



AGRAJATTRA

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Bill of Quantities for Twin Pit Toilet cubicles Construction

Sl#	Description	Unit	Qty.	Unit Price	Total Price
1	Earth work in excavation of Foundationfor: twin pit latrine, carrying and disposing of all Excavated materials at a safe distance designated by the EIC/UNICEF, all types of soil except rocky gravelly, organic maintains proper slope,disposing of all back filing of sites of all excavated materials to a safe distance back filling of sites of original level etc, all complete to the direction of the EIC/UNICEF	Cft	450		
2	Sand Filling: Sand filling in foundation trenches and plinth with fine local sand having minimum fineness modulus (FM) of 50 in 150mm / 75 mm layers, leveling, watering and consolidating each layer by layer up to finished level, etc. All filling completed as per direction of engineer-in-charge and as per drawing and design	Cft	30		
3	Polyethylene Sheet: Providing single layer polythene sheet (0.18mm thick) weighting one kilogram per 6.5 square meter in floor or anywhere in ground floor underneath the cement concrete, etc. all complete as per specifications and direction of the Engineer in-charge.	Sft.	20		
4	Brick Flat Soling (3"): Single layer of brick flat apron in foundation with 1st class or picked bricks preparation of bed and filing interstices with local sand, etc. All work completed as per direction of engineer-in-charge and as per drawing and design	Sft.	38		
5	Mass Concrete (1:2:4): Plain cement concrete work in foundation or floor with best quality Portland cement, sand (minimum FM 1.20) and 1st class/picked brick chips 20mm downgraded (LAA value not exceeding 40), including shuttering Shuttering works in/c centering, leveling, making shuttering fully leak proof, etc.Including all shuttering materials) mixing by concrete mixer machine/manually,casting, laying compacting and curing for 7 days etc. all complete as per direction of the engineer-in charge.	Cft	18		
6	Brick work with mortar 14: 5" Brick work with 15t class bricks in cement mortar 1:4)and making bond with connected walls & stair in/c necessary scaffolding racking out joints, cleaning and soaking the bricks at least for 24 hours before use, washing of sand, curing for requisite period etc. all complete as per direction of the Engineer in-charge.	Cft	3.36		
7	125mm (5") Brick work with mortar 1:4: 5" Brick work with 1st class bricks in cement mortar (1:4) and making bond with connected walls infc scaffolding, racking out joints, cleaning and soaking the bricks at least for 24 hours before use, washing of sand, curing for requisite period etc. al complete as per direction of the Engineer In charge.	Sft.	11		
8	12 mm thick plaster with NCF: Plastering interior and outer wall: minimum' in. thick cement plaster with (1:4) to outer wall; finishing comer and edges cleaning the surface, plastering work on the outer surface of precast column ,all plastering completed as per direction of engineer-in-charge and as per design.	Sft.	174		
9	0:32 mm thick (Colored) Corrugated Plastic Sheet for Roofing: Supplying, and fixing 0.32mm thick corrugated plastic sheet (Brand Quality), fitting and on wooden frame with screws. all complete and. accepted by the Engineer.	Sft.	56		
10	0.51 mm/24 gauge thick (Colored) Plain Galvanized Iron Sheet for Wall & Door: Supplying, fitting and fixing 0.51 mm /24 gauge thick plain iron sheet (Brand Quality) for fitting and fixing on wooden purlin.Impet washers and putty etc. all complete and accepted by the Engineer.	Sft.	138		

11	Wood Work (Gorjon/Akashmoni/Mehogin): Timber used for wood work shall be well seasoned, kiln dry containing not more than 8% to 12 % moisture so as to ensure minimum tendency towards warping, shrinking and swellings. It shall be free from all defects such as large or loose knots, shakes, saps, upsets, wane edge and twisted fiber. It shall also be free from all disease such as decay, wet rot, dry rot and woodworms and white and timber should be finished to the exact dimension shown on the drawing or as per Engineer direction.	Cft	7.2		
12	10ft 6 inch height pre-cast pile (5" x 5" size): with reinforced cement concrete works with minimum cement content relates to mix ratio 1:1.5:3 having minimum f _{cr} = 30 Mpa, and satisfying specified compressive strength f _{cr} = 25 Mpa at 28 days on standard cylinders as per standard practice of Code ACI/BNBC/ASTM best quality coarse sand (F.M.2.2), 20 mm down well graded stone chips conforming to ASTM C-33, mixing in standard mixture machine and centering and shuttering with M.S sheet, M.S angle, F. I bar, nuts and bolts, preparation of bed, laying polythene, placing of reinforcement cage in position, casting, compacting by vibrators and tapered rods, curing for 28 days etc. including cost of reinforcement, water, electricity and other charges as per design and drawing etc. all complete as per design, drawing and accepted by the Engineer.	Nos	4		
13	Supply, fittings & fixing of 48" dia. RCC Ring, 2.25" thickness and 6 mm bar used as reinforcement as per the drawing and instruction of EIC.	Nos	20		
14	Sato pan with footrest with good quality	Nos	1		
15	Supply, fittings & fixing of pre-cast ring cover 5'x4', thikness-3" made of 1:2:4)mixing ratio, mm dia ms rod (60G) 6" C/C both way as per the drawing and instruction of EIC.	Nos	2		
16	Other supplies & Accessories fitting ,fixing & supplying	Lps	1		
17	Stud Nail (2.5 inch)	Kg	2		
18	MS Clamp Size 1-6"X2.5"X3mm Thickness	Nos	4		
19	Nail Diferent size (1.5 to 4")	Kg	1.5		
20	Hinges	Nos	3		
21	Screw for Hinges	Dozen	1		
22	Lock Chain (small for door lock inside & out side)	Nos	2		
23	PVC pipe (1.5 dia) Gas pipe	F.t	20		
24	uPVC Long Trap (4"dia)	Nos	1		
25	uPVC pipe (4" dia)	Ft.	20		
26	10" CTC Stainless Steel Bar Pull - Stainless Steel (DELH-BP100OSS)	Nos	1		
			Total Price=		



S.M. Abu Sufian
Technical Officer (WASH)
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AGRAJATTRA

S.M. ABU SUFIAN

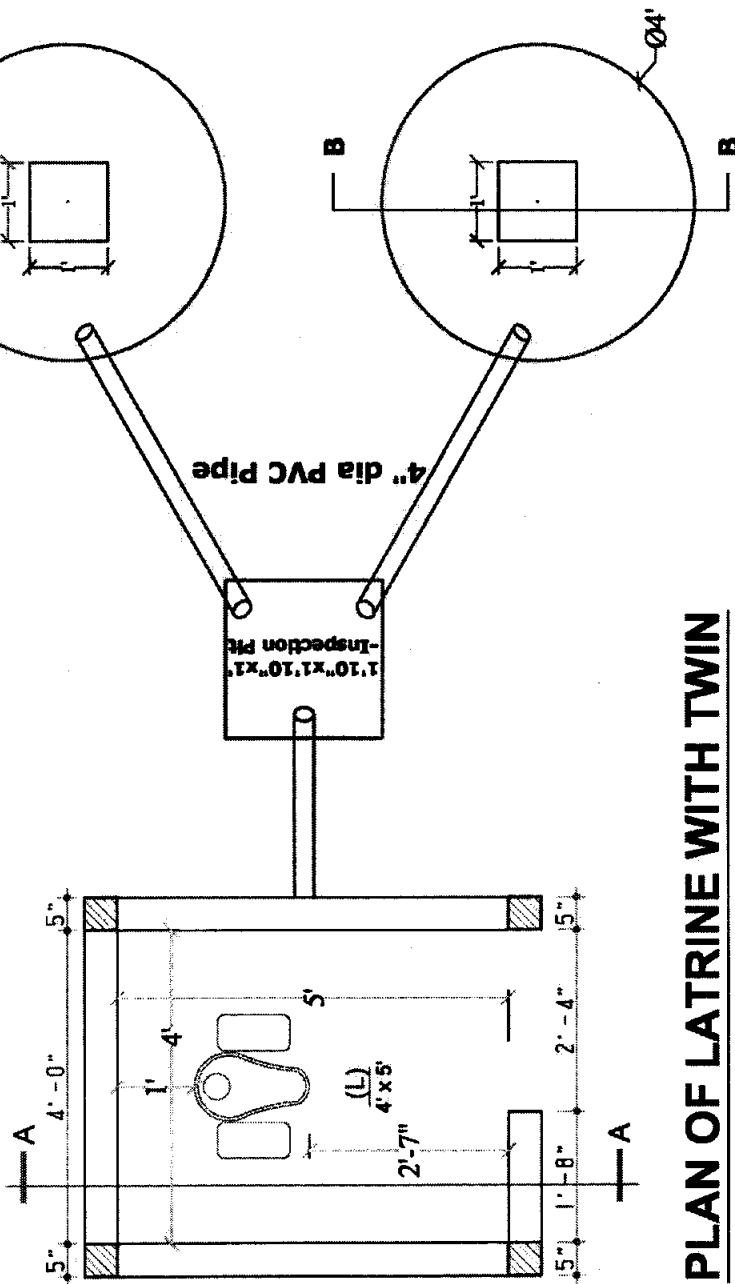
Engineer Wash

Prepared by




Option 3

**RCC Ring
10ft-Height**

RCC ring (1:1.5:3)-outer dia 4ft, height 1ft, thickness 2.25". Supplying, fabrication, and fixing 6mm dia MS rod @ 150mm in both direction (vertical & horizontal), with 0.75" 1st class brick aggregate & 1.6 FM sand.

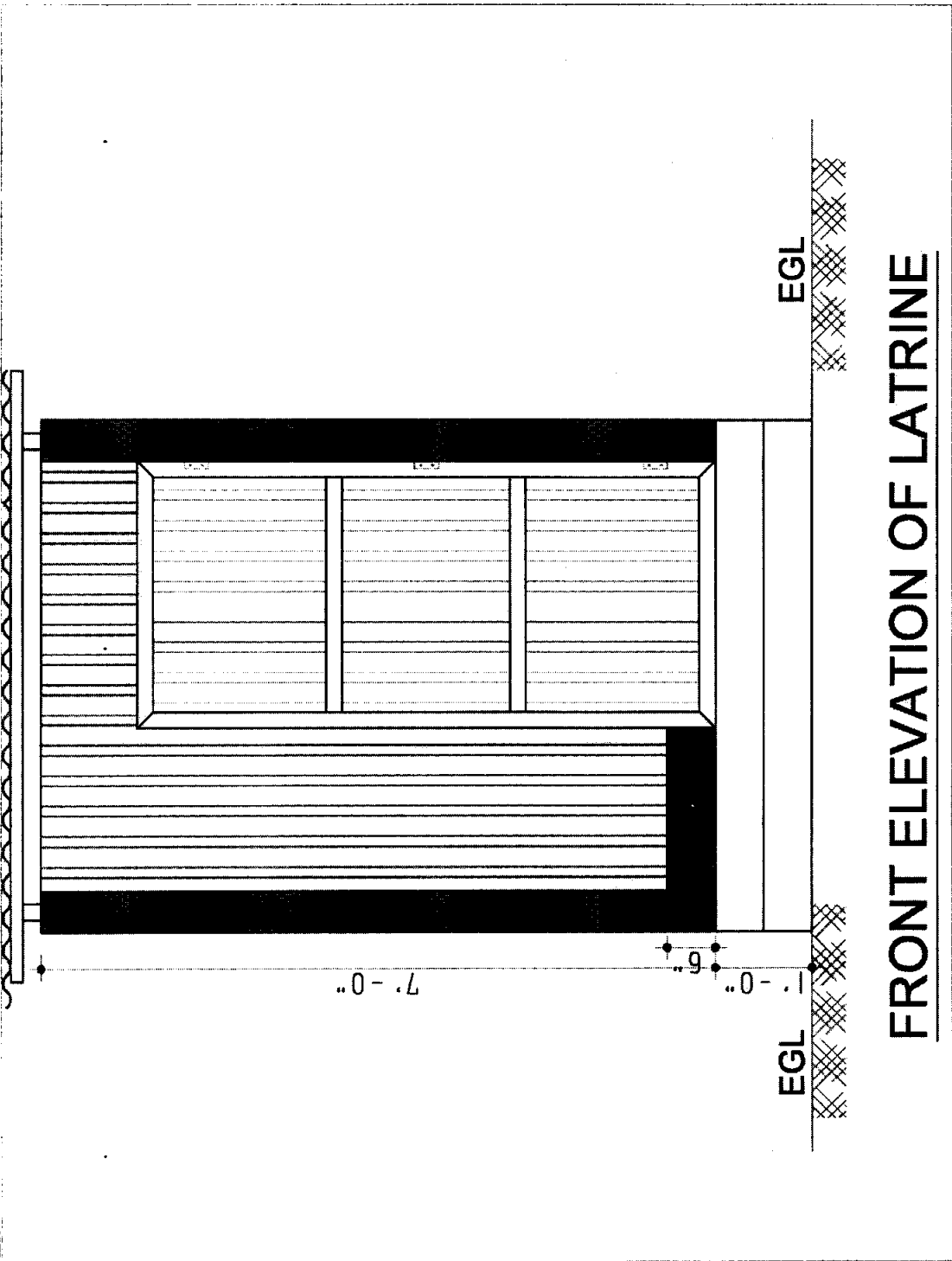


**PLAN OF LATRINE WITH TWIN
PIT**



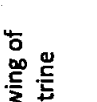

	 <p>WASH Sector Cox's Bazar</p>	<p>Design and Drawing of Latrine</p>	<p>Twin pit with Single Cubicle</p>	<p>Designed by Minhaj Uddin Ahmed UNHCR</p>	<p>Checked By ABM Sadiqur Rahman UNHCR</p>	<p>Drawing Title Plan of Latrine</p>	<p>Date 08-01-2018</p>	<p>Page 01</p>	<p>On Behalf of WASH Sector Developed by  UNHCR United Nations High Commissioner for Refugees Lehr: Commissariat des Nations Unies pour les Réfugiés</p>
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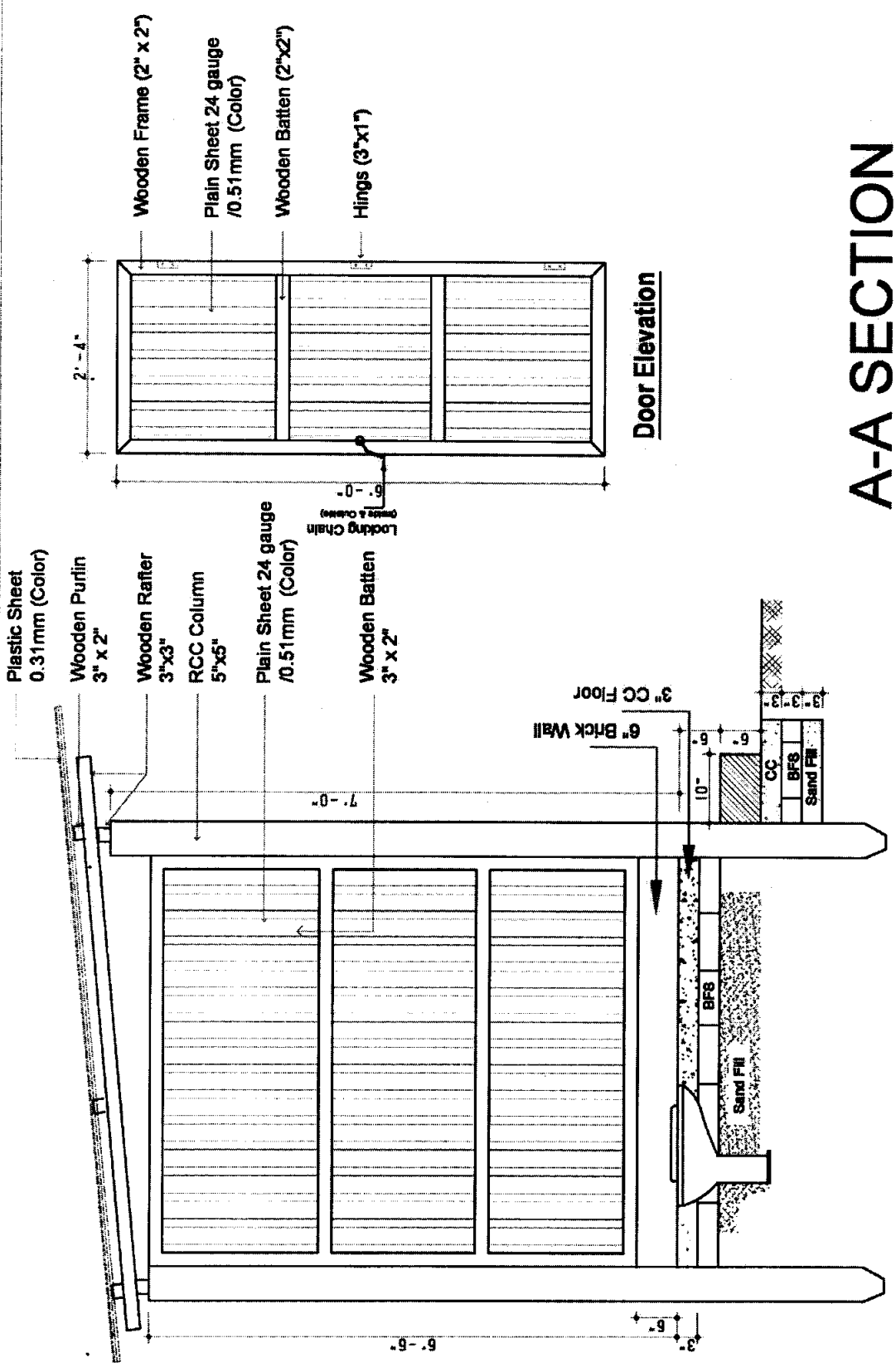


FRONT ELEVATION OF LATRINE

			<p>Project Design and Drawing of Latrine</p>	<p>Model Twin pit with Single Cubicle</p>	<p>Designed by Minhaj Uddin Ahmed UNHCR</p>	<p>Checked By ABM Sadiqur Rahman UNHCR</p>	<p>Drawing Title Elevation of Latrine</p>	<p>Date 08-01-2018</p>	<p>Page 02</p>	<p>On Behalf of WASH Sector Developed by</p>  <p>UNHCR United Nations High Commissioner for Refugees Health Commission of Cox's Bazar Upazila Health Complex</p>
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Minhaj

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Door Elevation

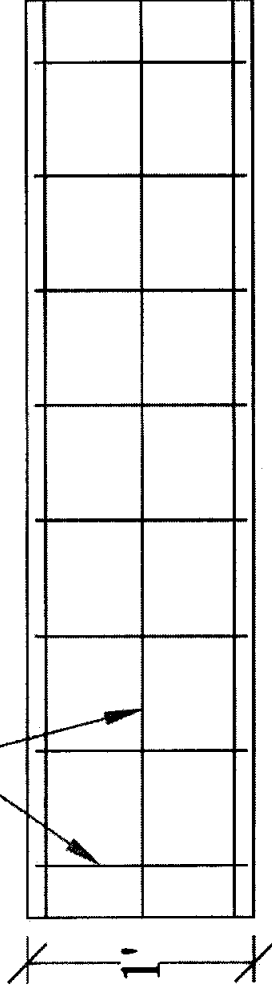
A-A SECTION

	 <p>United Nations High Commissioner for Refugees Herz Contrahandlung der Flüchtlinge Help pour les réfugiés</p>	<p>On Behalf of WASH Sector Developed by</p>	<p>Page 03</p>	<p>Date 08-01-2018</p>	<p>Drawing Title Section of Latrine</p>	<p>Checked By ABM Sadiqur Rahman UNHCR</p>	<p>Designed by Minhaj Uddin Ahmed UNHCR</p>	<p>Model Twin pit with Single Cubicle</p>	<p>Project Design and Drawing of Latrine</p>	<p>Model Twin pit with Single Cubicle</p>	<p>Designed by Minhaj Uddin Ahmed UNHCR</p>	<p>Checked By ABM Sadiqur Rahman UNHCR</p>	<p>Drawing Title Section of Latrine</p>	<p>Date 08-01-2018</p>	<p>Page 03</p>	<p>On Behalf of WASH Sector Developed by</p>
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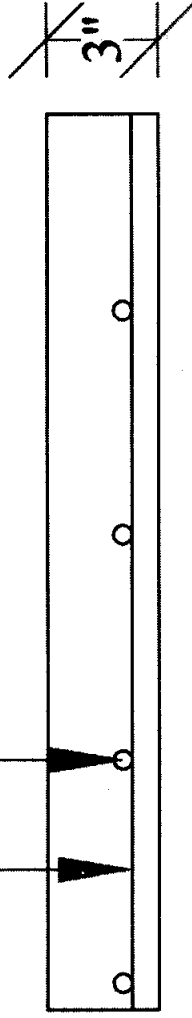
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6mm dia MS rod @ 150mm in both direction
(vertical & horizontal)

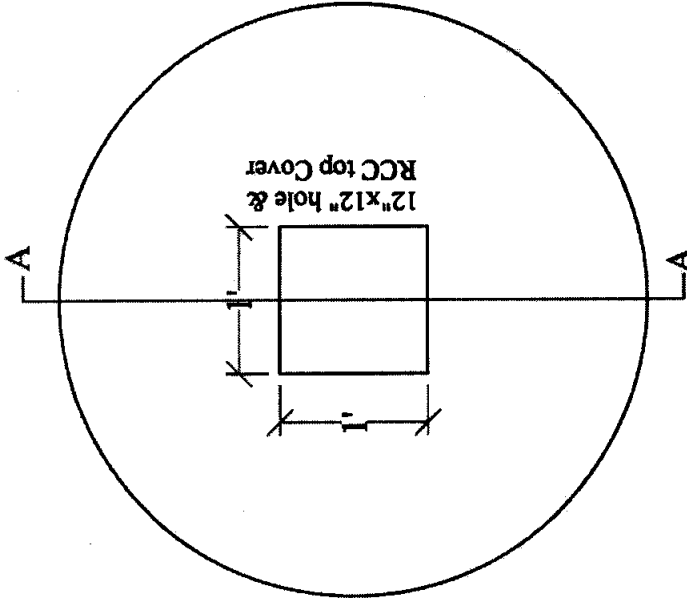


Section: BB (Ring)


8mm dia MS rod @ 150mm
in both direction



Section: AA (Top Slab of Ring)

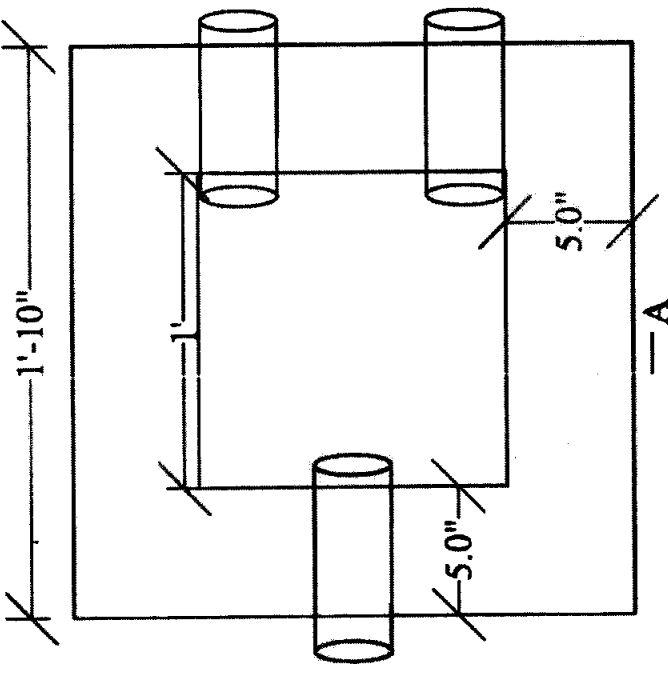


Plan: Top Slab of Ring

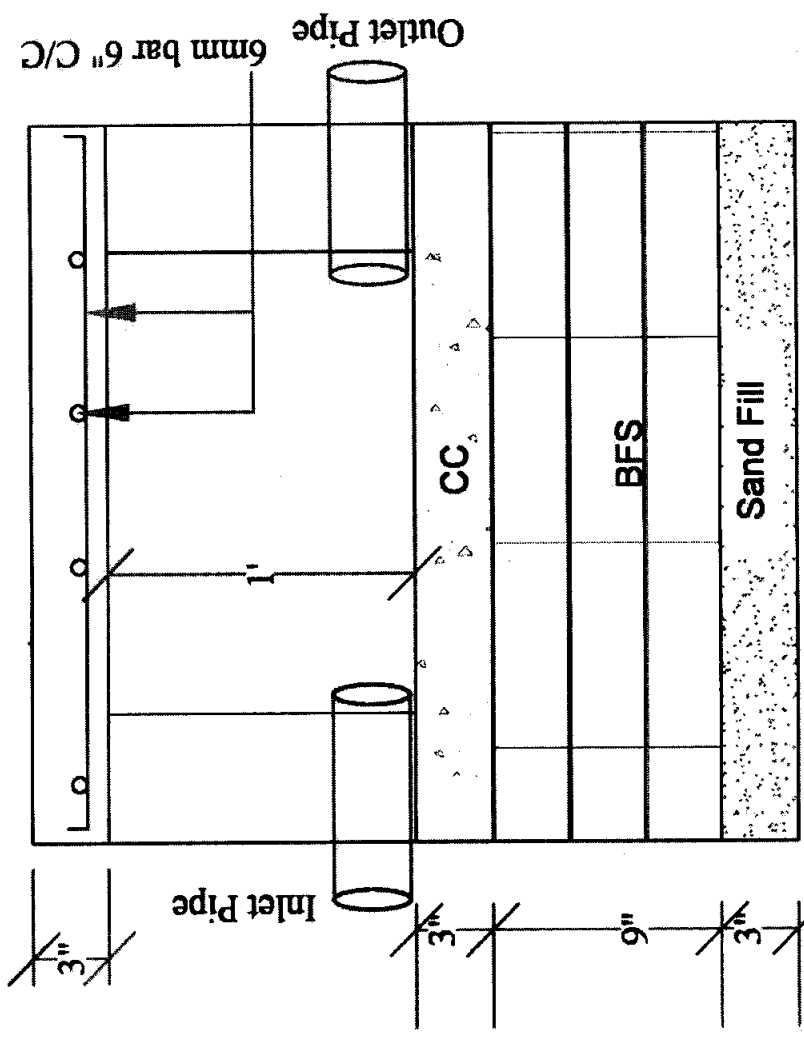
Project	Model	Designed by	Checked By	Drawing Title	Date	Page	On Behalf of WASH Sector Developed by
Design and Drawing of Latrine	Twin pit with Single Cubicle	Minhaj Uddin Ahmed UNHCR	ABM Sadiqur Rahman UNHCR	Ring & Top Slab Detail	08-01-2018	04	 UNHCR United Nations High Commissioner for Refugees Haat Centre/Regional de Nutrition / Haat pour les Réfugiés





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Plan: Inspection Pit

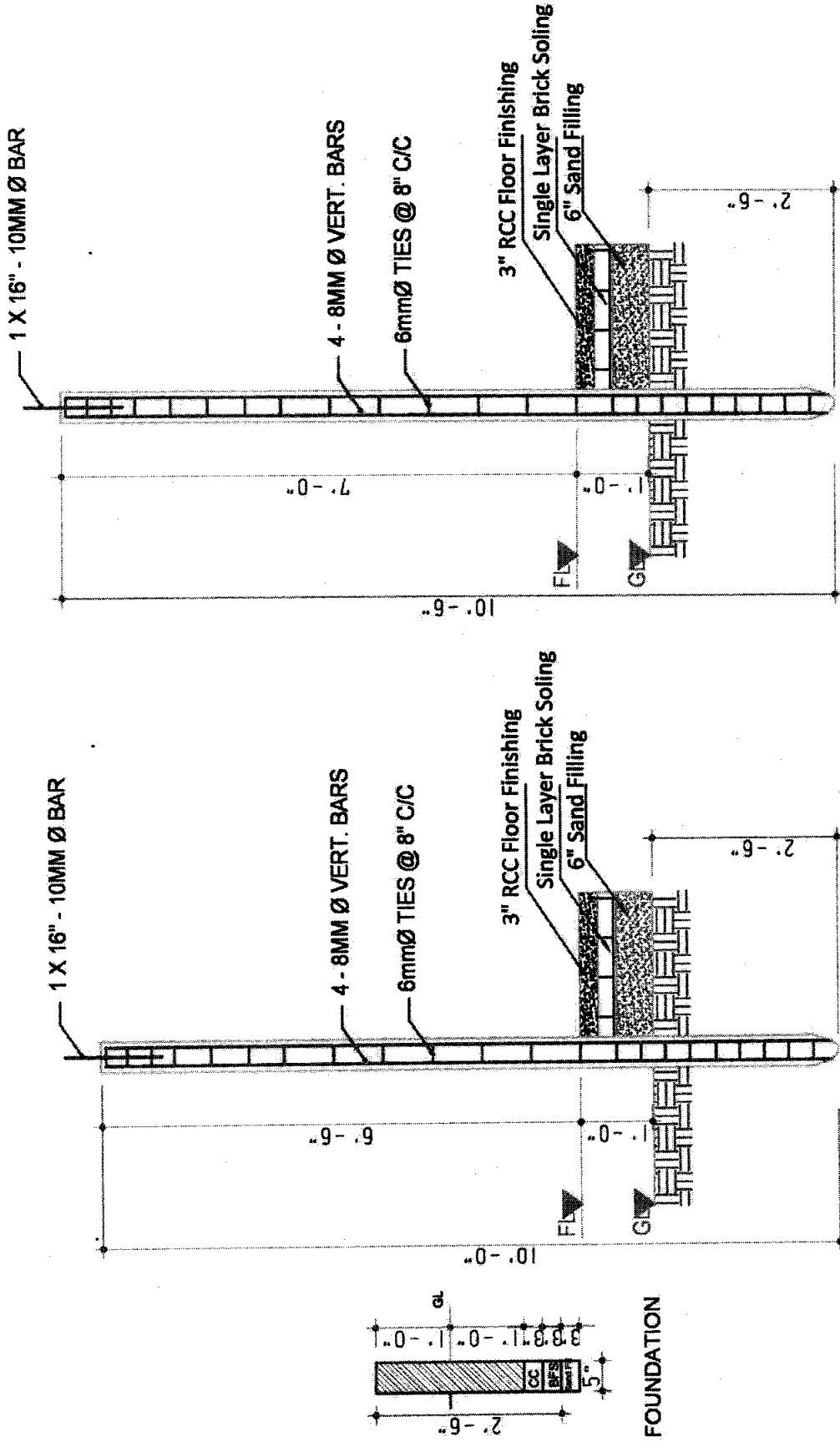


Section: AA

		Project Design and Drawing of Latrine	Model Twin pit with Single Cubicle	Designed by Minhaj Uddin Ahmed UNHCR	Checked By ABM Sadiqur Rahman UNHCR	Drawing Title Inspection Pit Details	Date 08-01-2018	Page 05	On Behalf of WASH Sector Developed by	 United Nations High Commissioner for Refugees Haïr Commissioner des Nations Unies pour les Réfugiés
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DETAIL OF R.C.C POST

Project	Model	Designed by	Checked By	Drawing Title	Date	Page	On Behalf of WASH Sector Developed by
Design and Drawing of Latrine	Twin pit with Single Cubicle	Minhaj Uddin Ahmed UNHCR	ABM Sadiqur Rahman UNHCR	Precast Column & Foundation Details	08-01-2018	06	UNHCR United Nations High Commissioner for Refugees Haut Commissariat des Nations Unies pour les Réfugiés



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