awareness, behavioral change, optimum resource mobilization, increase in usage of constructed toilets, and overall positive surge in public health indices of the district compared to the previous year

Annexure –I

Table 1.Re-verification of Baseline data: March 2013

Type of family	Total Households	Households with toilets	Households without toilets	% of families without toilet
Below poverty line families (eligible for subsidy)	425386	238020	187366	44.04
Above poverty line families (eligible for subsidy)	413370	298727	114643	27.73
Above poverty line families	201700	163828	37872	18.77
Total Families	1040456	700575	339881	32.66

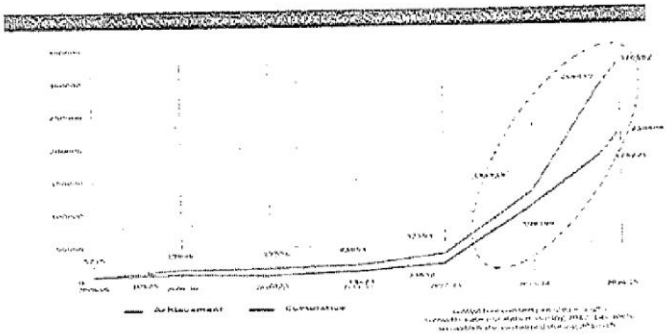
Annexure –II

Impacts:

- Improved health indices as per health department reports
- Women empowerment - greater participation of women, increased livelihood opportunities
- Collective behavior change among communities towards toilet use
- Decentralized institutional capacity for sanitation programme service delivery

Year	Diarrheal incidence	Diarrheal death	Severely malnourished	Moderately malnourished
2013	1,47,270	28	1,195	81,664
2014	96,185	19	675	60,652
2015 upto July	52,273	10	271	295

Table-2. Public health impacts already visible: from 2012-'13 to 2014-'15



Above Figure: A chart showing progress during NBA period (2009-13) and Sabar Shouchagar period (2013-2015

Annexure –III

Baseline toilets : 3,09,826
Outside of baseline : 33,503
Urban toilets: 12,220

Total toilets provided 3,55,609

Social Inclusion:
Community Toilets: 175
Toilets in Brick field: 516
Toilets besides Water bodies: 91
Toilets in Roadside Dhabas:116
Cluster toilets: 70

(Dipankar Bhattacharyya)
Additional Executive Officer
Nadia Zilla Parishad

A SKETCH OF N.B.A. (TSC) – PLAN AND PROJECT.
NADIA DISTRICT - A PROFILE

A)	Total Area	3927 Sq.Km.
B)	District headquarters	Krishnagar
C)	No of Sub-Divisions	4
D)	No. of Blocks	17
E)	No of Panchayat Samiti	17
F)	No of Gram Panchayat	187
G)	Population -	4603756
H)	Male percentage	51.37%
I)	Female Percentage	48.73%
J)	Literate	2e. 69,296
	i) Male	15, 00,537
	ii) Female	11, 68,759
K)	No of rural families	1010456 (approx.)
L)	No of BPL families (Rural)	3, 56, 092
M)	No of free Primary Schools	2e23
N)	No of Senior Madrasa	4
O)	No of High Madrasa	9
P)	No of Jr. Madrasa	5
Q)	No of Girls' High School in Rural Area	41
R)	No of Girls' Junior High School	11
S)	No of Co-education High and Higher Secondary School	264
T)	No of Co-education Jr. High School	144
U)	No of Sanitary Mart Sanctioned in district	17
V)	No of Sanitary Mart in Production	10
W)	No of NGO involved with Sanitary Marts	11
X)	No. of Gram Sansad	2641
Y)	No. of villages	1248
Z)	No. of ICDS Centre	6620

Name of District Magistrate & Exe. Vice-Chairman of SBM (G)	:	Sri Vijay Bharti, IAS
Address	:	P.O. Krishnagar, PIN 741101 Phone No. 03472-251001 (O) 03472-252052 (R) 9434340101 (M) Fax: 03472-253030 E mail: vijaybharati.ias@gmail.com
Name of Additional District Magistrate, ZP& Member of SBM (G)	:	Sri Dipanjan Bhattacharyya, WBCS (Exe.) P.O. Krishnagar, PIN 741101 Phone No. 03472-252233 (O) 8145037904 (M) Fax: 03472-253030 E mail: acozp.nadia@gmail.com
Name of Bank	:	Bank Account No. (TSC10055)
	:	Bank of India Krishnagar Branch, Nadia. Phone No. 03472-252277 Bank A/C No. 422310200010055 IFSC Code: BKID0004223

BASIC INFORMATION

1) **State:** West Bengal

2) **District:** Nadia

3) **Implementing Agency:** Zilla Parishad

DISTRICT LEVEL: (ZP/ DW SM BRDA / ZP
Chairman of the District Committee: Bani Kumar Roy
(by Designation): Sabhadhipati, Nadia Zilla Parishad.

4) **Address for communication:** Nadia Zilla Parishad
P.O.- Krishnagar
Dist-Nadia
State:- West Bengal
Phone: 03472-252499 (O) 03472-252233 (R) 9434165864 (M)
Email: tsenadia@gmail.com / shiben02@gmail.com

5) **Whether baseline survey (BLS) has been conducted and survey report sent to the Ministry?**

i) Date of Conducting Baseline Survey (BLS): 20-03-2013 to 31-03-2013
ii) Date of sending Baseline Survey (BLS) Report: 05-05-2013

6) **Project Template for submission of project, by Nadia Zilla Parishad**

a) Project Title: Post ODF Programme for sustainability

b) Aim of the Project: To keep the ODF status

c) Short justification for the project:

Nadia as a District has become Open Defecation Free as on today but to sustain the ODF status and to create ODF society as a whole there is still need of external input. As the District is poor one with percentage of people below poverty line (BPL) is 43.02% as per last RHS Data available there is a strong chance of shifting back to Open Defecation for a large chunk of this population due to sheer lack of personal funding to sustain the household toilets which were provided to them through the Govt. subsidy. During the BLS it was observed that the District have more than 2 Lakhs functioning squating plate toilets some of which are in need of immediate repair or replacement to double litchpit model as being provided now. As Govt subsidy can be provided to any beneficiary only once this additional provision may be made from the existing project proposal which is being sent herewith. Secondly in order to sustain ODF society massive IEC/BCC campaign is required which will also do good with additional funding which will also be used for capacity building and documentation. As Nadia has the distinction of being the first ODF district not only in the state but also in the country since commencement of SBM(G), the project as forwarded may kindly be justified and accepted.

d) Whether existing or new project:Exsisting project

e) Sector: Helth & Sanitation

f) Implementing agency and NGOs associated: Nadia Zilla Parishad

g) Target beneficiaries number and nature: Women, Children,Tribal etc

h) Target geographic location (village,district etc.): 17 Blocks / 187 GPs

i) Designe of project (methodology, intervention ect.): Described above

j) Expected outcomes/benefits proposed: To sustain the ODF district.

k) Project timeline (Date of commencement and completion): 31-03-2017

l) Estimated budget: Rs. 6995.46 lakhs

m) Whether the cost includes capital cost as well as maintenance cost: Yes

n) Images of proposed project (If any): Enclosed at the bottom of the proposal.

7) **Current Physical and Financial Details**

(a) Physical details

PARA-1

Components	Project Objective (Items sanctioned by GOI in the SBM(G) project)	Project Performance upto 30-04-2015 (Cumulative)	No. of IHHL having of Defunct
IHHL (APL Others)	37872	37872	6705
IHHL (APL SC)	33852	33852	7048
IHHL (APL ST)	5008	5008	696
IHHL (APL PH)	1065	1065	138
IHHL (APL S&M)	23732	23732	5204
IHHL (APL Landless)	42687	42687	8111
IHHL (APL WH)	8299	8299	1529
IHHL (BPL others)	99294	99294	11580
IHHL (BPL SC)	48581	48581	7069
IHHL (BPL ST)	9496	9496	1231
Total	309886	309886	49311

Fund requirement for the defunct toilet:-

PARA- 2

Sl. No.	Category	No. of IHHL having of Defunct	Per Unit cost Rs. In Lakh	Total Amount Rs. In Lakh
1	IHHL (APL Others)	6705	0.12	804.60
2	IHHL (APL SC)	7048	0.12	845.76
3	IHHL (APL ST)	696	0.12	83.52
4	IHHL (APL PH)	138	0.12	16.56
5	IHHL (APL S&M)	5204	0.12	624.48
6	IHHL (APL Landless)	8111	0.12	973.32
7	IHHL (APL WH)	1529	0.12	183.48
8	IHHL (BPL others)	11580	0.12	1389.60
9	IHHL (BPL SC)	7069	0.12	848.28
10	IHHL (BPL ST)	1231	0.12	147.72
	Grand Total	49311		5917.32

Fund requirement of Community Toilet

PARA-3

Sl. No.	Total	Rate Per unit (Rs. in lakh)	Total Amount Required (Rs. in lakh)
1	500 numbers	0.12	60.00

Fund requirement for Capacity Building

PARA-4

Sl. No	Items	No of Events	Rate per unit	Amount (Rs.in lakh)
1.	Training of Para Nazar- dari Committee and VHSNC	6620	0.05	331.00
2.	Training of Village Water and Sanitation Committee	187	0.10	18.70

3.	Training of Asha	17	0.30	5.10
4	Training of Aganwadi	17	0.50	8.50
5	Training of ANM	17	0.30	5.10
6.	Training of PRI member and Official,	17	0.50	8.50
7.	Training of core Teacher and others	17	0.50	8.50
8.	Training of Facilitator	17	0.50	8.50
9.	Exposure Visit	10	3.00	30.00
	Grand Total			423.90

Training for behavioral change

PARA-5

Sl. No	Items	No of activities	Rate per unit	Amount (Rs.in lakh)
1.	Song & street drama activities	1000	0.03	30.00
2.	Street Plays	1000	0.03	30.00
3.	Melas organised	17	1.00	17.00
4.	Group meetings	374	0.05	18.70
5.	Participatory Rural Appraisal	17	0.50	8.50
6.	Home Visit by the facilitator	187	1.00	18.70
	Tableau Show with song squad	17	2.00	34.00
	Grand Total			156.90

Documentation of best practices:-

PARA-6

Sl.No	Items	No of activities	Rate per unit	Amount (Rs.in lakh)
1.	Documentation of best practices	10	2.00	20.00

Monitoring & evaluation

PARA-7

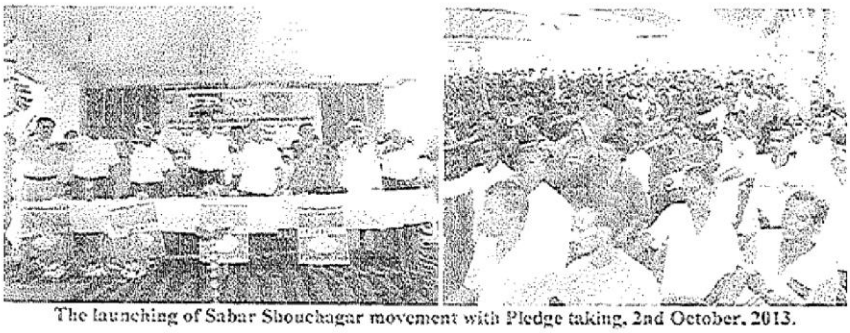
Sl.No	Items	No of activities	Rate per unit	Amount (Rs.in lakh)
1.	District Level	38 (19 month X 2 Time)	0.10	3.80
2.	Block Level	646 (19 month X 2 Time X 17 blocks)	0.05	32.30
3.	Gram Panchayat Level	14212(19 month X 4 Time X 187 GP)	0.02	282.24
	Mobility Support	19 month X Rs. 3.00 lakh	3.00	57.00
	Total			377.34

PARA-8

Budget at a glance

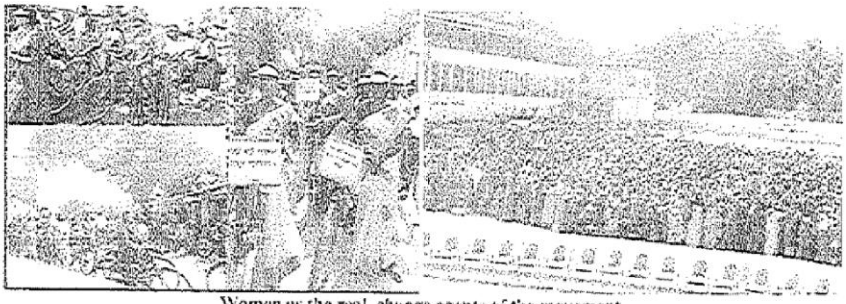
Sl. No.	Synopsis	Amount Rs. in lakh
1.	Fund requirement for the defunct toilet	5917.32 (Para-2)
2.	Fund requirement of Community Toilet	60.00 (Para-3)
3.	Fund requirement for Capacity Building for sustainable	423.90(Para-4)
4.	Training for behavioral change for sustain the ODF status	156.90(Para-5)
5.	Documentation of best practices	20.00(Para-6)
6.	Monitoring & evaluation	377.34 (Para-7)
7.	Administrative Cost	40.00
	Total Rs.	6995.46 (Sixty nine Crores Ninety five lakhs Forty six thousand)

Sabar Shouchagar- A journey to ODF Nadia

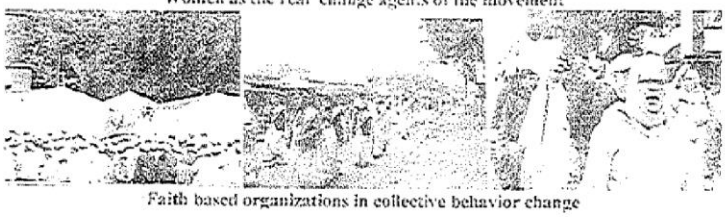


The launching of Sabar Shouchagar movement with Pledge taking, 2nd October, 2013.

Massive participation of School children - as catalysts

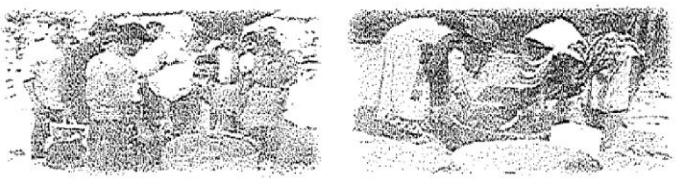


Women as the real change agents of the movement



Faith based organizations in collective behavior change

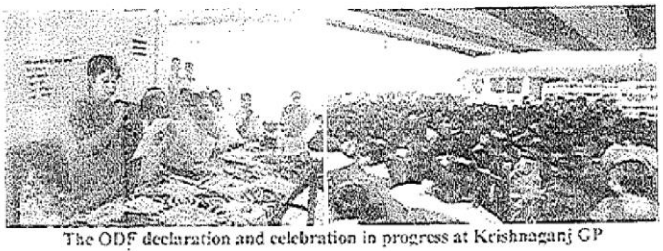
Women SHGs – as Rural Sanitary Marts



Permanent mason training centres for skilling

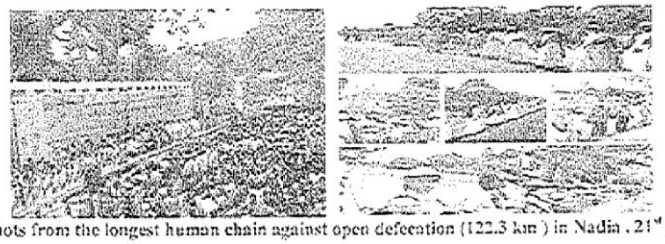
GIS map based monitoring, showing toilet density and coverage

Proud women with their new possession for dignity



The ODF declaration and celebration in progress at Krishnaganj GP

The 'Para Najardari Committee' on the move: With the first defaulter in the GP



Snap shots from the longest human chain against open defecation (122.3 km) in Nadia , 21st Feb,'15.

District ODF declaration
and
celebration

On 30th April 2015, Nadia district declared ODF by Hon'ble Chief Minister, Ms. Mamata Banerjee

Nadia district received UNPSA Award on 23 June, 2015 for Sabar Shouchagar initiative

For more updates:
Website: www.sabarshouchagar.in
FB Page: www.facebook.com/sabarshouchagar

(Dipanjan Bhattacharyya)
Additional Executive Officer,
Nadia Zilla Parishad

Model Estimate of Community Toilet with Water facilities of Rs.12900.00

Part-1

Details Plan & Estimate of Community Toilet with Beneficiary Contribution of Rs.10900.00

Part-II

Details Plan & Estimate of Water facilities in IHHL of Rs. 2000.00

Individual Household Latrine with Brick work superstructure;
Roof & door with GCI sheet; Double leach pit lining with circular concrete/ ferro-cement rings

1. Earth work in excavation:
   - i) Foundation (trench cutting) – 4.10 m (C.L.) x 0.20 m x 0.30 m
   - ii) Leach pits – 2 nos; diameter 0.90 m & depth 1.22 m

2. Construction of Individual Household Latrine (Masonary work):
   - i) P.C.C. (1 : 3 : 6) with jhama khoa – width 200 mm & thickness 100 mm
   - ii) 125 mm brick work (1 : 4) up to G.L. of height 200 mm
   - iii) 125 mm brick work (1 : 4) up to P.L. of height 300 mm
   - iv) Walls of 125 mm brick work (1 : 4) gradually downward in slope from 1.83 m (front side) to 1.68 m (back side) height above P.L. to roof; front wall of 125 mm off-set
   - v) Pan & siphon to be placed in proper position with right alignment; PVC 'Y' pipe to be connected with siphon and outlet of PVC pipe (100 mm dia) to be placed over one leach pit after linking with one arm of 'Y' pipe. Another arm of 'Y' pipe to be blocked.
   - vi) Plaster (19 mm th, 1 : 6 – sand : cement) to internal wall
   - vii) Plaster (12 mm th, 1 : 6 – sand : cement) to external wall
   - viii) Artificial Stone Flooring (1 : 2 : 4; 37.5 mm thickness) in floor
   - ix) Setting up Ceramic tiles (150 mm x 200 mm or 200 mm x 300 mm) at skirting (height 0.30 m) of internal walls
   - x) Neat cement punning at dado (height 0.30 m) of external walls
   - xi) Roof - G.C.I. sheet of thickness 0.25 mm to be placed & framed over timber rafter
   - xii) Door - G.C.I. sheet of thickness 0.18 mm to be fitted with timber battens & hanged in front wall with the help of hinges
   - xiii) Placed 4 nos of pre-cast circular concrete/ ferro-cement rings (using G.I. wire) in each leach pit; internal & external diameter 0.75 m & 0.80 m respectively and height 0.30 m of each ring
   - xiv) Placed pre-cast R.C.C. pit cover of diameter 0.80 m & thickness 37.5 mm over the top most rings in the pit

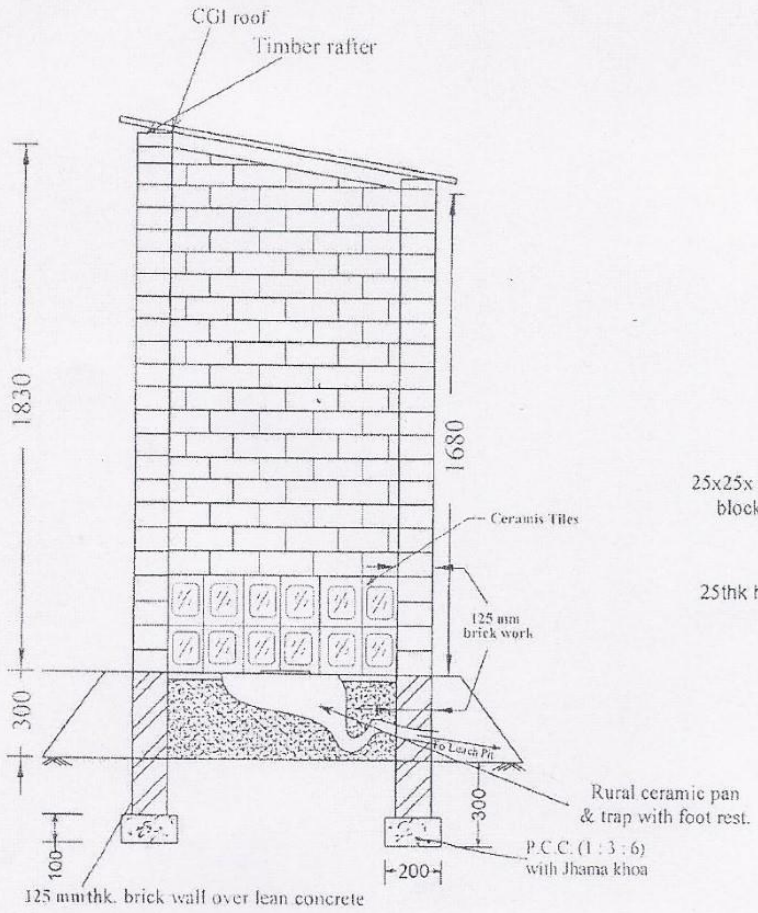
Soil has been categorized in 05 (five) different sectors - (i) Loose & soft soil; (ii) Ordinary mixed soil; (iii) Medium hard soil; (iv) Hard soil, moorum & laterite; and (v) Muddy & slushy soil as per the Government Order vide No. 7490-RD/P/NREGA/18S-09/06 Dated: 20/12/2011. The average output in excavation against lead upto 80'-0" and lift upto 5'-0" has been considered following the above mentioned G.O. However, in this model estimate, the consumption of un-skilled labour in point of earth work excavation has been shown on Ordinary mixed soil (62 c.ft/ 1 u-sk). Hence, the consumption of un-skilled labour in other soil sectors may be adjusted little a bit following the Government Order & Guideline.

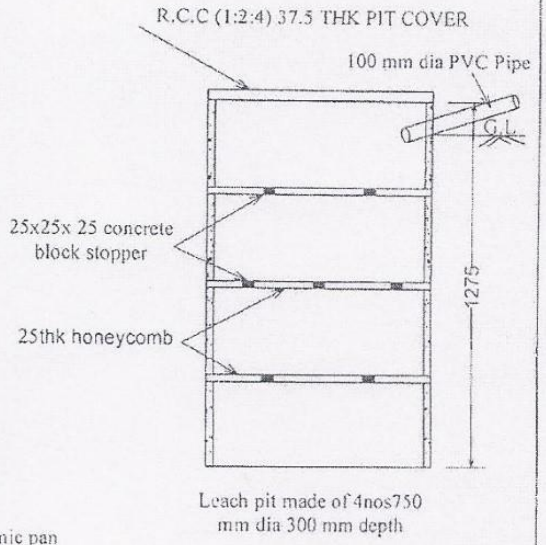
N.B. :

- i) The drawing and the abstract of cost estimate may be considered as a guide and a model estimate one for provision of household toilet.
- ii) Consumption of skilled & un-skilled labour has been followed vide reference of the "Technical Guide Book and Schedule of Works for Rural Employment Programme", P.&R.D., GoWB.
- iii) The foundation as indicated in the drawing may vary (with the approval of district authority) depending on the bearing capacity of soil and other local conditions where the toilet would be built.
- iv) Rate of few raw materials considered in the cost estimate as per prevailing justified local market rates in and around Kolkata during the 1st week of April, 2014. Thus, the estimate may vary from place to place and from time to time (with the approval of district authority) depending on the prevailing market rates of different kinds of raw materials in any particular area.

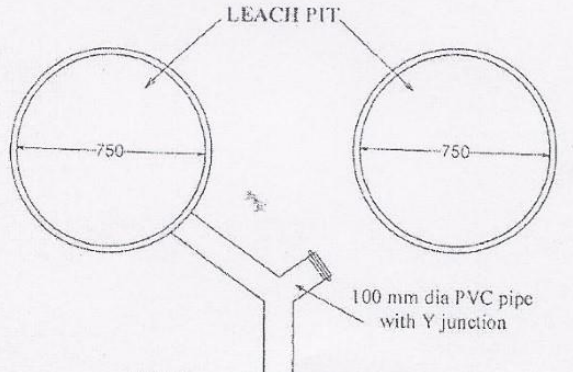
30/6/2014
State Co-ordinator
Sanitation Cell

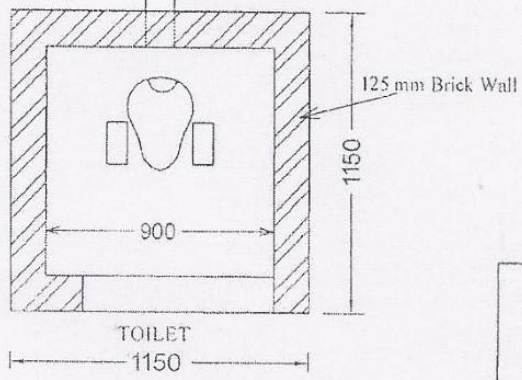
30/6/14
Technical Officer,
State Sanitation Cell
Govt. of West Bengal





Leach pit made of 4nos750 mm dia 300 mm depth





PLAN

Technical Officer,
State Sanitation Cell
Govt. of West Bengal
S.I.P. & R.D., Kalyani, Nadia

PLAN AND SECTIONAL DETAILS

OFF-THE PIT TOILET (DOUBLE PIT) WITH BRICK MASSONRY SUPERSTRUCTURE

All dimensions are in mm

NOT TO SCALE

Convergence between NBA - MGNREGA

Abstact of cost estimate of Individual Household Latrine with Brick work superstructure; Roof & door with GCI sheet; Floor & skirting set up with ceramic tiles; Double leach pit lining with circular ferro-cement/ concrete rings in each pit

Part (A): Incentive from NBA fund + Beneficiary contribution

Sl. No.	Description of Items	Quantity	Unit	Rate (Rs.)	Amount (Rs.)
1	1st class Bricks	390	Each	8.00	3,120.00
2	Cement (Reputed brand with ISI mark)	5.00	Bag	351.50	1,757.50
3	½" Stone chips	7.00	C.ft	42.00	294.00
4	Transportation cost of all materials	Lump - Sum	Lump - Sum	Lump - Sum	328.50
	(a) Total Cost of Materials	**Five Thousand Five Hundred only**			**5,500.00**

Part (B): MGNREGA fund

a) Material component

Sl. No.	Description of Items	Quantity	Unit	Rate (Rs.)	Amount (Rs.)
1	Sand (Coarse)	23.00	C.ft	20.00	460.00
2	Steel (using 5.5 mm rod) for 2 pit covers	2.50	Kg	52.00	130.00
3	Jhama bats (PWD SOR - Wage for Breaking)	3.00	C.ft	35.00	105.00
4	GCI sheet (of thickness 0.18 mm) for door of height 5'-0" (cutting piece from sheet of full height 10'-0"; 7 pieces in bundle @ Rs. 2,100/-)	3/4	Piece	300.00	225.00
5	GCI sheet (of thickness 0.25 mm) for roof of height 5'-0" & width 2'-8" (cutting piece from sheet of height 10'-0"; 7 pieces in bundle @ Rs. 2,450/-)	1	Piece	350.00	350.00
6	PVC pipe (4" dia; 2'-0" long) with 'Y' junction	1	Set	180.00	180.00
7	Washer, Nut-Bolt, Black annealed wire (for binding), GI wire (if ferro cement rings used), Hinges, Sikols, P. sheet etc.	Lump sum	Lump sum	Lump sum	154.00
8	Ceramic rural pan/ trap with foot rest	1	Set	300.00	300.00
9	Ceramic tiles (6" x 8" or 8" x 12") for internal walls	11.00	Sq.ft	25.00	275.00
10	Timber batten for door & roof (local heart wood)	Lump sum	Lump sum	Lump sum	375.00
11	Display Board	Lump sum	Lump sum	Lump sum	100.00
	a) Raw material	-	-	-	**2,654.00**
12	Skilled labour for Masonary work	4.00	MD	338.00	1,352.00
13	Supervisor (to be engaged for every 6 IHHL's vide Memo No. 301(20)/Comm.-P&RD/P/NREGA/18E-01/06(Part-I) Dated 08.10.2013 of P&RDD, Government of West Bengal)	1/6	MD	253.50	42.25
	b) Skilled labour + Supervisor	-	-	-	**1,394.25**
	a) + b)				**4,048.25**
	say	**Four Thousand Forty Eight only**			**4,048.00**

b) Wage component

14	i) Un-skilled labour for Masonary work	8.0	MD	169.00	1,352.00
	Total Un-skilled labour	**One Thousand Three Hundred Fifty Two only**			**1,352.00**

Synopsis

	Part - (A): Incentive from NBA fund + Beneficiary contribution		**5,500.00**
	Part - (B): MGNREGA fund	**Ratio of %age**	
	a) Material component	74.96	**4,048.00**
	b) Wage component	25.04	**1,352.00**
	Grand Total -	**Rupees Ten Thousand Nine Hundred only**	**10,900.00**

N.B. - This estimate is prepared on the basis of PWD (WB) Schedule of Rates for Building works (effective from 01st August, 2010) and the Corrigendum (w.e.f. 07th April, 2012)/ Local justified market rate; Technical Guide Book and Schedule of Works for Rural Emolyment Programme (effective from 01.12.1999, P.&R.D. Deptt., GoWB) and NBA Guidelines

Countersigned by

30/8/2014

(Ganesh Choudhary)
State Co-ordinator
State Sanitation Cell, SIPRD, Kalyani

Prepared & Verified by

30/8/14

(Dipankar Sarkar)
Technical Officer
State Sanitation Cell, SIPRD, Kalyani

Consumption of Materials & Labour Component on estimate of IHHL

Sl. No.	Description of Items	Qty.	Unit	Materials						Labour	
				Brick (in Pes)	Cement (in Bags)	Sand (in C.ft.)	Stone chips (in C.ft.)	Jhama khoa (in C.ft.)	Steel (in Kg)	Sk	Usk
1	a) Earthwork in excavation of foundation trenches or drains ..... (considering, Ordinary mixed soil to be excavated by spade ..... lift upto 5'-0" & lead upto 80'-0") *{considering, 62.0 c.ft per 1-Usk}*	1.80	m3	-	-	-	-	-	-	-	1.02
2	Cement concrete (1 : 3 : 6) with graded jhama khoa (40 mm size) excluding shuttering. *{2-Sk & 3-Usk per 2.1 m3}* *{Jhama khoa-0.96 m3, Sand-0.48 m3 & Cement-0.16 m3 per m3}* In foundation	0.082	m3	-	0.38	1.39	-	2.780	-	0.08	0.12
	Supply of Jhama bats = 2.78 x 1.10 = 3.058 c ft Breaking of Jhama bats to Jhama khoa (63mm to 45mm); 2.78 c.ft = 0.0787 m3 *{1-Usk per 1.20 m3}*	0.0787	m3	-	-	-	-	-	-	-	0.07
3	125 mm thick Brick work (1 : 4) ..... *{5-Sk & 4-Usk per 24.0 m2}* *{Brick-4951 nos. Sand-3.66 m3 & Cement-0.914 m3 per % m2}* Brick work laid over PCC upto Plinth level	2.0500	m2	101	0.54	2.65	-	-	-	0.26	0.34
4	125 mm thick Brick work (1 : 4) ..... *{3-Sk & 4-Usk per 24.0 m2}* *{Brick-4951 nos. Sand-3.66 m3 & Cement-0.914 m3 per % m2}* Superstructure above P.L.	5.8448	m2	289	1.54	7.55	-	-	-	0.73	0.97
5	Nominal mix (1 : 2 : 4) cement concrete with graded stone chips (20 mm size) excluding shuttering & reinforcement ..... in Gr. Floor. *{2-Sk & 3-Usk per 2.0 m3}* [Stone chips-0.88 m3, Sand-0.44 m3 & Cement-0.22 m3 per m3] b) 2 nos RCC pit cover	0.0387	m3	-	0.245	0.601	1.202	-	-	0.04	0.06
	Nominal mix (1 : 2 : 4) cement concrete with graded stone chips (20 mm size) excluding shuttering & reinforcement ..... in Gr. Floor. *{2-Sk & 3-Usk per 2.0 m3}* [Stone chips-0.88 m3, Sand-0.44 m3 & Cement-0.22 m3 per m3] c) 8 nos RCC rings & concreting in 4 top corners	0.1575	m3	-	0.997	2.447	4.893	-	-	0.16	0.24
6	Reinforcement for reinforced concrete work in all sorts of structure ..... Tor steel/ Mild steel (using 5.5 mm bar) *{3-Sk (Rod binder) & 2-Usk per 220 Kg}* 2 nos RCC pit cover	0.8% of total R.C.C. volume	kg	-	-	-	-	-	2.43	0.03	0.02
7	Grey A.S.F. for floor, dado, skarting, staircase etc. with cement concrete (1 : 2 : 4) with stone chips 6 mm down ... *{5-Sk & 3-Usk per 24.0 m2}* *{Stone chips-2.23 m3, Sand-1.12 m3 & Cement-0.855 m3 per %m2}*	0.720	m2	-	0.177	0.285	0.567	-	-	0.15	0.09
8	Plaster (to wall, floor, ceiling etc.) with sand and cement mortar ... . a) 19 mm thick (1 : 6) *{5-Sk & 8-Usk per 36.0 m2}* *{Cement-0.366 m3 & Sand-2.196 m3 per %m2}* Internal wall	5.244	m2	-	0.55	4.07	-	-	-	0.73	1.17
	Plaster (to wall, floor, ceiling etc.) with sand and cement mortar ... . b) 12 mm thick (1 : 6) *{2-Sk & 3-Usk per 18.0 m2}* *{Cement-0.244 m3 & Sand-1.46 m3 per %m2}* External wall	7.802	m2	-	0.55	4.02	-	-	-	0.87	1.30

Sl. No.	Description of Items	Qty.	Unit	Materials						Labour	
				Brick (in Pcs)	Cement (in Bags)	Sand (in C.ft.)	Stone chips (in C.ft.)	Jhama khoa (in C.ft.)	Steel (in Kg)	Sk	Usk
9	Neat cement punning about 1.5 mm. thick in wall, dado, window, sills, floor, drain etc. *[2-Sk & 1-Usk per 50.0 m2]* *[Cement-0.152 m3 per %m2]* Floor area, Internal & External wall	2.190	m2	-	0.096	-	-	-	-	0.09	0.04
10	Roofing work with cladding of roof surface materials over frame work ..... (for Corrugated iron sheet) *[1-Carpenter (Sk), 4-Helper & 2-Usk per 37.0 m2]*	1.400	-	-	-	-	-	-	-	0.04	0.23
11	Fitting, fixing door & window shutters with necessary hinges *[1-Sk & 1-Usk per 2 nos]* *(Skilled labour converted to Un-skilled labour for more involvement & participation under Wage component)*	1	each	-	-	-	-	-	-	-	1.50
12	Setting up ceramic tiles in walls ..... *[2-Sk & 5-Usk per 7.5 m2]* [considering, the amount of work per day as the same of item - 25 mm thick mosaic flooring .....] *(2 mm thick cement slurry at back side of tiles using cement @ 2.91 kg/ m2 & joint filling using white cement slurry @ 0.20 kg/ m2)*	0.95	m2	-	0.05	-	-	-	-	0.25	0.63
				390	5.13	23.02	6.66	2.78	2.43	3.42	7.80
	Total - say			390	5.00	23.00	7.00	3.00	2.50	4.00	8.00

Countersigned by

30/6/2014

(Ganesh Choudhary)
State Co-ordinator
State Sanitation Cell, SIPRD, Kalyani

Prepared & Verified by

30/6/14

(Dipankar Sarkar)
Technical Officer
State Sanitation Cell, SIPRD, Kalyani

Part - A: Itemwise detail estimate of IHHL

Particulars	No.	Length	Breadth	Height	Dia.	Total	Unit
1. Earthwork in excavation of foundation trenches ... (considering, soil to be excavated by spade.. lift upto 5'0" & lead upto 80'0")							
i) Foundation, - 1 x 13'8" x 0'8" x 1'0"	1	4.10	0.20	0.30		0.2460	cu.m
ii) Leach pit - 2 nos. (depth - 4'-0" & diameter - 3'0")	2	-	-	1.22	0.90	1.5529	cu.m
						1.7989	cu.m
2. P.C.C (1 : 3 : 6) with jhama khoa: (Jhama chips-0.96 m3, Sand-0.48 m3 & Cement-0.16 m3) per m3							
In findn. & trenches. (C.L. = 1.025 m); i.e. Total length = (4 x 1.025) = 4.10 m	1	4.10	0.20	0.10		0.0820	cu.m
3. B/work; 125 mm (1 : 4); (Brick-4951 Nos, Cement-0.914 m3 & Sand-3.66 m3) per % m2							
Upto G.L., (C.L. = 1.025 m); i.e. Total length = (4 x 1.025) = 4.10 m	1	4.10		0.20		0.8200	sq.m
4. B/work; 125 mm (1 : 4); (Brick-4951 Nos, Cement-0.914 m3 & Sand-3.66 m3) per % m2							
Upto P.L., (C.L. = 1.025 m); i.e. Total length = (4 x 1.025) = 4.10 m	1	4.10		0.30		1.2300	sq.m
5. B/work; 125 mm (1 : 4); (Brick-4951 Nos, Cement-0.914 m3 & Sand-3.66 m3) per % m2							
Above P.L., {(2 x 1.15) + (1 x 0.90)} = 3.20m & Ht. (1.83 + 1.68)/2 = 1.755m	1	3.20		1.755		5.6160	sq.m
Front side	1	0.125		1.83		0.2288	sq.m
						5.8448	sq.m
6. Plaster (to wall, floor, ceiling etc.) with cement-sand mortar							
a) Plaster (19 mm th.; 1 : 6) with cement-sand mortar .....; (Cement-0.366 m3 & Sand-2.196 m3) per % m2							
Internal wall: 2 side walls	2	0.90		1.755		3.1590	sq.m
Back wall	1	0.90		1.68		1.5120	sq.m
Front wall	1	0.125		1.83		0.2288	sq.m
Top surface of the wall	1	2.750	0.125			0.3438	sq.m
						5.2435	sq.m
b) Plaster (12 mm th.; 1 : 6) with cement-sand mortar .....; (Cement-0.366 m3 & Sand-2.196 m3) per % m2							
External wall: 2 side walls	2	1.15		2.055		4.7265	sq.m
Back wall	1	1.15		1.98		2.2770	sq.m
Front wall	1	0.375		2.13		0.7988	sq.m
						7.8023	sq.m
7. Artificial Stone Flooring (1 : 2 : 4; 37.5 mm th.); (Stone chips-2.23 m3, Sand-1.12 m3 & Cement-0.855 m3 per %m2)							
Floor area	1	0.90	0.90			0.8100	sq.m
Deduction (-) for pan area	1	0.30	0.45			0.1350	sq.m
						0.6750	sq.m
8. Neat cement punning about 1.5 mm thick; (Cement-0.152 m3 per % m2)							
External wall (dado)	4	1.15		0.30		1.3800	sq.m
Floor area						0.8100	sq.m
						2.1900	sq.m
9. Setting up ceramic tiles in walls							
Internal wall (skirting)	3	0.90		0.30		0.8100	sq.m
	3	0.15		0.30		0.1350	sq.m
						0.9450	sq.m
10. P.C.C. (1 : 2 : 4); Stone chips - 0.88 cu.m, Sand - 0.44 cu.m & Cement - 0.22 cu.m (per cu.m for all materials)							
i) Pre-cast Rings; D1=0.81 m, D2=0.76 m & H=0.3 m; V = 22/7 x (0.66 - 0.58) x 0.3/4 = 0.0189 m3	8			0.3		0.1512	cu.m
ii) Concreting 4 nos top corners (for holding timber batten in roof truss through bolt inserted in concrete block)	4	0.125	0.125	0.10		0.00625	cu.m
						0.1575	cu.m
11. R.C.C. (1 : 2 : 4); Stone chips - 0.88 cu.m, Sand - 0.44 cu.m & Cement - 0.22 cu.m (per cu.m for all materials)							
Pre-cast Pit cover; (considering, 0.8% steel on total volume of concrete; using 5.5 mm rod @ 150 mm c/c)	2			0.0375	0.81	0.0387	cu.m

Countersigned by

30/6/2014

(Ganesh Choudhary)
State Co-ordinator
State Sanitation Cell, SIPRD, Kalyani

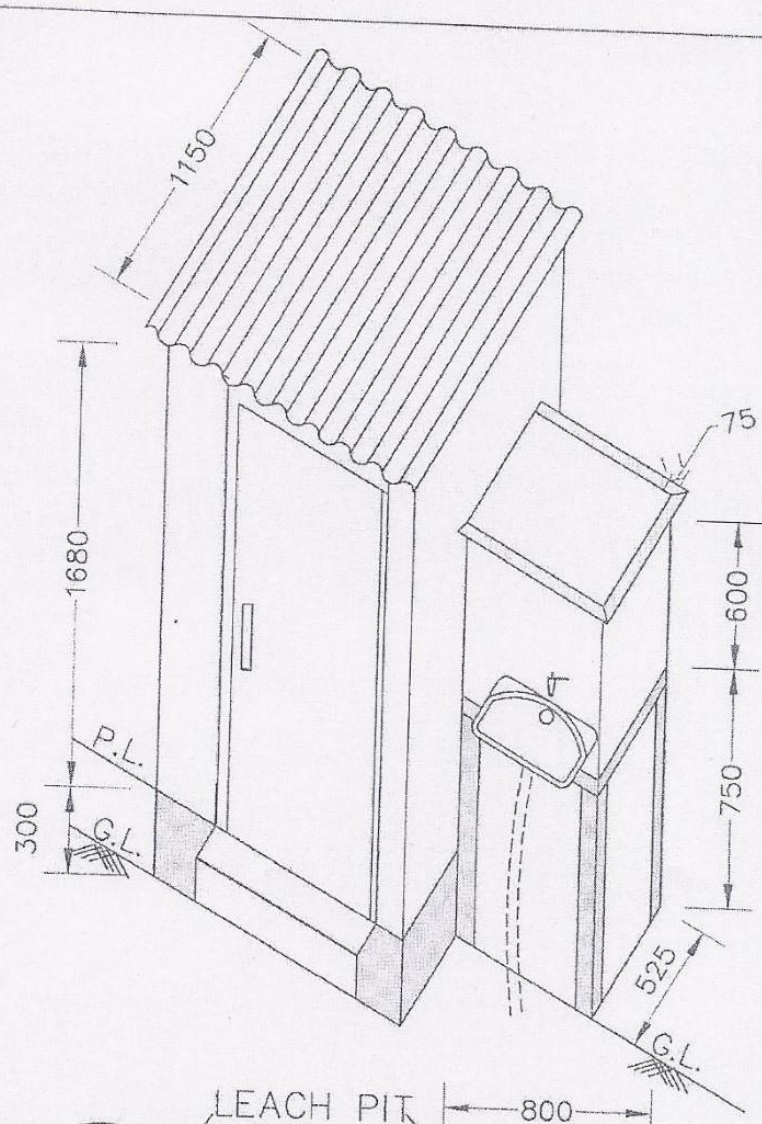
Prepared & Verified by

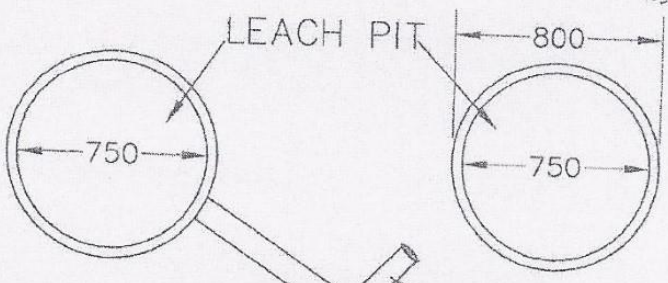
30/6/14

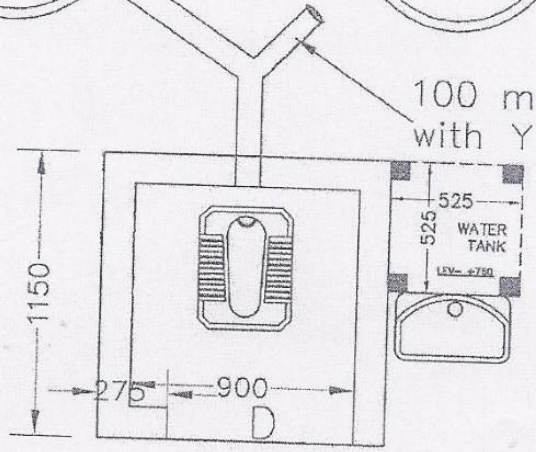
(Dipankar Sarkar)
Technical Officer
State Sanitation Cell, SIPRD, Kalyani

Part-II

Details Plan & Estimate of Water facilities in IHHL of Rs. 2000.00

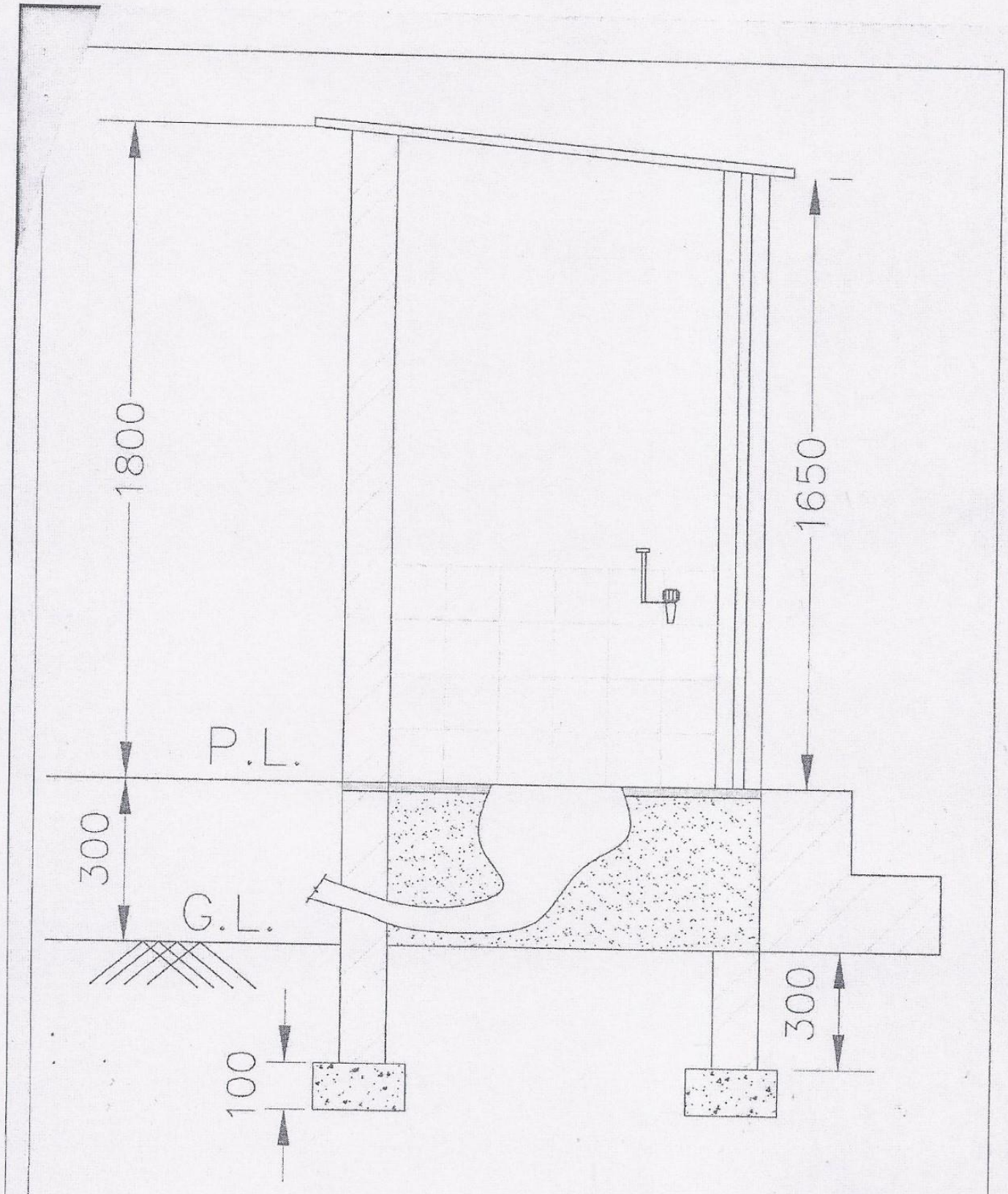






NADIA ZILLA PARISHAD KRISHNAGAR: NADIA.
PROP. CONST. OF WATER SUPPLY AT TOILET BLOCK CONSTRUCTED UNDER SABAR SHOUCHAGAR PROJECT IN THE DIST. OF NADIA
SUB TITLE: PLAN , ELEVATION

TOILET



SECTION–A–A

PROP. CONST. OF WATER SUPPLY AT TOILET BLOCKS CONSTRUCTED UNDER SABAR SHOUCHAGAR PROJECT IN THE DIST OF NADIA

A. SANITERY & PLUMBING WORKS

Sl.	Description of Work	Quantity	Unit	Rate	In Words	Amount
1	3" X 3" X 4' PILLER	4.00	Each	Rs. 120.00	(Rupes One hundred twenty) only	Rs.480.00
2	20" x 20" x 2' water tank with 1.5" thick. Ferro-cement wall	1.00	Each	Rs. 380.00	(Rupees Three hundred eighty) only	Rs.380.00
3	3' x2.5' conc. Slab 2" thick	1.00	Each	Rs. 200.00	(Rupees Two hundred) only	Rs.200.00
4	Tank Cover (Wooden rrame and GCI Sheet)	1.00	Each	Rs. 140.00	(Rupees One hundred fourty) only	Rs.140.00
5	Ceramic Basin	1.00	Each	Rs. 250.00	(Rupees Two hundred fifty) only	Rs.250.00
6	Plambingp Pipe (6"in each tap)	1.00	ft	Rs. 40.00	(Rupees Fourty) only	Rs.40.00
7	Tap	2.00	Each	Rs. 40.00	(Rupees Fourty) only	Rs.80.00
8	Exhausht Pipe	3.00	ft	Rs. 10.00	(Rupees Ten) only	Rs.30.00
9	Mason and Labour	1.00	Each	Rs. 200.00	(Rupees Two hundred) only	Rs.200.00
10	Carring Cost	1.00		Rs. 200.00	(Rupees Two hundred) only	Rs.200.00
					A. TOTAL OF SANITERY & PLUMBING WORKS	Rs.2,000.00
					(Rupees Two Thousand) only	

Model Estimate of IHHL with Water facilities of Rs.12900.00

Part-1

Details Plan & Estimate of IHHL with Beneficiary Contribution of Rs.10900.00

Individual Household Latrine with Brick work superstructure;
Roof & door with GCI sheet; Double leach pit lining with circular concrete/ ferro-cement rings

1. Earth work in excavation:
   - i) Foundation (trench cutting) – 4.10 m (C.L.) x 0.20 m x 0.30 m
   - ii) Leach pits – 2 nos; diameter 0.90 m & depth 1.22 m

2. Construction of Individual Household Latrine (Masonary work):
   - i) P.C.C. (1 : 3 : 6) with jhama khoa – width 200 mm & thickness 100 mm
   - ii) 125 mm brick work (1 : 4) up to G.L. of height 200 mm
   - iii) 125 mm brick work (1 : 4) up to P.L. of height 300 mm
   - iv) Walls of 125 mm brick work (1 : 4) gradually downward in slope from 1.83 m (front side) to 1.68 m (back side) height above P.L. to roof; front wall of 125 mm off-set
   - v) Pan & siphon to be placed in proper position with right alignment; PVC 'Y' pipe to be connected with siphon and outlet of PVC pipe (100 mm dia) to be placed over one leach pit after linking with one arm of 'Y' pipe. Another arm of 'Y' pipe to be blocked.
   - vi) Plaster (19 mm th, 1 : 6 – sand : cement) to internal wall
   - vii) Plaster (12 mm th, 1 : 6 – sand : cement) to external wall
   - viii) Artificial Stone Flooring (1 : 2 : 4; 37.5 mm thickness) in floor
   - ix) Setting up Ceramic tiles (150 mm x 200 mm or 200 mm x 300 mm) at skirting (height 0.30 m) of internal walls
   - x) Neat cement punning at dado (height 0.30 m) of external walls
   - xi) Roof - G.C.I. sheet of thickness 0.25 mm to be placed & framed over timber rafter
   - xii) Door - G.C.I. sheet of thickness 0.18 mm to be fitted with timber battens & hanged in front wall with the help of hinges
   - xiii) Placed 4 nos of pre-cast circular concrete/ ferro-cement rings (using G.I. wire) in each leach pit; internal & external diameter 0.75 m & 0.80 m respectively and height 0.30 m of each ring
   - xiv) Placed pre-cast R.C.C. pit cover of diameter 0.80 m & thickness 37.5 mm over the top most rings in the pit

Soil has been categorized in 05 (five) different sectors - (i) Loose & soft soil; (ii) Ordinary mixed soil; (iii) Medium hard soil; (iv) Hard soil, moorum & laterite; and (v) Muddy & slushy soil as per the Government Order vide No. 7490-RD/P/NREGA/18S-09/06 Dated: 20/12/2011. The average output in excavation against lead upto 80'-0" and lift upto 5'-0" has been considered following the above mentioned G.O. However, in this model estimate, the consumption of un-skilled labour in point of earth work excavation has been shown on Ordinary mixed soil (62 c.ft/ 1 u-sk). Hence, the consumption of un-skilled labour in other soil sectors may be adjusted little a bit following the Government Order & Guideline.

N.B. :

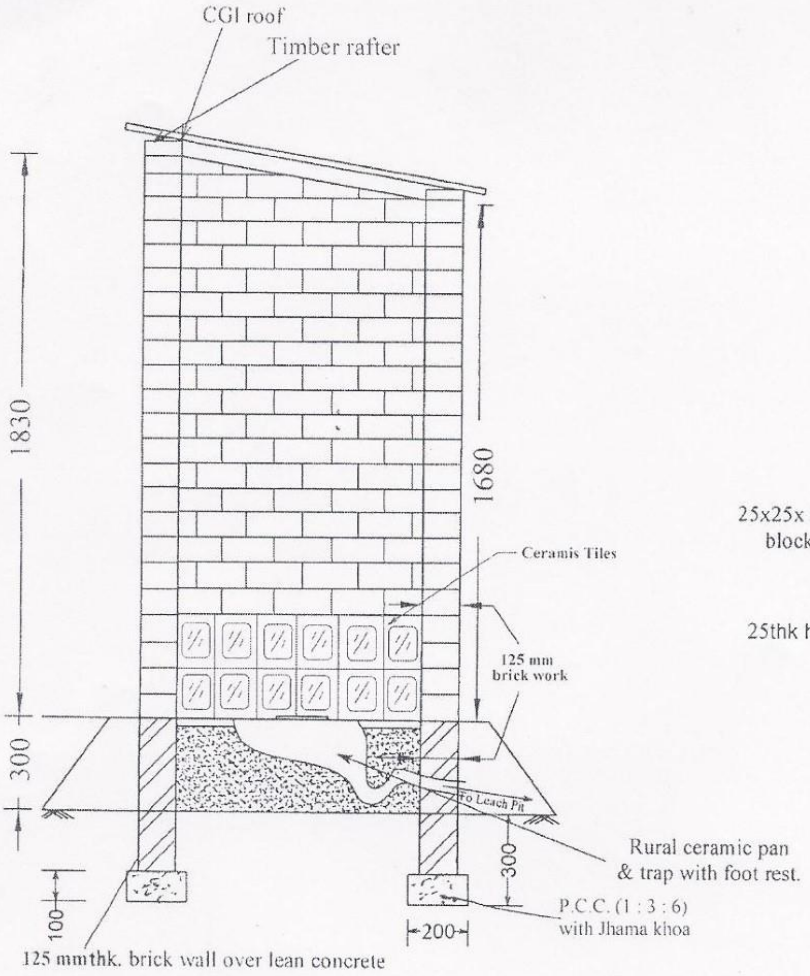
- i) The drawing and the abstract of cost estimate may be considered as a guide and a model estimate one for provision of household toilet.
- ii) Consumption of skilled & un-skilled labour has been followed vide reference of the "Technical Guide Book and Schedule of Works for Rural Employment Programme", P.&R.D., GoWB.
- iii) The foundation as indicated in the drawing may vary (with the approval of district authority) depending on the bearing capacity of soil and other local conditions where the toilet would be built.
- iv) Rate of few raw materials considered in the cost estimate as per prevailing justified local market rates in and around Kolkata during the 1st week of April, 2014. Thus, the estimate may vary from place to place and from time to time (with the approval of district authority) depending on the prevailing market rates of different kinds of raw materials in any particular area.

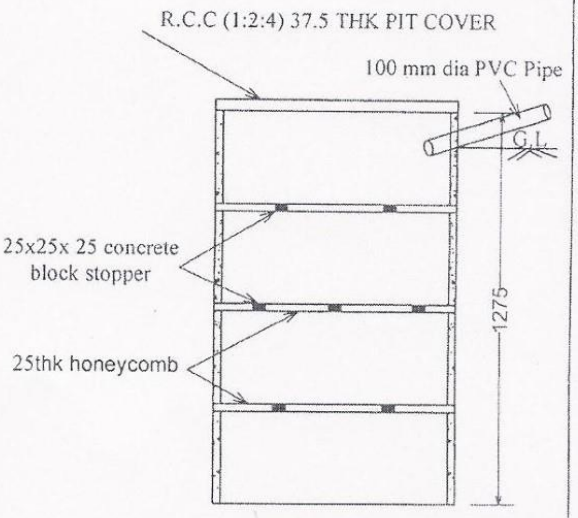
30/6/2014

State Co-ordinator
Sanitation Cell

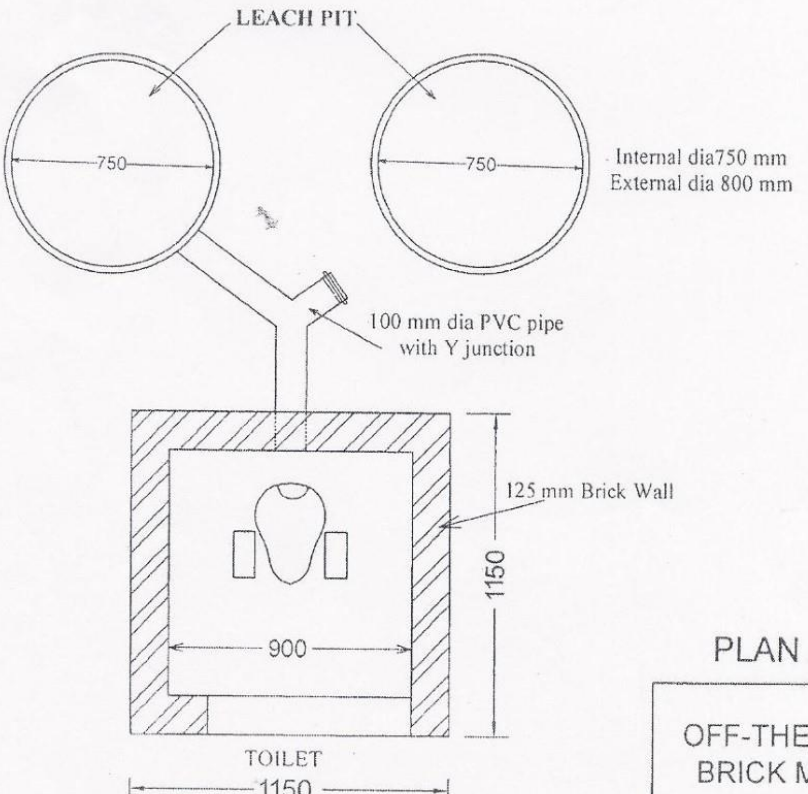
30/6/14

Technical Officer,
State Sanitation Cell
Govt. of West Bengal





Leach pit made of 4nos750
mm dia 300 mm depth



PLAN

Technical Officer,
State Sanitation Cell
Govt. of West Bengal
S.I.P. & R.D., Kalyani, Nadia

PLAN AND SECTIONAL DETAILS

OFF-THE PIT TOILET (DOUBLE PIT) WITH BRICK MASSONRY SUPERSTRUCTURE

All dimensions are in mm

NOT TO SCALE

Convergence between NBA - MGNREGA

Abstact of cost estimate of Individual Household Latrine with Brick work superstructure; Roof & door with GCI sheet; Floor & skirting set up with ceramic tiles; Double leach pit lining with circular ferro-cement/ concrete rings in each pit

Part (A): Incentive from NBA fund + Beneficiary contribution					
Sl. No.	Description of Items	Quantity	Unit	Rate (Rs.)	Amount (Rs.)
1	1st class Bricks	390	Each	8.00	3,120.00
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	(a) Total Cost of Materials	**Five Thousand Five Hundred only**			**5,500.00**

Part (B): MGNREGA fund					
a) Material component					
Sl. No.	Description of Items	Quantity	Unit	Rate (Rs.)	Amount (Rs.)
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2	Steel (using 5.5 mm rod) for 2 pit covers	2.50	Kg	52.00	130.00
3	Jhama bats (PWD SOR - Wage for Breaking)	3.00	C.ft	35.00	105.00
4	GCI sheet (of thickness 0.18 mm) for door of height 5'-0" (cutting piece from sheet of full height 10'-0"; 7 pieces in bundle @ Rs. 2,100/-)	3/4	Piece	300.00	225.00
5	GCI sheet (of thickness 0.25 mm) for roof of height 5'-0" & width 2'-8" (cutting piece from sheet of height 10'-0"; 7 pieces in bundle @ Rs. 2,450/-)	1	Piece	350.00	350.00
6	PVC pipe (4" dia; 2'-0" long) with 'Y' junction	1	Set	180.00	180.00
7	Washer, Nut-Bolt, Black annealed wire (for binding), GI wire (if ferro cement rings used), Hinges, Sikols, P. sheet etc.	Lump sum	Lump sum	Lump sum	154.00
8	Ceramic rural pan/ trap with foot rest	1	Set	300.00	300.00
9	Ceramic tiles (6" x 8" or 8" x 12") for internal walls	11.00	Sq.ft	25.00	275.00
10	Timber batten for door & roof (local heart wood)	Lump sum	Lump sum	Lump sum	375.00
11	Display Board	Lump sum	Lump sum	Lump sum	100.00
	a) Raw material	-	-	-	**2,654.00**
12	Skilled labour for Masonary work	4.00	MD	338.00	1,352.00
13	Supervisor (to be engaged for every 6 IHHL's vide Memo No. 301(20)/Comm.-P&RD/P/NREGA/18E-01/06(Part-I) Dated 08.10.2013 of P&RDD, Government of West Bengal)	1/6	MD	253.50	42.25
	b) Skilled labour + Supervisor	-	-	-	**1,394.25**
	a) + b)				**4,048.25**
	say	**Four Thousand Forty Eight only**			**4,048.00**
b) Wage component					
14	i) Un-skilled labour for Masonary work	8.0	MD	169.00	1,352.00
	Total Un-skilled labour	**One Thousand Three Hundred Fifty Two only**			**1,352.00**

Synopsis			
	Part - (A): Incentive from NBA fund + Beneficiary contribution		**5,500.00**
	Part - (B): MGNREGA fund	**Ratio of %age**	
	a) Material component	74.96	**4,048.00**
	b) Wage component	25.04	**1,352.00**
	Grand Total - Rupees Ten Thousand Nine Hundred only		**10,900.00**

N.B. - This estimate is prepared on the basis of PWD (WB) Schedule of Rates for Building works (effective from 01st August, 2010) and the Corrigendum (w.e.f. 07th April, 2012)/ Local justified market rate; Technical Guide Book and Schedule of Works for Rural Emolyment Programme (effective from 01.12.1999, P.&R.D. Deptt., GoWB) and NBA Guidelines

Countersigned by

30/8/2014

(Ganesh Choudhary)
State Co-ordinator
State Sanitation Cell, SIPRD, Kalyani

Prepared & Verified by

30/8/14

(Dipankar Sarkar)
Technical Officer
State Sanitation Cell, SIPRD, Kalyani

Consumption of Materials & Labour Component on estimate of IHHL

Sl. No.	Description of Items	Qty.	Unit	Materials						Labour	
				Brick (in Pcs)	Cement (in Bags)	Sand (in C.ft.)	Stone chips (in C.ft.)	Jhama khoa (in C.ft.)	Steel (in Kg)	Sk	Usk
1	a) Earthwork in excavation of foundation trenches or drains ..... (considering, Ordinary mixed soil to be excavated by spade ..... lift upto 5'-0" & lead upto 80'-0") *[considering, 62.0 c.ft per 1-Usk]*	1.80	m3	-	-	-	-	-	-	-	1.02
2	Cement concrete (1 : 3 : 6) with graded jhama khoa (40 mm size) excluding shuttering. *[2-Sk & 3-Usk per 2.1 m3]* *[Jhama khoa-0.96 m3, Sand-0.48 m3 & Cement-0.16 m3 per m3]* In foundation	0.082	m3	-	0.38	1.39	-	2.780	-	0.08	0.12
	Supply of Jhama bats = 2.78 x 1.10 = 3.058 c.ft Breaking of Jhama bats to Jhama khoa (63mm to 45mm); 2.78 c.ft = 0.0787 m3 *[1-Usk per 1.20 m3]*	0.0787	m3	-	-	-	-	-	-	-	0.07
3	125 mm thick Brick work (1 : 4) ..... *[3-Sk & 4-Usk per 24.0 m2]* *[Brick-4951 nos. Sand-3.66 m3 & Cement-0.914 m3 per % m2]* Brick work laid over PCC upto Plinth level	2.0500	m2	101	0.54	2.65	-	-	-	0.26	0.34
4	125 mm thick Brick work (1 : 4) ..... *[3-Sk & 4-Usk per 24.0 m2]* *[Brick-4951 nos. Sand-3.66 m3 & Cement-0.914 m3 per % m2]* Superstructure above P.L.	5.8448	m2	289	1.54	7.55	-	-	-	0.73	0.97
5	Nominal mix (1 : 2 : 4) cement concrete with graded stone chips (20 mm size) excluding shuttering & reinforcement ..... in Gr. Floor. *[2-Sk & 3-Usk per 2.0 m3]* [Stone chips-0.88 m3, Sand-0.44 m3 & Cement-0.22 m3 per m3] b) 2 nos RCC pit cover	0.0387	m3	-	0.245	0.601	1.202	-	-	0.04	0.06
	Nominal mix (1 : 2 : 4) cement concrete with graded stone chips (20 mm size) excluding shuttering & reinforcement ..... in Gr. Floor. *[2-Sk & 3-Usk per 2.0 m3]* [Stone chips-0.88 m3, Sand-0.44 m3 & Cement-0.22 m3 per m3] c) 8 nos RCC rings & concreting in 4 top corners	0.1575	m3	-	0.997	2.447	4.893	-	-	0.16	0.24
6	Reinforcement for reinforced concrete work in all sorts of structure ..... For steel/ Mild steel (using 5.5 mm bar) *[3-Sk (Rod binder) & 2-Usk per 220 Kg]* 2 nos RCC pit cover	0.8% of total R.C.C. volume	kg	-	-	-	-	-	2.43	0.03	0.02
7	Grey A.S.F. for floor, dado, skarting, staircase etc. with cement concrete (1 : 2 : 4) with stone chips 6 mm down ... *[5-Sk & 3-Usk per 24.0 m2]* *[Stone chips-2.23 m3, Sand-1.12 m3 & Cement-0.855 m3 per %m2]*	0.720	m2	-	0.177	0.285	0.567	-	-	0.15	0.09
8	Plaster (to wall, floor, ceiling etc.) with sand and cement mortar ..... a) 19 mm thick (1 : 6) *[5-Sk & 8-Usk per 36.0 m2]* *[Cement-0.366 m3 & Sand-2.196 m3 per %m2]* Internal wall	5.244	m2	-	0.55	4.07	-	-	-	0.73	1.17
	Plaster (to wall, floor, ceiling etc.) with sand and cement mortar ..... b) 12 mm thick (1 : 6) *[2-Sk & 3-Usk per 18.0 m2]* *[Cement-0.244 m3 & Sand-1.46 m3 per %m2]* External wall	7.802	m2	-	0.55	4.02	-	-	-	0.87	1.30

Sl. No.	Description of Items	Qty.	Unit	Materials						Labour	
				Brick (in Pcs)	Cement (in Bags)	Sand (in C.ft.)	Stone chips (in C.ft.)	Jhama khoa (in C.ft.)	Steel (in Kg)	Sk	Usk
9	Neat cement punning about 1.5 mm. thick in wall, dado, window, sills, floor, drain etc. *[2-Sk & 1-Usk per 50.0 m2]* *[Cement-0.152 m3 per %m2]* Floor area, Internal & External wall	2.190	m2	-	0.096	-	-	-	-	0.09	0.04
10	Roofing work with cladding of roof surface materials over frame work ..... (for Corrugated iron sheet) *[1-Carpenter (Sk), 4-Helper & 2-Usk per 37.0 m2]*	1.400	-	-	-	-	-	-	-	0.04	0.23
11	Fitting, fixing door & window shutters with necessary hinges *[1-Sk & 1-Usk per 2 nos]* *(Skilled labour converted to Un-skilled labour for more involvement & participation under Wage component)*	1	each	-	-	-	-	-	-	-	1.50
12	Setting up ceramic tiles in walls ..... *[2-Sk & 5-Usk per 7.5 m2]* [considering, the amount of work per day as the same of item - 25 mm thick mosaic flooring .....] *(2 mm thick cement slurry at back side of tiles using cement @ 2.91 kg/ m2 & joint illing using white cement slurry @ 0.20 kg/ m2)*	0.95	m2	-	0.05	-	-	-	-	0.25	0.63
				390	**5.13**	**23.02**	**6.66**	**2.78**	**2.43**	**3.42**	**7.80**
	Total - **say**			**390**	**5.00**	**23.00**	**7.00**	**3.00**	**2.50**	**4.00**	**8.00**

Countersigned by

30/6/2014

(Ganesh Choudhary)
State Co-ordinator
State Sanitation Cell, SIPRD, Kalyani

Prepared & Vetted by

30/6/14

(Dipankar Sarkar)
Technical Officer
State Sanitation Cell, SIPRD, Kalyani

Part - A: Itemwise detail estimate of IHHL

Particulars	No.	Length	Breadth	Height	Dia.	Total	Unit
1. Earthwork in excavation of foundation trenches ... (considering, soil to be excavated by spade.. lift upto 5'0" & lead upto 80'0")							
i) Foundation; - 1 x 13'8" x 0'8" x 1'0"	1	4.10	0.20	0.30		0.2460	cu.m
ii) Leach pit - 2 nos; (depth - 4'-0" & diameter - 3'0")	2	-	-	1.22	0.90	1.5529	cu.m
						1.7989	cu.m
2. P.C.C (1 : 3 : 6) with jhama khoa; (Jhama chips-0.96 m3, Sand-0.48 m3 & Cement-0.16 m3) per m3							
In fndn. & trenches, (C.L. = 1.025 m); i.e. Total length = (4 x 1.025) = 4.10 m	1	4.10	0.20	0.10		0.0820	cu.m
3. B/work; 125 mm (1 : 4); (Brick-4951 Nos, Cement-0.914 m3 & Sand-3.66 m3) per % m2							
Upto G.L., (C.L. = 1.025 m); i.e. Total length = (4 x 1.025) = 4.10 m	1	4.10		0.20		0.8200	sq.m
4. B/work; 125 mm (1 : 4); (Brick-4951 Nos, Cement-0.914 m3 & Sand-3.66 m3) per % m2							
Upto P.L., (C.L. = 1.025 m); i.e. Total length = (4 x 1.025) = 4.10 m	1	4.10		0.30		1.2300	sq.m
5. B/work; 125 mm (1 : 4); (Brick-4951 Nos, Cement-0.914 m3 & Sand-3.66 m3) per % m2							
Above P.L., {(2 x 1.15) + (1 x 0.90)} = 3.20m & Ht. (1.83 + 1.68)/2 = 1.755m	1	3.20		1.755		5.6160	sq.m
Front side	1	0.125		1.83		0.2288	sq.m
						5.8448	sq.m
6. Plaster (to wall, floor, ceiling etc.) with cement-sand mortar							
a) Plaster (19 mm th.; 1 : 6) with cement-sand mortar .....; (Cement-0.366 m3 & Sand-2.196 m3) per % m2							
Internal wall; 2 side walls	2	0.90		1.755		3.1590	sq.m
Back wall	1	0.90		1.68		1.5120	sq.m
Front wall	1	0.125		1.83		0.2288	sq.m
Top surface of the wall	1	2.750	0.125			0.3438	sq.m
						5.2435	sq.m
b) Plaster (12 mm th.; 1 : 6) with cement-sand mortar .....; (Cement-0.366 m3 & Sand-2.196 m3) per % m2							
External wall; 2 side walls	2	1.15		2.055		4.7265	sq.m
Back wall	1	1.15		1.98		2.2770	sq.m
Front wall	1	0.375		2.13		0.7988	sq.m
						7.8023	sq.m
7. Artificial Stone Flooring (1 : 2 : 4; 37.5 mm th.); (Stone chips-2.23 m3, Sand-1.12 m3 & Cement-0.855 m3 per %m2)							
Floor area	1	0.90	0.90			0.8100	sq.m
Deduction (-) for pan area	1	0.30	0.45			0.1350	sq.m
						0.6750	sq.m
8. Neat cement punning about 1.5 mm thick; (Cement-0.152 m3 per % m2)							
External wall (dado)	4	1.15		0.30		1.3800	sq.m
Floor area						0.8100	sq.m
						2.1900	sq.m
9. Setting up ceramic tiles in walls							
Internal wall (skirting)	3	0.90		0.30		0.8100	sq.m
	3	0.15		0.30		0.1350	sq.m
						0.9450	sq.m
10. P.C.C. (1 : 2 : 4); Stone chips - 0.88 cu.m, Sand - 0.44 cu.m & Cement - 0.22 cu.m (per cu.m for all materials)							
i) Pre-cast Rings; D1=0.81 m, D2=0.76 m & H=0.3 m; V = 22/7 x (0.66 - 0.58) x 0.3/4 = 0.0189 m3	8			0.3		0.1512	cu.m
ii) Concreting 4 nos top cormers (for holding timber batten in roof truss through bolt inserted in concrete block)	4	0.125	0.125	0.10		0.00625	cu.m
						0.1575	cu.m
11. R.C.C. (1 : 2 : 4); Stone chips - 0.88 cu.m, Sand - 0.44 cu.m & Cement - 0.22 cu.m (per cu.m for all materials)							
Pre-cast Pit cover; (considering, 0.8% steel on total volume of concrete; using 5.5 mm rod @ 150 mm c/c)	2			0.0375	0.81	0.0387	cu.m

Countersigned by

20/6/2014

(Ganesh Choudhary)
State Co-ordinator
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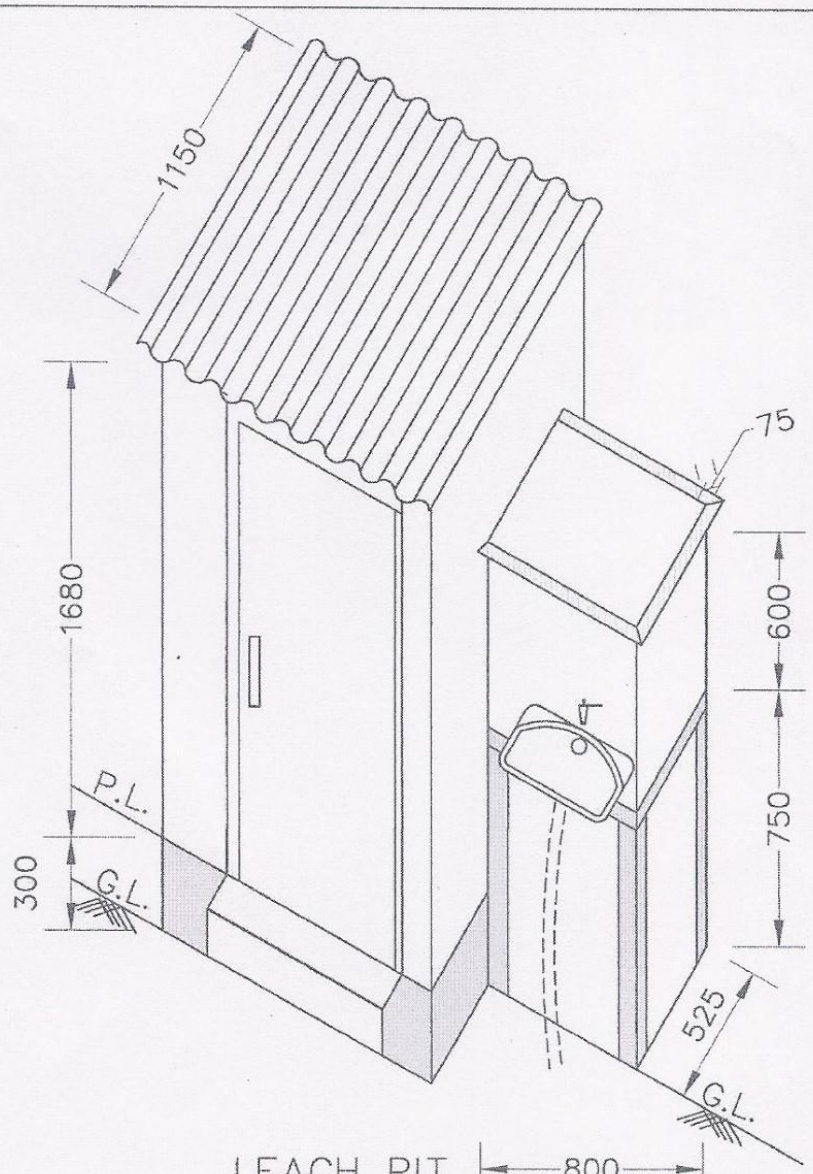
Prepared & Valued by

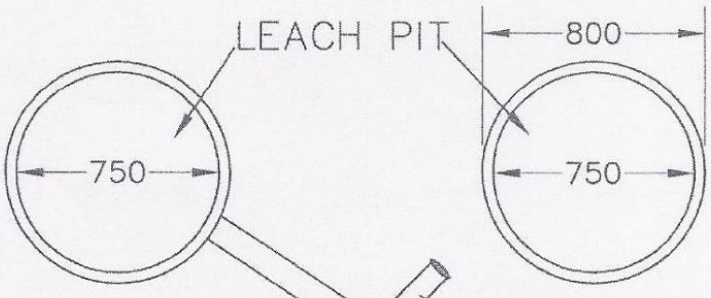
20/6/14

(Dipankar Sarkar)
Technical Officer
State Sanitation Cell, SIPRD, Kalyani

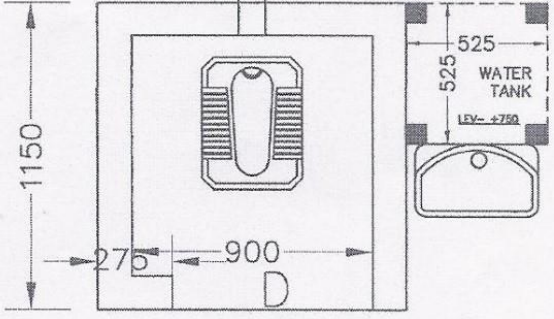
Part-II

Details Plan & Estimate of Water facilities in IHHL of Rs. 2000.00

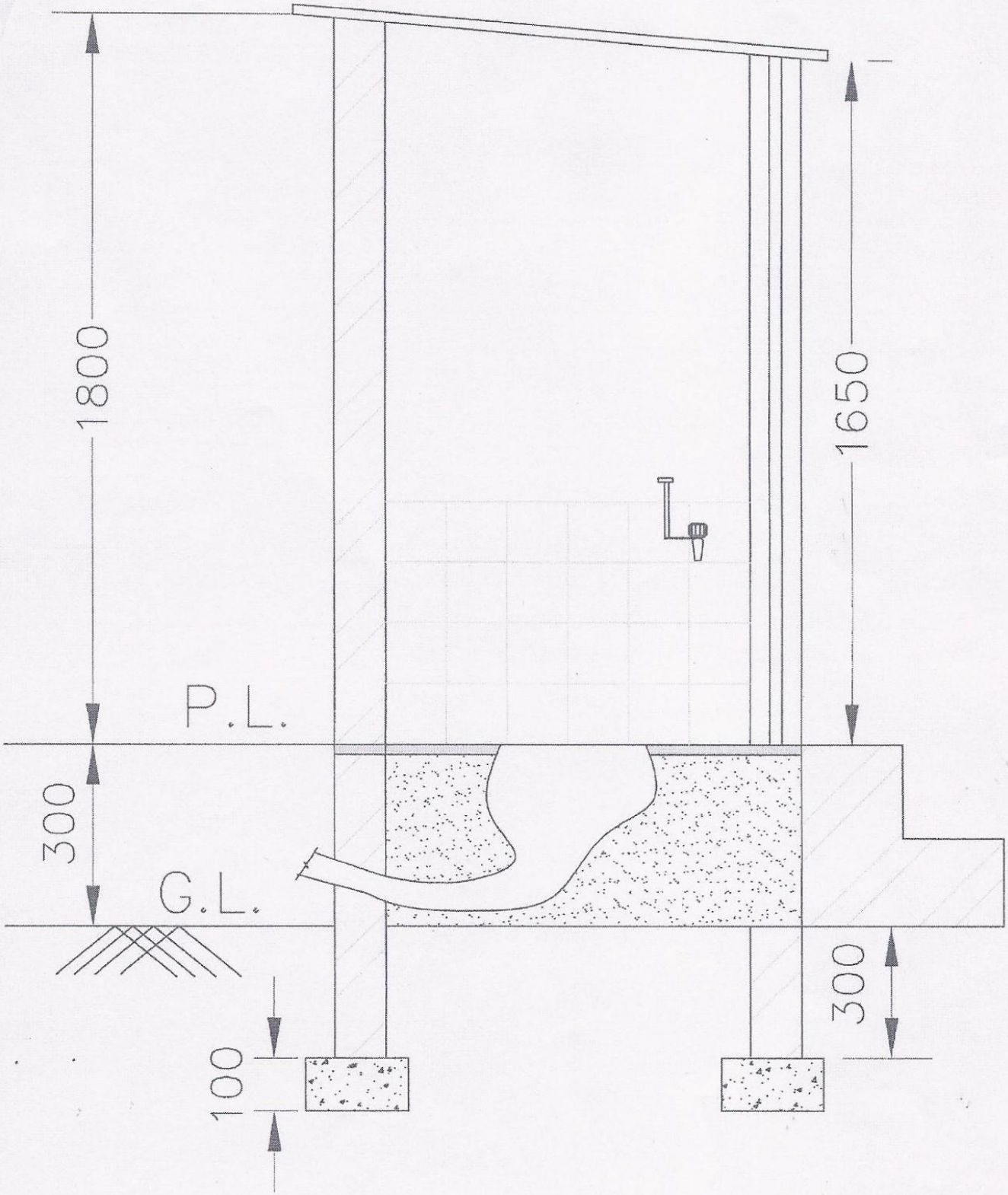




100 mm dia PVC pipe with Y junction



NADIA ZILLA PARISHAD KRISHNAGAR: NADIA.
PROP. CONST. OF WATER SUPPLY AT TOILET BLOCK CONSTRUCTED UNDER SABAR SHOUCHAGAR PROJECT IN THE DIST. OF NADIA
SUB TITLE: PLAN , ELEVATION



SECTION – A – A

PROP. CONST. OF WATER SUPPLY AT TOILET BLOCKS CONSTRUCTED UNDER SABAR SHOUCHAGAR PROJECT IN THE DIST OF NADIA

A. SANITERY & PLUMBING WORKS

Sl.	Description of Work	Quantity	Unit	Rate	In Words	Amount
1	3" X 3" X 4' PILLER	4.00	Each	Rs. 120.00	(Rupes One hundred twenty) only	Rs.480.00
2	20" x 20" x 2' water tank with 1.5" thick. Ferro-cement wall	1.00	Each	Rs. 380.00	(Rupees Three hundred eighty) only	Rs.380.00
3	3' x2.5' conc. Slab 2" thick	1.00	Each	Rs. 200.00	(Rupees Two hundred) only	Rs.200.00
4	Tank Cover (Wooden rrame and GCI Sheet)	1.00	Each	Rs. 140.00	(Rupees One hundred fourty) only	Rs.140.00
5	Ceramic Basin	1.00	Each	Rs. 250.00	(Rupees Two hundred fifty) only	Rs.250.00
6	Plambingp Pipe (6"in each tap)	1.00	ft	Rs. 40.00	(Rupees Fourty) only	Rs.40.00
7	Tap	2.00	Each	Rs. 40.00	(Rupees Fourty) only	Rs.80.00
8	Exhausht Pipe	3.00	ft	Rs. 10.00	(Rupees Ten) only	Rs.30.00
9	Mason and Labour	1.00	Each	Rs. 200.00	(Rupees Two hundred) only	Rs.200.00
10	Carring Cost	1.00		Rs. 200.00	(Rupees Two hundred) only	Rs.200.00
					A. TOTAL OF SANITERY & PLUMBING WORKS	**Rs.2,000.00**
					(Rupees Two Thousand) only	