

UNHCR WASH SAFETY AND SECURITY CHECKLIST

- UNHCR and WASH actors must ensure that all WASH programmes in refugee settings have been designed to protect users from physical safety related risks.
- While undertaking the assessment it is important for the assessor to assess each piece of WASH infrastructure for potential risks from the individual perspective of each type of vulnerable user in particular women, children, infants, the elderly, and refugees with disabilities.
- Please note that the list of questions is not exhaustive and is merely intended to focus attention on potential safety and security issues related to trip, crush, pinch, pierce, cut, splinter, burn, drowning, and gender based violence. Common sense should be used at all times and if there is a safety or security issue that is not included on the sheet it should be noted in the additional comments section for corrective action.
- Following the assessment, it is essential to prioritise risks into high, medium and low – and establish a clear plan of action to immediately address the most critical risks.
- This safety and security checklist and action plan should be referenced in the annex of the site's WASH strategy/plan.

UNHCR WASH SAFETY AND SECURITY CHECKLIST	
A. General Information	
Location: Camp _____ Sector _____ Block _____ Community _____	
GPS Long: ____° ____' ____" GPS Lat: ____° ____' ____" Site Population : _____	
Contact Person: _____ Position: _____ Organisation: _____	
Telephone: _____ Email: _____ Date of Assessment: ____/____/____	
B. Risk of SGBV	
	Risk Factor
1. Lack of consultation of women with regards to	
• The design and siting of toilets?	Y <input type="checkbox"/> / N <input type="checkbox"/>
• The design and siting of bathing areas?	Y <input type="checkbox"/> / N <input type="checkbox"/>
• The design and siting of laundering areas?	Y <input type="checkbox"/> / N <input type="checkbox"/>
• The design and siting of water collection points?	Y <input type="checkbox"/> / N <input type="checkbox"/>
• The design and siting of waste collection points?	Y <input type="checkbox"/> / N <input type="checkbox"/>
2. Lack of household or shared (one per 4 families) toilet or bathing facilities?	Y <input type="checkbox"/> / N <input type="checkbox"/>
3. Public toilet or bathing cubicle coverage greater than one cubicle per 20 persons?	Y <input type="checkbox"/> / N <input type="checkbox"/>
4. Public toilet or bathing blocks are used by more than 80 persons (16 families)?	Y <input type="checkbox"/> / N <input type="checkbox"/>
5. Public toilet or bathing facilities further than 50m from users?	Y <input type="checkbox"/> / N <input type="checkbox"/>
6. Lack of at least two layers of privacy at public, shared or household bathing and toilet facilities? (inadequate = lack of privacy wall at least 1.8m around facility in addition to a lack of individual cubicle privacy).	Y <input type="checkbox"/> / N <input type="checkbox"/>
7. Inadequate privacy of individual toilet or shower cubicles? (for example – privacy exists but material is inadequate or ripped)?	Y <input type="checkbox"/> / N <input type="checkbox"/>
8. Inadequate or non-functional door on any of the cubicles? (inadequate door = lacking a solid frame, poorly fitting with gaps)	Y <input type="checkbox"/> / N <input type="checkbox"/>
9. Inadequate, missing, or non-functional cubicle locking mechanism in any of the cubicles? (inadequate = less than 100kgs static holding force)	Y <input type="checkbox"/> / N <input type="checkbox"/>
10. Lack of adequate night-time security lighting at WASH facilities? (inadequate lighting = less than 100 lumens / m ² up to 3m around block)	Y <input type="checkbox"/> / N <input type="checkbox"/>
Total score of risks	<u> </u> / 10

UNHCR WASH SAFETY AND SECURITY CHECKLIST

C. Risk of trip, slip, or fall when using WASH infrastructure	
1. Risk of wet or slippery surfaces at water collection, laundering, bathing, toilet, or waste disposal areas?	Y <input type="checkbox"/> / N <input type="checkbox"/>
2. Risk of tripping over steps, curbs, or raised objects when accessing WASH services or infrastructure?	Y <input type="checkbox"/> / N <input type="checkbox"/>
3. Risk of falling from elevated structures? (raised toilets, open well etc.)	Y <input type="checkbox"/> / N <input type="checkbox"/>
4. Lack of hand-rails to provide additional support when climbing steps or stairs to WASH infrastructure? (raised toilets, open well etc.)	Y <input type="checkbox"/> / N <input type="checkbox"/>
5. Lack of hand-rails to provide additional support in potentially wet or slippery areas?	Y <input type="checkbox"/> / N <input type="checkbox"/>
6. Lack of anti-slip floor surfaces in potentially wet or slippery areas?	Y <input type="checkbox"/> / N <input type="checkbox"/>
7. Solid waste pits (or latrine pits under construction) without adequate fencing or clear and visible warning tape and signs?	Y <input type="checkbox"/> / N <input type="checkbox"/>
8. Any other risks of trip, slip, or fall at the site?	Y <input type="checkbox"/> / N <input type="checkbox"/>
Total score of risks	<u> </u> / 8
D. Risk of cut, pinch, pierce, crush, or splinter when using WASH infrastructure	
1. Risk of cut, pinch, pierce, crush, or splinter when using handpump or any other water collection or lifting equipment?	Y <input type="checkbox"/> / N <input type="checkbox"/>
2. Risk of cut, pinch, pierce, crush, or splinter when using solid waste containers?	Y <input type="checkbox"/> / N <input type="checkbox"/>
3. Risk of cut, pinch, pierce, crush, or splinter when using toilet or bathing cubicles?	Y <input type="checkbox"/> / N <input type="checkbox"/>
4. Any other risks of cut, pinch, pierce, crush, or splinter at the site?	Y <input type="checkbox"/> / N <input type="checkbox"/>
Total score of risks	<u> </u> / 4
E. Risk of drowning when using WASH infrastructure	
1. Surface water collection (river, stream, lake, pond) taking place at the site?	Y <input type="checkbox"/> / N <input type="checkbox"/>
2. Open wells are not equipped with locked covers / metallic grills?	Y <input type="checkbox"/> / N <input type="checkbox"/>
3. Open well headwalls are lower than 70cm?	Y <input type="checkbox"/> / N <input type="checkbox"/>
4. Septic tanks are not equipped with locked covers?	Y <input type="checkbox"/> / N <input type="checkbox"/>
5. Toilet slab or support structure at risk of collapse?	Y <input type="checkbox"/> / N <input type="checkbox"/>
6. Blocked drainage canals or risk of poorly managed drainage?	Y <input type="checkbox"/> / N <input type="checkbox"/>
7. Any other risks of drowning at the site?	Y <input type="checkbox"/> / N <input type="checkbox"/>
Total score of risks	<u> </u> / 7
F. Risk of burning when using WASH infrastructure	
1. Hot water provided for bathing or laundering is greater than 50 °C?	Y <input type="checkbox"/> / N <input type="checkbox"/>
2. Burning of solid wastes taking place at the site?	Y <input type="checkbox"/> / N <input type="checkbox"/>
3. Any other risks of burning at the site?	Y <input type="checkbox"/> / N <input type="checkbox"/>
Total score of risks	<u> </u> / 3
Signature of Inspector	Community representative
Notes	

WASH ORGANISATIONAL CAPACITY ASSESSMENT

- Capacity building of national public, private, or refugee-based WASH service providers is an essential element in ensuring there is a long-term durable strategy for WASH service provision in refugee settings. It should be carried out in parallel with activities to switch to appropriate and affordable low-cost WASH technologies for the setting, making WASH service provision as cost-effective as possible to facilitate handover.
- Capacity building activities should focus on reinforcing technical skills, ensuring the organisation has the financial and material resources (e.g. office furniture, computers, printers, waste collection trucks, containers, water pumps etc.) to carry out effective WASH programming, in addition to reinforcing administrative systems (finance, admin, logistics). Any interventions to hand over WASH service provision should be carried out slowly and carefully with continued support and capacity building. Once WASH services are handed over, UNHCR and WASH actors should continue to work with national regulatory authorities to ensure that the quality of services is being carried out to defined standards.
- This tool has been designed to help obtain a snapshot capacity of national public, private, or refugee-based WASH service providers and understand the type of interventions that can be carried out to build capacity. Please note that the list of questions is not exhaustive and is merely intended to focus attention on areas of potential organisational capacity support. Common sense should be used at all times and if there is a clear capacity building need that is not included on the sheet it should be noted in the additional comments section for support.
- The tool should be used to guide a conversation (approximately an hour long) with the most senior representatives of the organisation. It should be made clear that the aim of the tool is not to identify weaknesses within the organisation but to understand where the organisation can most benefit from additional support and strengthening.
- At the end of the tool, the results may be plotted on a radar plot (or simple bar chart) as follows..



A. TECHNICAL SERVICE DELIVERY

1. WASH sectoral expertise

a. Relevant WASH sectoral expertise and experience (water supply, excreta management, hygiene promotion, solid waste management, disease vector control) exists within the organization.	① ② ③ ④ ⑤ ⑥
b. The organization is able to carry out WASH related technical design, build, operate, train, transfer, and regulate related activities to national WASH quality standards.	① ② ③ ④ ⑤ ⑥
c. WASH expertise is distributed throughout the organisation and does not rest with one or two individuals.	① ② ③ ④ ⑤ ⑥

2. Geographical coverage	
a. The WASH organisation has a programmatic presence in areas affected by displaced population or has the ability to expand WASH programming into these areas.	① ② ③ ④ ⑤ ⑥
3. WASH assets and resources	
a. The WASH organisation currently has the required staffing, assets, and resources (e.g. pumps, tankers, reservoirs, surveying equipment, water quality testing equipment, tankers, drilling equipment, waste collection equipment, vector control equipment etc.) to carry out WASH program delivery to relevant standards, or has a demonstrated ability to procure these assets?	① ② ③ ④ ⑤ ⑥
4. Stakeholder consultation	
a. WASH programs currently undertaken by the organization are based on real prioritized needs and are designed and implemented in association with stakeholders. Accountability mechanisms are in place and functional.	① ② ③ ④ ⑤ ⑥
5. Value for money	
a. WASH programs currently undertaken by the organization are efficient, adequate, cost effective, timely, and responsive.	① ② ③ ④ ⑤ ⑥
6. Programmatic sustainability	
a. The WASH programs carried out by the organization have clear exit strategies and systems of sustainable operation, maintenance and cost-recovery in the medium and long-term.	① ② ③ ④ ⑤ ⑥
B. GOVERNANCE	
1. Board / advisors	
a. The WASH organisation has a board or list of advisors composed of elected and capable members who carry out key roles such as policy formulation, fund raising, public relations, or financial oversight.	① ② ③ ④ ⑤ ⑥
2. Clearly defined mission and goals	
a. The WASH organisation has clearly articulated mission/goals and clearly defined objective statements aligned with a mission statement.	① ② ③ ④ ⑤ ⑥
3. Legal status	
a. The WASH organisation is registered according to relevant legislation.	① ② ③ ④ ⑤ ⑥
4. Leadership	
a. Board / advisors, and senior management have a clear understanding of their respective roles and responsibilities.	① ② ③ ④ ⑤ ⑥
b. Leadership style of senior management is participatory.	① ② ③ ④ ⑤ ⑥
C. MANAGEMENT PRACTICES	
1. Organizational structure and culture	
a. The WASH organisation has an organizational structure with clearly defined lines of authority and responsibility.	① ② ③ ④ ⑤ ⑥
b. Systems are in place to ensure appropriate involvement of all levels of staff in decision making.	① ② ③ ④ ⑤ ⑥

2. Planning	
a. The WASH organisation has short, medium and long-term plans that are used and are updated regularly.	① ② ③ ④ ⑤ ⑥
3. Administrative procedures	
a. Administrative procedures and manual exist.	① ② ③ ④ ⑤ ⑥
4. Monitoring, evaluation and reporting	
a. The WASH program carried out by the organisation incorporates monitoring, evaluation and reporting activities	① ② ③ ④ ⑤ ⑥
b. Systems exist to collect, analyse and report data and information.	① ② ③ ④ ⑤ ⑥
c. The organisation has the ability to produce a range of appropriate reports.	① ② ③ ④ ⑤ ⑥
D. HUMAN RESOURCES	
1. Human resources management	
a. Recruitment processes are transparent and competitive.	① ② ③ ④ ⑤ ⑥
b. Job descriptions are documented and updated.	① ② ③ ④ ⑤ ⑥
c. Salaries are clearly structured and competitive.	① ② ③ ④ ⑤ ⑥
2. Human resources development	
a. Job appraisals are performance based and equitable.	① ② ③ ④ ⑤ ⑥
b. Staff training is based on capacity, needs and strategic objectives.	① ② ③ ④ ⑤ ⑥
3. Human resources management	
a. The WASH organisation has short, medium and long-term plans that are used and are updated regularly.	① ② ③ ④ ⑤ ⑥
4. Work organisation	
a. Staff meetings are held regularly and team work is encouraged.	① ② ③ ④ ⑤ ⑥
E. FINANCIAL AND PROCUREMENT	
1. Accounting	
a. Appropriate financial procedures and reporting systems are in place. Account categories exist for separating project funds.	① ② ③ ④ ⑤ ⑥
2. Budgeting	
a. Budgeting process is integrated into annual implementation plans.	① ② ③ ④ ⑤ ⑥
b. A financial unit responsible for the preparation, management and implementation of the annual budget exists and budgetary control is carried out on an ongoing basis.	① ② ③ ④ ⑤ ⑥
3. Procurement	
a. Appropriate stock control systems exist.	① ② ③ ④ ⑤ ⑥
b. Appropriate procurement systems are in place.	① ② ③ ④ ⑤ ⑥
c. Internal and external audits are conducted on a regular basis.	① ② ③ ④ ⑤ ⑥
d. The organization has the ability to prepare, launch, analyse and award competitive tenders	① ② ③ ④ ⑤ ⑥
4. Financial reporting	
a. Annual financial report is prepared by a registered firm of auditors.	① ② ③ ④ ⑤ ⑥

5. Diversification of income base	
a. The organization has multiple funding sources.	① ② ③ ④ ⑤ ⑥
b. The organization has the ability to tender for contracts.	① ② ③ ④ ⑤ ⑥
F. EXTERNAL RELATIONS	
1. Stakeholder relations	
a. The organization is seen as credible by stakeholders and funders.	① ② ③ ④ ⑤ ⑥
2. Inter-organisation collaboration	
a. The organisation networks and shares resources with other national WASH organisations.	① ② ③ ④ ⑤ ⑥
3. Government collaboration	
a. The organisation has contacts with government policy and decision makers.	① ② ③ ④ ⑤ ⑥
4. Funder collaboration	
a. The organisation has diversified contacts within the funding community.	① ② ③ ④ ⑤ ⑥
5. Public relations	
a. The organisation engages in public relations. Activity information disseminated.	① ② ③ ④ ⑤ ⑥
6. Local resources	
a. The organisation has relations with the private sector for technical expertise, material and/or human resources.	① ② ③ ④ ⑤ ⑥
7. Media	
a. The organisation has media strategy and has attracted positive media attention.	① ② ③ ④ ⑤ ⑥
G. SUSTAINABILITY	
1. Program/benefit sustainability	
a. Programs are supported by those being served.	① ② ③ ④ ⑤ ⑥
b. The organisation has developed systems for continuation of its program in the medium and long-term.	① ② ③ ④ ⑤ ⑥
c. The organisation has developed programmatic phasing-out strategies.	① ② ③ ④ ⑤ ⑥
2. Organizational sustainability	
a. The organisation has linkages with international NGOs, education institutions, government entities, research institutes, and the private sector.	① ② ③ ④ ⑤ ⑥
3. Financial sustainability	
a. The organisation has the ability to access diversified resources.	① ② ③ ④ ⑤ ⑥
b. The organisation has a fee for services and/or other cost recovery mechanisms built into service delivery where appropriate.	① ② ③ ④ ⑤ ⑥
c. The organisation has a fund raising strategy.	① ② ③ ④ ⑤ ⑥
d. The organisation has capacity to develop proposals and respond to tenders and calls for proposals.	① ② ③ ④ ⑤ ⑥

UNHCR BOREHOLE LOG

UNHCR field staff and their partners must ensure that a drilling log, development log, constant discharge pump test, and step drawdown pump test are completed for every borehole. Copies must be kept by the drilling agency, the WASH partner, national regulatory authorities, and UNHCR.

A) Agency information							
Drilling Agency:				Drilling rig make and model:			
Drilling Officer:				Drilling fluid used:			
Contact details:				Drilling bit sizes:			
Name of Geologist:				Date started:			
Drilling method:				Date completed:			
B) Borehole location							
District:				Coordinates:			
Sub-district:				Latitude:			
Village / Camp:				Longitude:			
Location:				Elevation:			
Depth (m)	Time (hh: mm)	Description (geology, colour, density, hardness, gradations, angularity, odour, fragments, lamination etc.)	Acid test (reaction to 5% HCl acid)	Conductivity (µS/cm)	Water struck (est. of yield)	Observations (bit diameter, use of mud additives, foam etc.)	Casing plan
0m							
2m							
4m							
6m							
8m							
10m							
12m							
14m							
16m							
18m							
20m							
22m							
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32m							
34m							
36m							
38m							
40m							
42m							
44m							
46m							
48m							
50m							

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C) Borehole construction details		
Borehole diameter:	<input type="text"/>	mm
Casing / screen diameter:	<input type="text"/>	mm
Screen / slot size:	<input type="text"/>	mm
Sediment formation		
Head casing length:	<input type="text"/>	m
Casing length:	<input type="text"/>	m
Screen length:	<input type="text"/>	m
Gravel pack length:	<input type="text"/>	m
Gravel pack volume	<input type="text"/>	litres
Gravel pack size:	<input type="text"/>	mm
Gravel pack type:	<input type="text"/>	
Grout seal length:	<input type="text"/>	m
Total borehole depth:	<input type="text"/>	m
Hard rock formation		
Head casing length:	<input type="text"/>	m
Casing length:	<input type="text"/>	m
Screen length:	<input type="text"/>	m
Grout seal length:	<input type="text"/>	m
Total borehole depth:	<input type="text"/>	m
Yield		
Static water level:	<input type="text"/>	m
Dynamic water level:	<input type="text"/>	m
Production yield	<input type="text"/>	m ³ /hr
Conductivity	<input type="text"/>	µS/cm
Equipping		
Pump type:	<input type="text"/>	
Pump setting depth:	<input type="text"/>	m
Centralizers	<input type="text"/>	Y/N
Rising main material	<input type="text"/>	
Rising main diameter	<input type="text"/>	mm

UNHCR BOREHOLE LOG

UNHCR field staff and their partners must ensure that a drilling log, development log, constant discharge pump test, and step drawdown pump test are completed for every borehole. Copies must be kept by the drilling agency, the WASH partner, national regulatory authorities, and UNHCR.

D) Remarks

E) Sketch plan of borehole location (show any nearby buildings/features and the north direction)

UNHCR BOREHOLE LOG

UNHCR field staff and their partners must ensure that a drilling log, development log, constant discharge pump test, and step drawdown pump test are completed for every borehole. Copies must be kept by the drilling agency, the WASH partner, national regulatory authorities, and UNHCR.

F) Borehole construction sketch (show dimensions)

UNHCR BOREHOLE LOG

UNHCR field staff and their partners must ensure that a drilling log, development log, constant discharge pump test, and step drawdown pump test are completed for every borehole. Copies must be kept by the drilling agency, the WASH partner, national regulatory authorities, and UNHCR.

G) Borehole development

	Depth (m)		Time (min.)	Measured yield (l/s)	Dynamic water level (m)	Observations (presence of sand, clay etc.)	Conductivity (µS/cm)
	Pipe	Hose					
Pumping							
Flushing							
Pumping							
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H) Constant duration pumping test

Boreholes that will be equipped with handpumps need only be subjected to a constant discharge pump test for 12 hours. Production boreholes that will be motorized must be tested for 48 hours.

PUMPING					RECOVERY			
Time	Pumping time (minutes)	Water level (m)	Drawdown (m)	Discharge (l/s)	Time	Recovery time (minutes)	Water level (m)	Residual drawdown (m)
	0							
	3							
	5							
	10							
	15							
	20							
	30							
	40							
	50							
	(1H) 60							
	80							
	100							
	(2H) 120							
	140							
	160							
	(3H) 180							
	210							
	(4H) 240							
	270							
	(5H) 300							
	330							
	(6H) 360							
	(7H) 420							
	(8H) 480							
	(9H) 540							
	(10H) 600							
	(11H) 660							
	(12H) 720							
	(13H) 780							
	(14H) 840							
	(16H) 960							
	(18H) 1080							
	(20H) 1200							
	(22H) 1320							
	(24H) 1440							
	(32H) 1920							
	(40H) 2400							
	(48H) 2880							
Discharge rate (l/s):					Observations:			
Duration (hours):								

I) Step drawdown pumping test

Three constant discharge steps must be selected with the third step being 20% greater than the design yield. The duration of each step is 2 hours.

STEP n° :		1			Discharge rate (l/s) :				Pumping duration :		2 hours	
PUMPING					RECOVERY							
Time	Pumping time (minutes)	Water level (m)	Drawdown (m)	Discharge (l/s)	Time	Recovery time (minutes)	Water level (m)	Residual drawdown (m)				
	0											
	1											
	2											
	3											
	5											
	10											
	15											
	20											
	30											
	40											
	50											
	(1H) 60											
	80											
	100											
	(2H) 120											

STEP n° :		2			Discharge rate (l/s) :				Pumping duration :		2 hours	
PUMPING					RECOVERY							
Time	Pumping time (minutes)	Water level (m)	Drawdown (m)	Discharge (l/s)	Time	Recovery time (minutes)	Water level (m)	Residual drawdown (m)				
	0											
	1											
	2											
	3											
	5											
	10											
	15											
	20											
	30											
	40											
	50											
	(1H) 60											
	80											
	100											
	(2H) 120											

STEP n° :		Discharge rate (l/s) :			Pumping duration :		2 hours	
PUMPING					RECOVERY			
Time	Pumping time (minutes)	Water level (m)	Drawdown (m)	Discharge (l/s)	Time	Recovery time (minutes)	Water level (m)	Residual drawdown (m)
	0							
	1							
	2							
	3							
	5							
	10							
	15							
	20							
	30							
	40							
	50							
	(1H) 60							
	80							
	100							
	(2H) 120							

Observations:

UNHCR BOREHOLE LOG

UNHCR field staff and their partners must ensure that a drilling log, development log, constant discharge pump test, and step drawdown pump test are completed for every borehole. Copies must be kept by the drilling agency, the WASH partner, national regulatory authorities, and UNHCR.

J) Hydrogeologist's report (include graphs of constant discharge and step drawdown tests)

TOILET INFRASTRUCTURE ASSESSMENT FORM

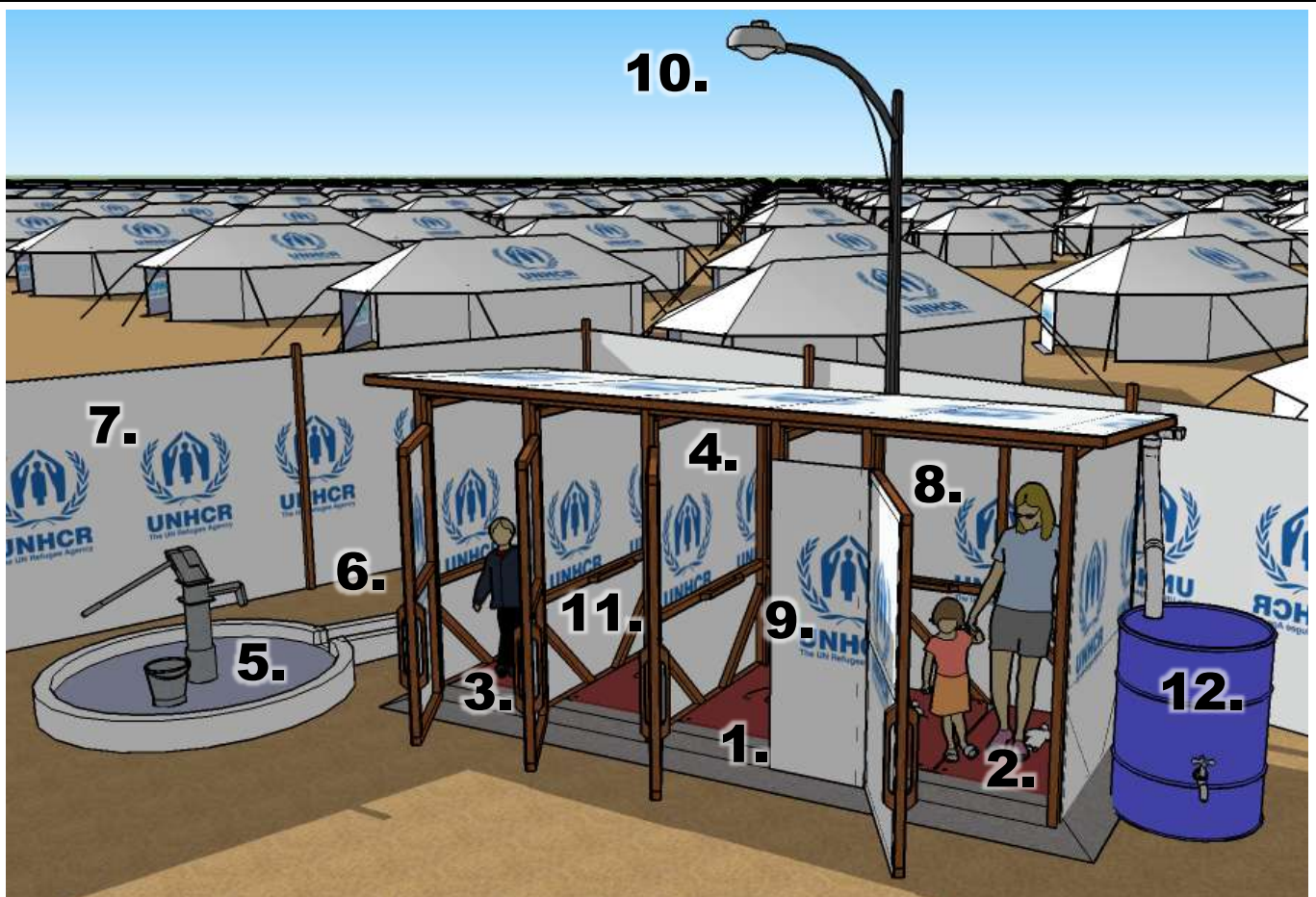
COMMUNAL TRENCH LATRINE

A. General Information

Location: Camp _____ Sector _____ Block _____ Community _____

GPS Long: _____° _____' _____" GPS Lat: _____° _____' _____" Number of toilet cubicles: _____

Contact person: _____ Position: _____ Date of visit: ____/____/____



B. Identification of risk factors

- | Risk | Risk |
|--|---|
| 1. Are the pit walls visibly cracked / broken / leaking / flooded? | Y <input type="checkbox"/> / N <input type="checkbox"/> |
| 2. Is the toilet pit full? (less than 0.5m remaining space in the pit)? | Y <input type="checkbox"/> / N <input type="checkbox"/> |
| 3. Is the toilet block unsanitary? (traces of faeces anywhere inside the toilet facilities)? | Y <input type="checkbox"/> / N <input type="checkbox"/> |
| 4. Is there any evidence of fly infestation?
(presence of one or more flies in the cubicle during the assessment period)? | Y <input type="checkbox"/> / N <input type="checkbox"/> |
| 5. Are there any drinking water sources within 10m of the toilet facility? | Y <input type="checkbox"/> / N <input type="checkbox"/> |
| 6. Is there evidence of open defecation anywhere around the toilet block? | Y <input type="checkbox"/> / N <input type="checkbox"/> |
| 7. Is there a lack of a privacy screen around the toilet block? | Y <input type="checkbox"/> / N <input type="checkbox"/> |
| 8. Is there a lack of privacy inside any of the toilet cubicles?
(for example - is any of the plastic sheeting missing or ripped)? | Y <input type="checkbox"/> / N <input type="checkbox"/> |
| 9. Are any of the toilet cubicles missing a functional security lock? | Y <input type="checkbox"/> / N <input type="checkbox"/> |
| 10. Is there a lack of adequate night-time security lighting within 3m of the toilet block?
(adequate lighting = at least 100 lumens / m ²) | Y <input type="checkbox"/> / N <input type="checkbox"/> |
| 11. Is there a lack of a functional hand-washing station within 10m of the toilet?
(functional = soap + handwashing water + drainage) | Y <input type="checkbox"/> / N <input type="checkbox"/> |
| 12. Is there a lack of handrails for vulnerable groups (elderly / infirm / disabled / children)? | Y <input type="checkbox"/> / N <input type="checkbox"/> |

Total score of risks / 12

Signature of Inspector Community representative

Note: Risk score: 9-12 = very high, 6-8 = high, 3-5 = intermediate, 0-2 = low

EXCRETA MANAGEMENT INFRASTRUCTURE ASSESSMENT TOOL

- This assessment tool has been designed to assist UNHCR field staff and their partners collect data on excreta management during a needs assessment. The main purpose of this tool is to identify problems related to excreta management and identify actions to bring conditions to UNHCR standards.
- This tool attempts to capture most of the common problems encountered with excreta management, however the user should apply common sense and document any additional problems that may not be covered.
- It is good practice to discuss the results of this assessment with members of the displaced community before departing. Matters of extreme urgency should be addressed immediately.

EXCRETA MANAGEMENT INFRASTRUCTURE ASSESSMENT TOOL

 Assessor(s): _____

 Contact details: _____
 Date of assessment : ____/____/____

Site information

 Site location (District, Town, Village etc.): _____ Number of men: _____
 GPS Long: _____° _____' _____" GPS Lat: _____° _____' _____" Number of women: _____
 Planned camp Unplanned camp Urban collective centre Host families Number of children: _____
 Rented accommodation Public buildings Other _____
 Contact person: _____ Position: _____ Phone number: _____

Toilet coverage information

 Number of cubicles _____ Total daily users _____ Coverage rate _____ (persons/toilet)
 Estimated % of population defecating in the open _____

Privacy structure type

 Wood frame / plastic sheeting Wood frame / corrugated iron sheeting Wood frame / grass covering
 Concrete Block Brick Cement Wood Other _____ (tick all that apply)

Toilet type

 Plastic squatting slab Wooden squatting slab Concrete sanplat Ceramic pour flush slab
 Non-reinforced dome concrete slab Urine diverting toilet Ceramic cistern flush toilet
 Bucket latrine Non-flush pedestal type toilet Oil drum latrine Storage tank latrine
 Plastic bag latrine Portable toilet Trench latrine Defecation field Other _____

Privacy structure / toilet problems

<input type="checkbox"/> Broken privacy structure?	<input type="checkbox"/> Lack of dedicated cleaning equipment (buckets / mops, brushes, detergent etc.)?	<input type="checkbox"/> Fly infestation (flies observed during assessment period)?
<input type="checkbox"/> Toilet block unsanitary (faeces visible on toilet surface, or inside facilities)?	<input type="checkbox"/> Lack of dedicated cleaning attendant?	<input type="checkbox"/> Difficult access / usage for vulnerable groups (elderly / infirm / disabled / children)?
<input type="checkbox"/> Toilet block flooded?	<input type="checkbox"/> Insufficient water for adequate operation or anal-cleansing?	<input type="checkbox"/> Lack of personal protective equipment for cleaners (gloves, aprons, overalls, boots)?
<input type="checkbox"/> Insufficient number of toilets?	<input type="checkbox"/> Evidence of open defecation?	<input type="checkbox"/> Lack of functional hand-washing station within 5m / 15ft of toilet?
<input type="checkbox"/> Lack of privacy screen around toilet block?	<input type="checkbox"/> Inadequate cleaning (< four times a day or strong smell of excreta or urine)?	<input type="checkbox"/> _____
<input type="checkbox"/> Lack of privacy inside toilet cubicle?	<input type="checkbox"/> Inappropriate design?	<input type="checkbox"/> _____
<input type="checkbox"/> Lack of security (lack of functional lock or lighting)?		

Collection / storage system

 Offset pit Direct pit Double pit Raised pit Dehydrating vault Composting vault
 Septic tank Sewage holding tank Transfer station Biogas vault Other _____

Toilet capacity information

 Vault / pit capacity _____ (m³) Used volume _____ (%)

Excreta collection / storage problems

<input type="checkbox"/> Excreta containment structure inadequately covered or sealed?	<input type="checkbox"/> Containment structure <30m from water source?	<input type="checkbox"/> Excreta containment structure full or overflowing?
<input type="checkbox"/> Containment structure < 1.5m / 5ft of groundwater table?	<input type="checkbox"/> Fly infestation (flies observed during the assessment period)?	<input type="checkbox"/> Presence of vermin or other vectors?
	<input type="checkbox"/> Excreta containment structure visibly cracked / broken / leaking / flooded?	<input type="checkbox"/> _____
		<input type="checkbox"/> _____

Excreta handling / desludging operations

- Human emptying Motorized emptying Buckets Vacuum pumps Diaphragm pumps
 Centrifugal pumps Other _____ (tick all that apply)

Excreta desludging device specifications

- Device make _____ Device model _____ Power _____ (kW)

Excreta handling / desludging problems

- | | | |
|---|--|--|
| <input type="checkbox"/> Excreta leakage? | <input type="checkbox"/> Desludging equipment or vehicles inadequately cleaned or disinfected (0.2% chlorine), between desludging? | <input type="checkbox"/> Lack of personal protective equipment for desludging staff? |
| <input type="checkbox"/> Direct contact between excreta and personnel? | <input type="checkbox"/> Inadequate disposal of desludging cleaning water? | <input type="checkbox"/> Lack of on-site showers for desludging staff? |
| <input type="checkbox"/> Visible traces of excreta on equipment during transportation or storage? | | <input type="checkbox"/> _____ |
| | | <input type="checkbox"/> _____ |

Excreta transportation information

- Sludge tankers Sludge carts Sealed drums Other _____ (tick all that apply)
 Volume _____ (m³) Type _____ Emptying Frequency _____ Condition _____

Excreta transportation problems

- | | | |
|--|--|---|
| <input type="checkbox"/> Excreta transportation tank overflowing, leaking, or poorly sealed / covered? | <input type="checkbox"/> Visible traces of excreta on transportation system? | <input type="checkbox"/> Fly infestation (flies observed during assessment period)? |
| <input type="checkbox"/> Unauthorized dumping? | <input type="checkbox"/> Visible traces of excreta along transportation route? | <input type="checkbox"/> Insufficient fuel / capacity? |
| | | <input type="checkbox"/> _____ |

Presence and use of sewers

- Conventional sewer Simplified sewer Interceptor sewer Vacuum sewer Other _____
 Sewer pipe material _____ Sewer lengths _____ (m) Sewer diameters _____ (mm)

Sewer related problems

- | | | |
|--|---|--|
| <input type="checkbox"/> Sewer pipes or inspection chambers overflowing, blocked or leaking? | <input type="checkbox"/> Sewer pipes exposed or buried less than 0.5m / 2ft? | <input type="checkbox"/> Fly infestation (one or more flies observed on inspection)? |
| <input type="checkbox"/> Insufficient retention times? | <input type="checkbox"/> Inspection chambers or rodding eyes inadequately sealed? | <input type="checkbox"/> _____ |
| | | <input type="checkbox"/> _____ |

Excreta treatment practice

- Off site sewage treatment works Waste stabilization ponds Anaerobic digester
 Constructed wetlands / reed beds Septic tank Trickling filter Activated sludge
 Thickening ponds Drying beds Composting Other _____ (tick all that apply)
 Width _____ (m) Height _____ (m) Length _____ (m) Volume _____ (m³) Flow rate _____ (l/s)

Excreta treatment related problems

- | | | |
|---|--|---|
| <input type="checkbox"/> Excreta containment structures cracked, broken, overflowing, leaking, flooded, inadequately covered or sealed? | <input type="checkbox"/> Inadequate protection from surface water? | <input type="checkbox"/> Lack of personal protective equipment for workers? |
| <input type="checkbox"/> Insufficient retention times? | <input type="checkbox"/> Poor maintenance schedule / lack of cleaning / replacement? Inadequate fencing? | <input type="checkbox"/> _____ |
| | | <input type="checkbox"/> _____ |

Excreta final disposal practice

- Fill And Cover Leach Field Other _____ (tick all that apply)

Excreta final disposal problems

- | | | |
|--|--|---|
| <input type="checkbox"/> Untreated disposal of excreta into water bodies? | <input type="checkbox"/> Fly infestation (flies observed during the assessment period)? | <input type="checkbox"/> Lack of personal protective equipment? |
| <input type="checkbox"/> Excreta disposal location less than 1.5m / 5ft above groundwater level? | <input type="checkbox"/> Application of untreated excreta to directly to land, or inadequate soil cover depth? | <input type="checkbox"/> _____ |
| | | <input type="checkbox"/> _____ |

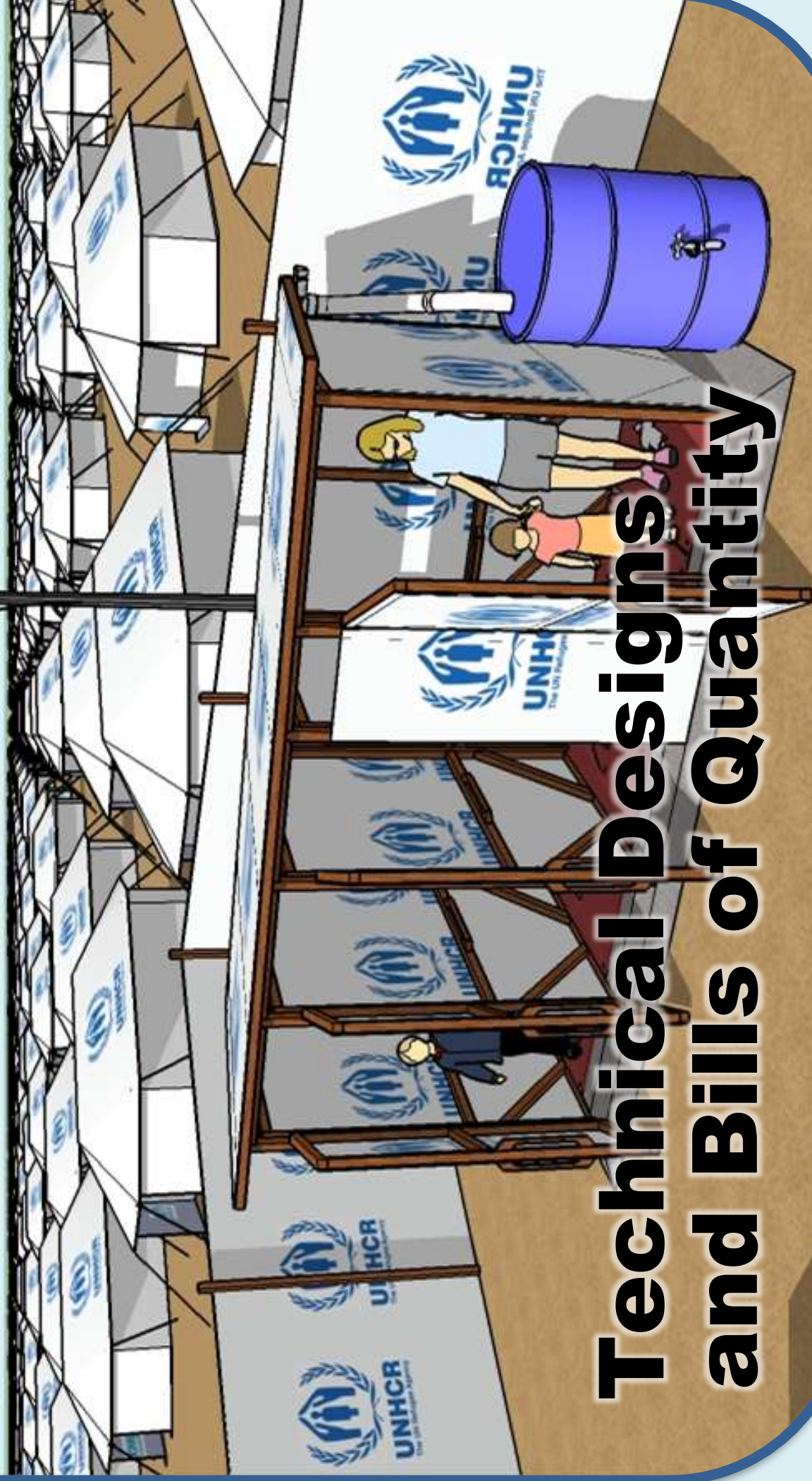
Toilet programme operation and maintenance information

- No. of toilet attendants _____ No. of maintenance crew _____ Cleaning stocks _____ (weeks)
 # Shovels _____ # Wheelbarrows _____ # Buckets _____ # Brushes _____ # Mops _____
 # Backpack sprayers _____ # Overalls _____ # Thick soled boots _____ # Thick gloves _____
 # Aprons _____ # Eye protection _____ # Masks _____ # Chlorine _____ (kg) Detergent _____ (l)

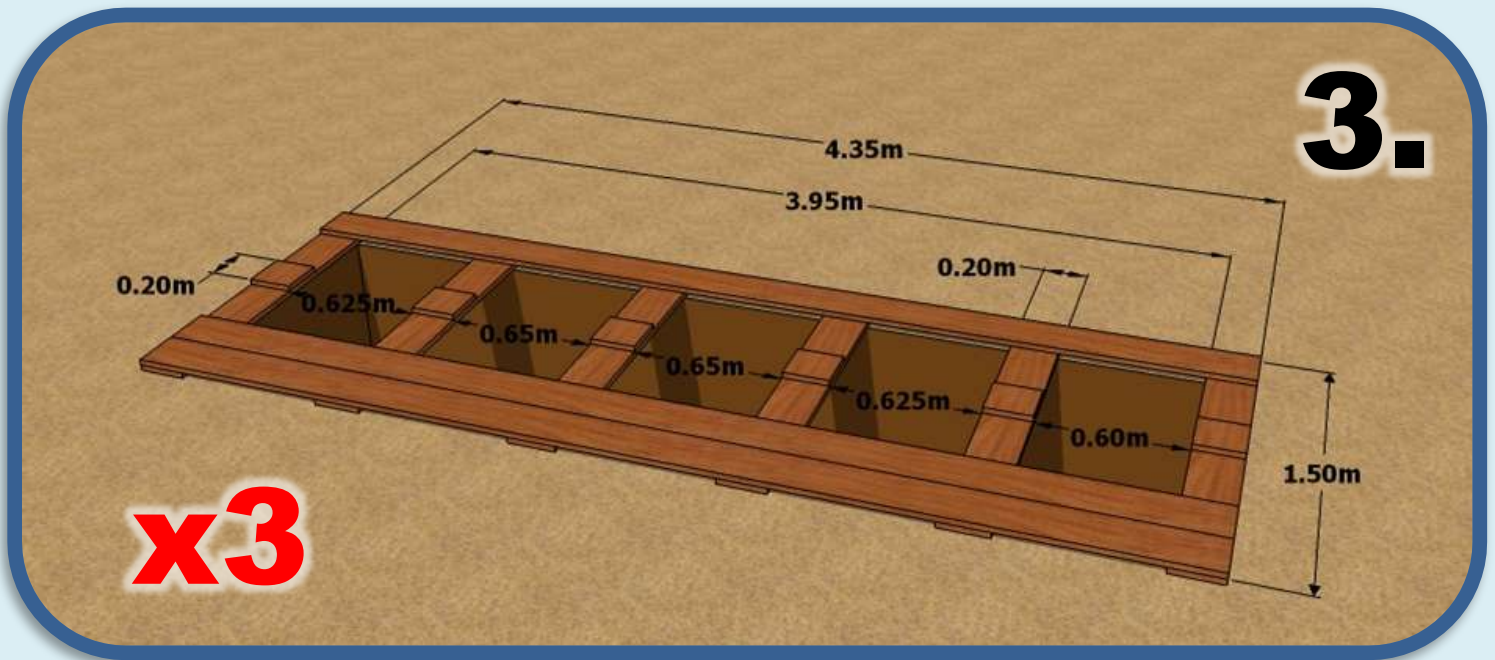
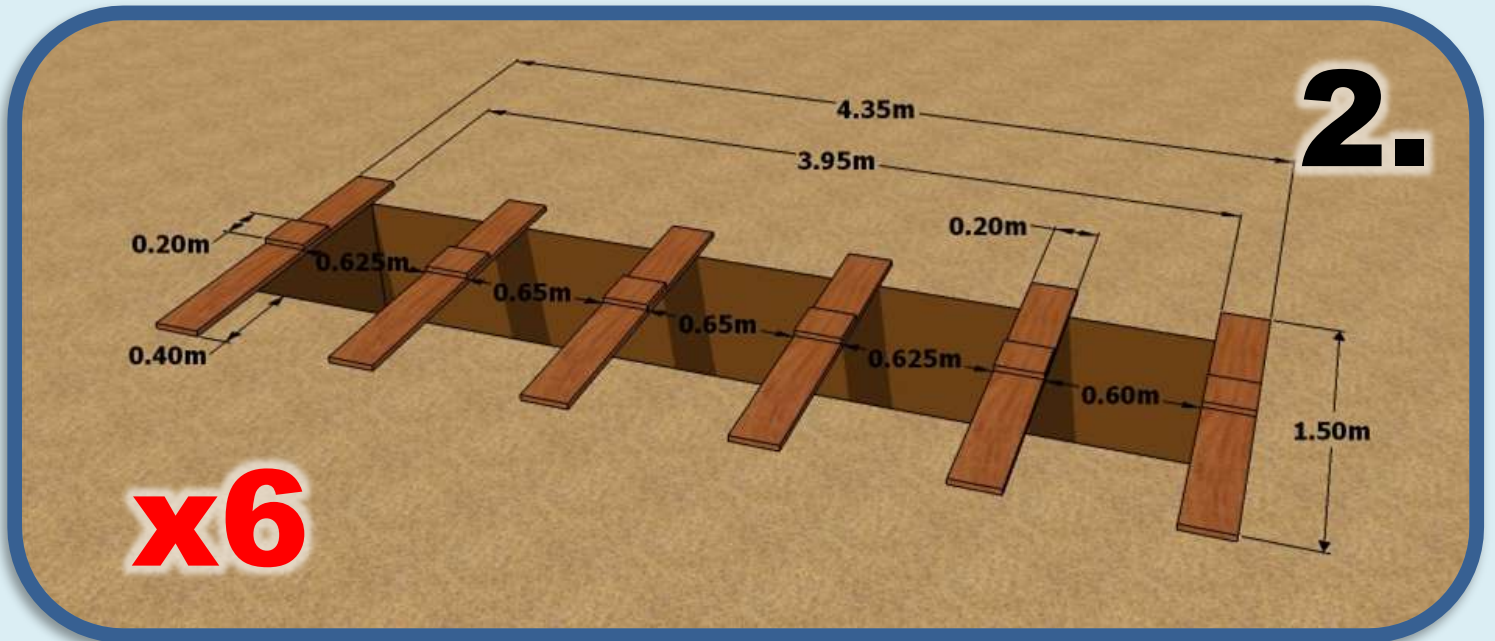
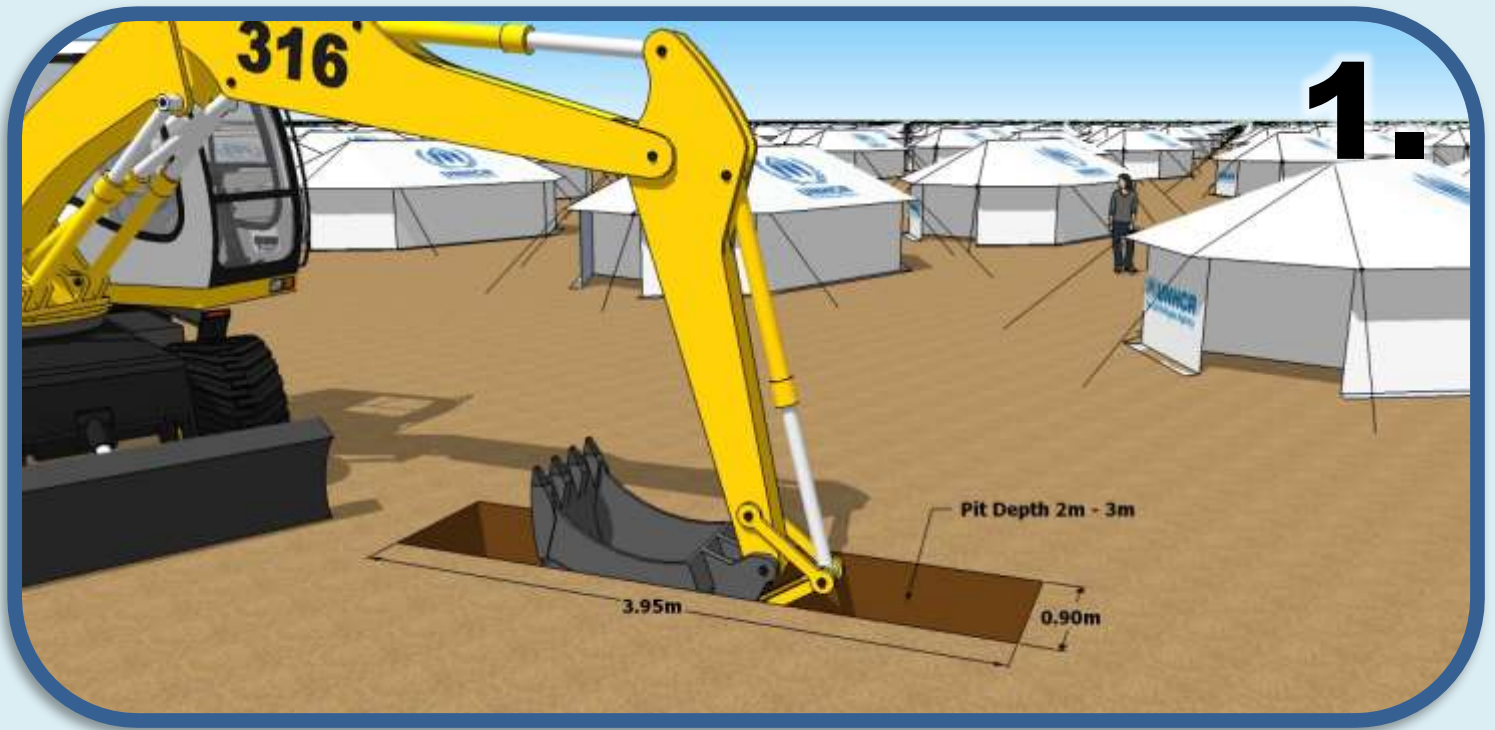
Operation and maintenance related problems

- | | | |
|---|--|--|
| <input type="checkbox"/> Insufficient cleaning and maintenance staff? | <input type="checkbox"/> Poor routine cleaning and maintenance schedule? | <input type="checkbox"/> Lack of consumables? |
| <input type="checkbox"/> Staff insufficiently trained? | <input type="checkbox"/> Lack of personal protective equipment? | <input type="checkbox"/> Lack of on-site showers for sanitation workers? |
| <input type="checkbox"/> Lack of maintenance equipment? | | <input type="checkbox"/> _____ |

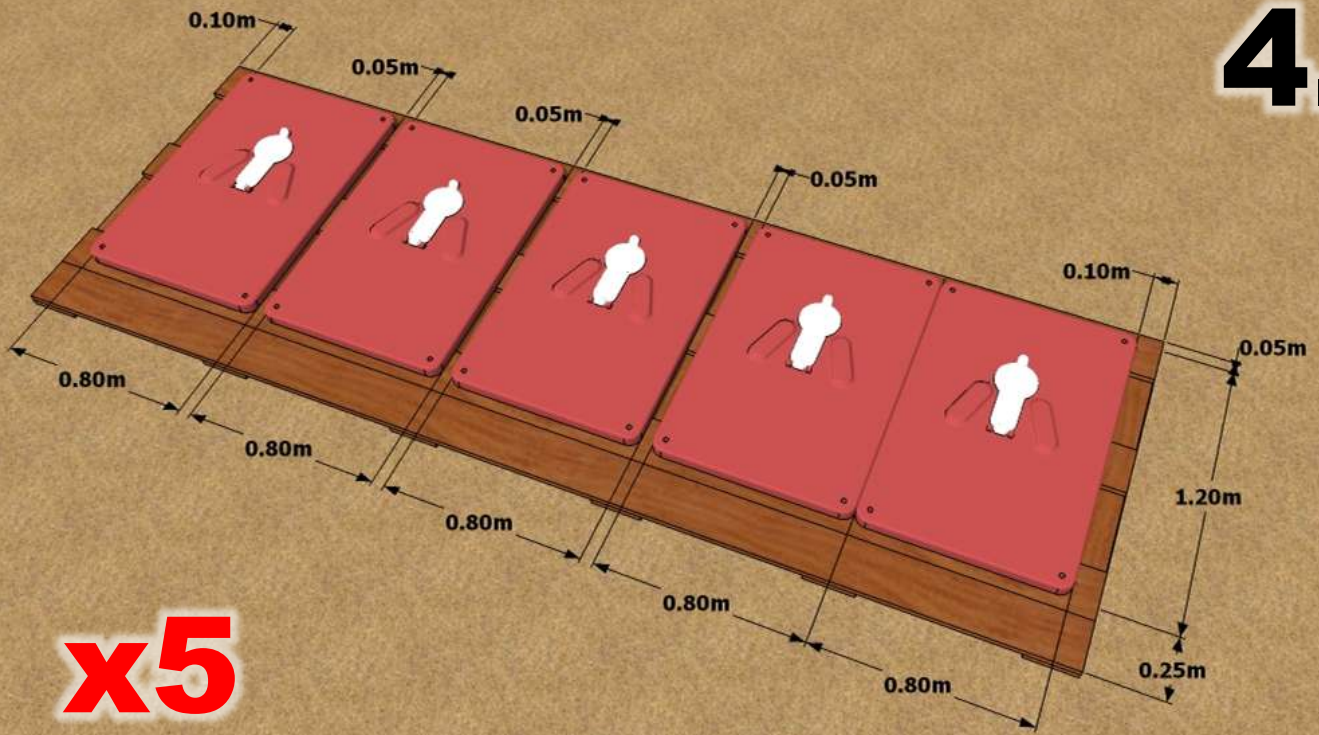
Emergency Trench Latrine



**Technical Designs
and Bills of Quantity**

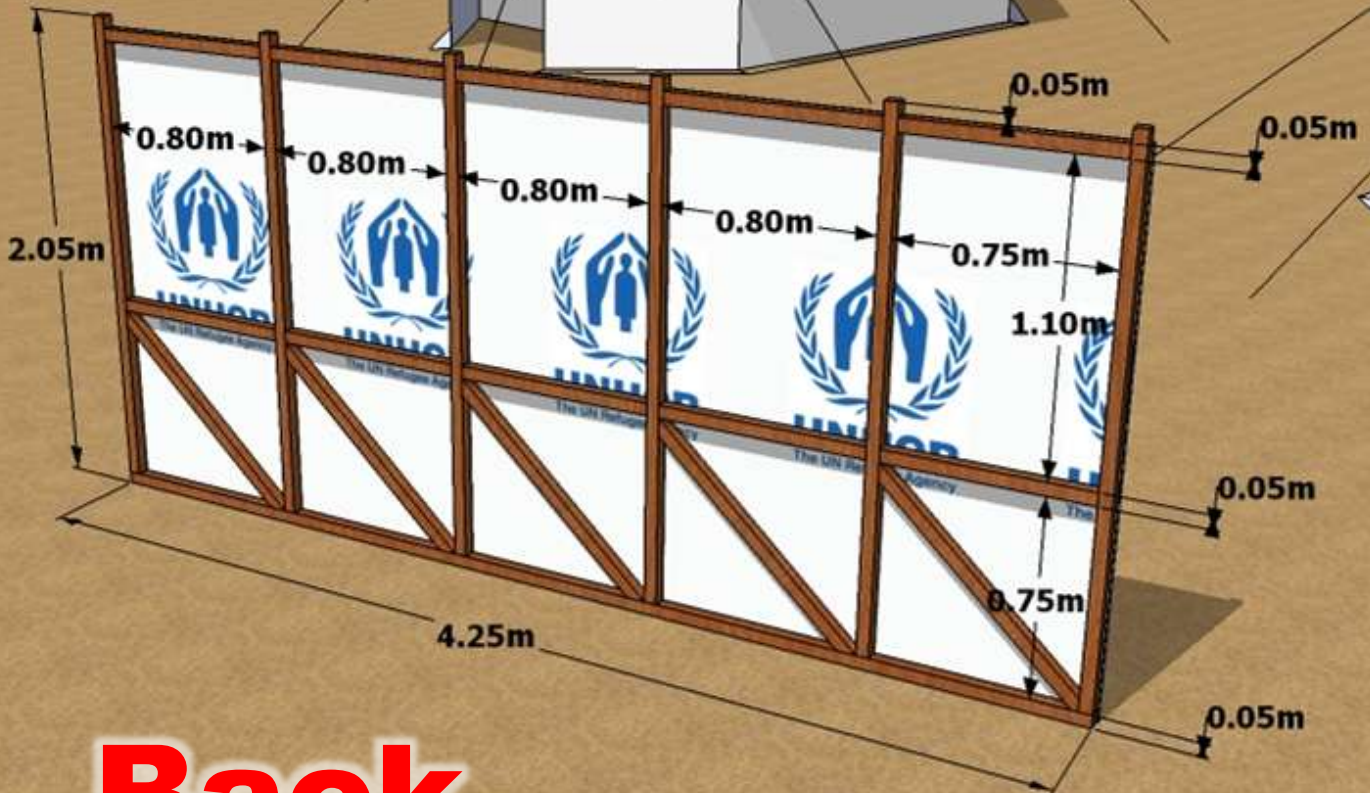


4.



x5

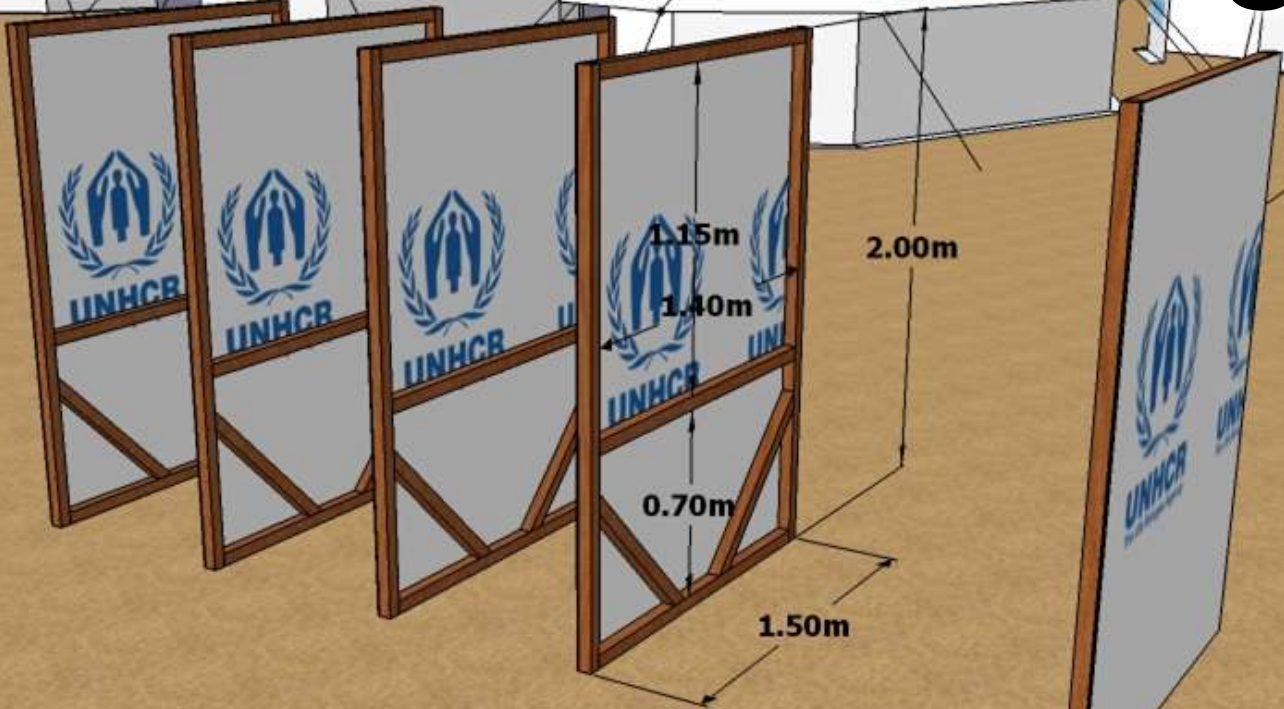
5.



Back

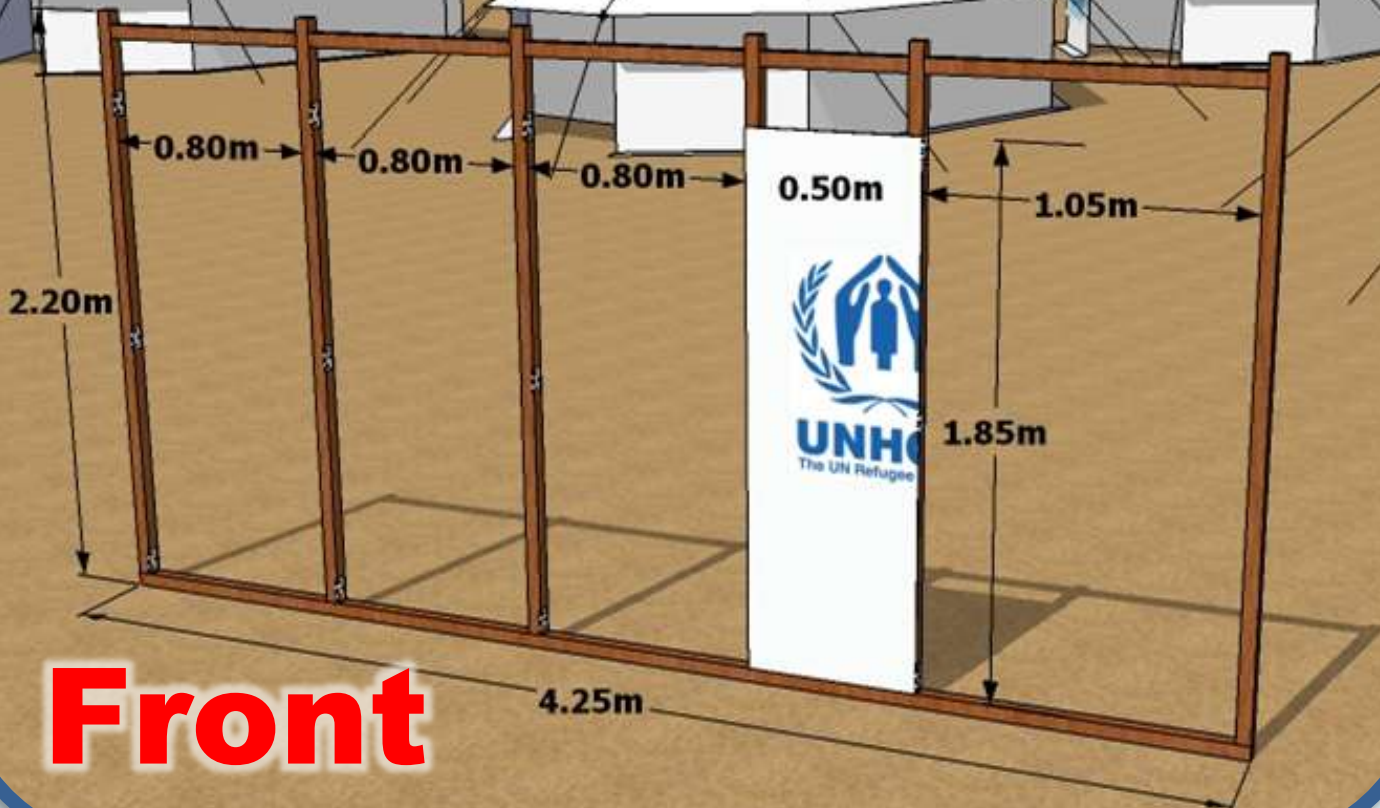
Sides

6.

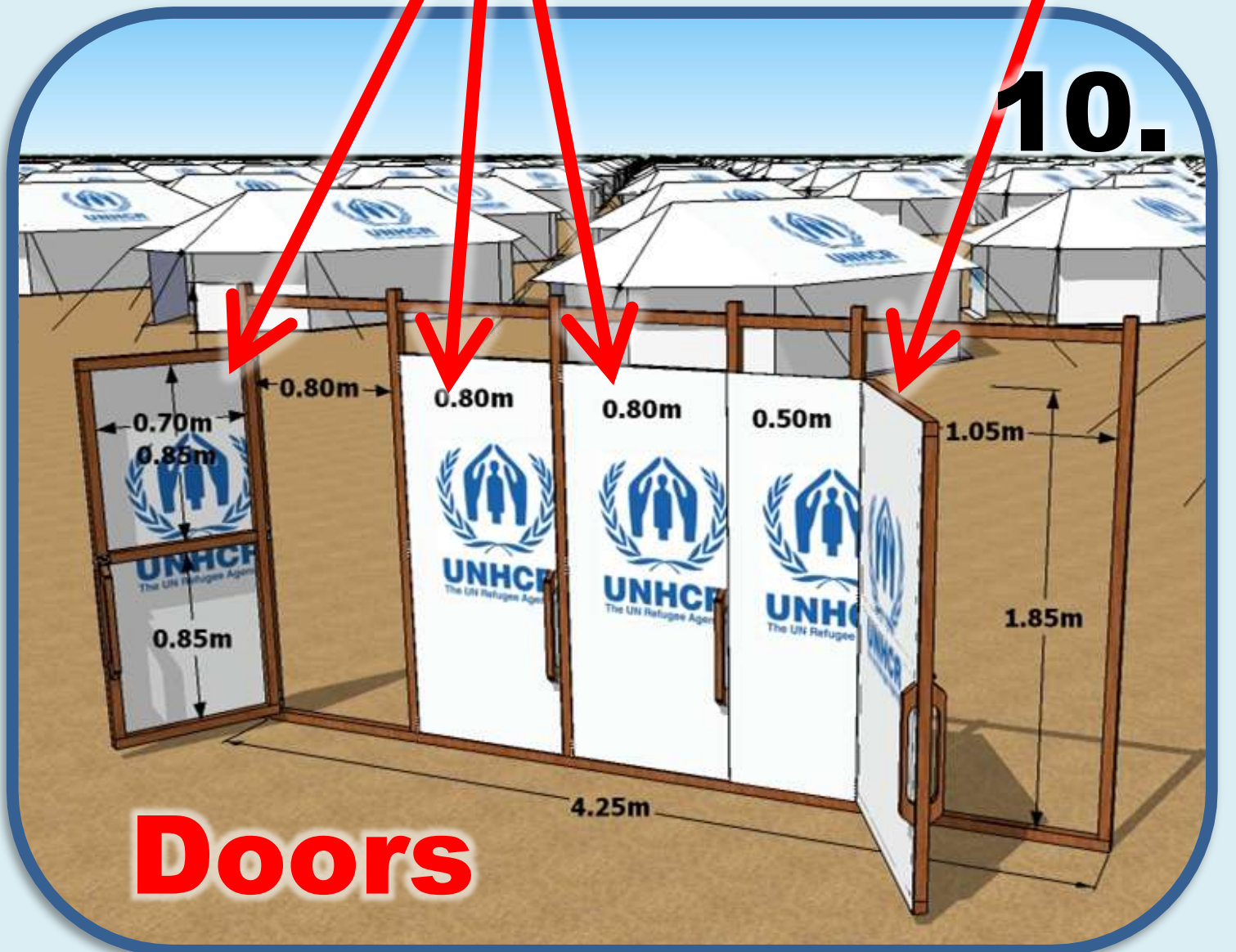
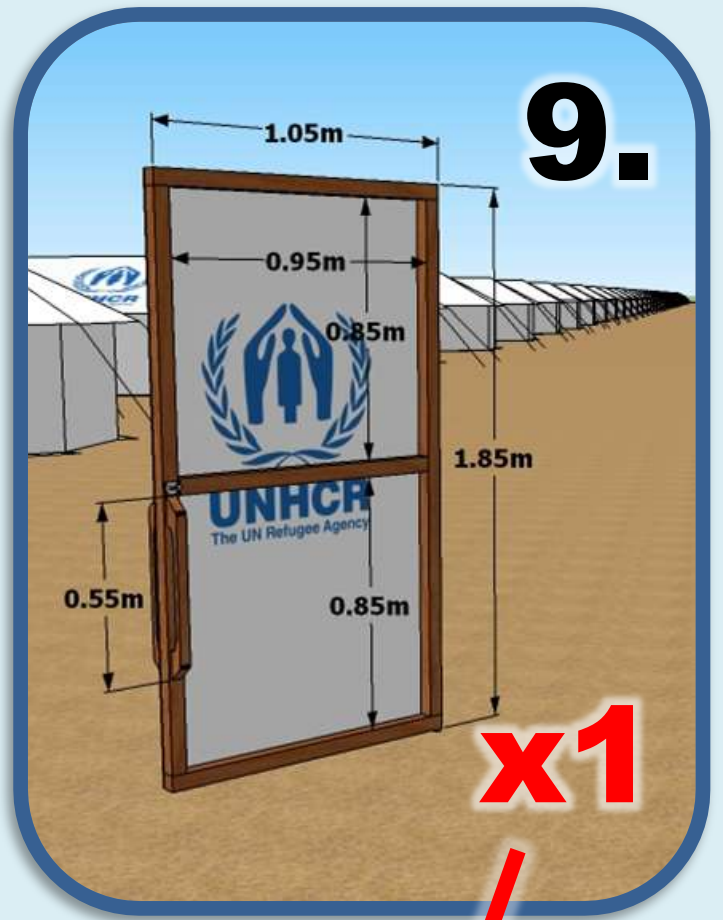
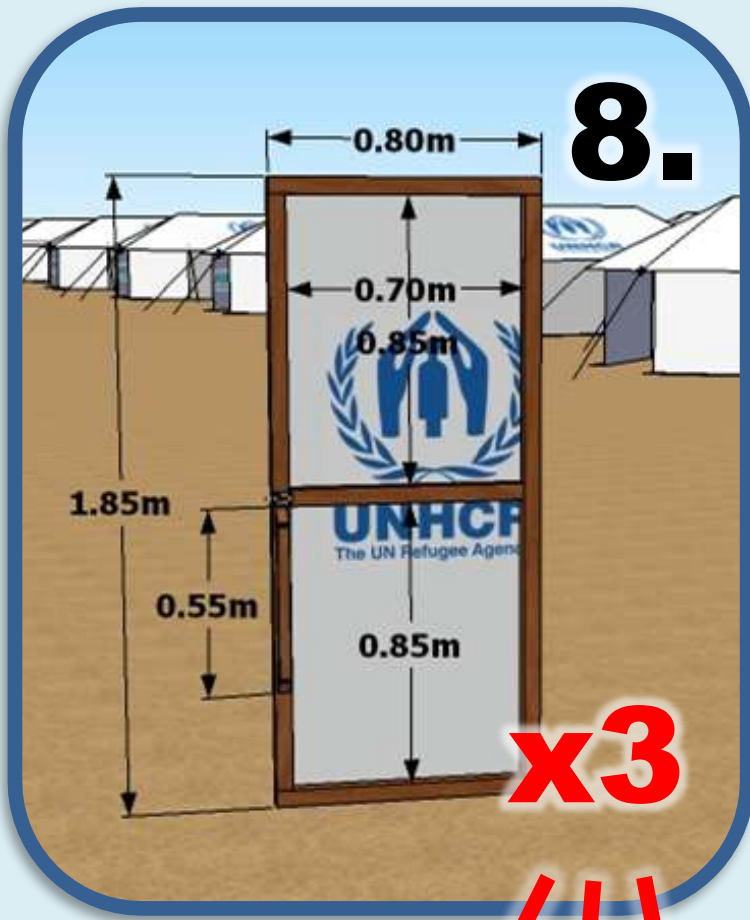


Identical side panels used in blocks with 1,2,3,and 4 cubicles.
Panels can be stockpiled with emergency contingency supplies.

7.



Front



10.

Child friendly door bolt
4cm long

Child friendly door handle
55 cm long
both sides

Child friendly door handle
55cm long
both sides

11.

Every hinge hole to be filled with a screw of at least 4cm. Nails must not be used!

Every door to have 3 heavy duty steel hinges at least 75mm long.

Assembly

12.

Panels to be **BOLTED** together for ease of storage, assembly, disassembly, moving and reuse in new locations

13.

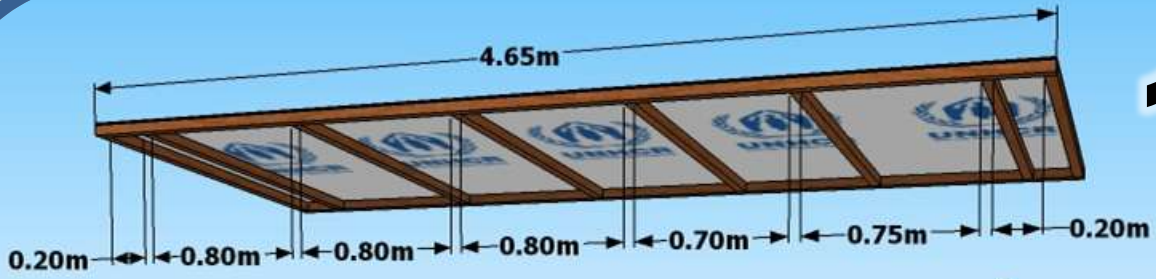
Grab rails
55cm length
fitted on all
sides 55cm
from front of
cubicle

Grab Rails x13

14.

Assembly

15.



Roof

16.



Assembly

Security

19.



- Night time illumination to at least 100 lumens per m²
- All female communal facilities to include a privacy wall
- All doors securely lockable with child-friendly mechanism

- All plastic sheeting to be upgraded within 6 months
- Upgrade walls, doors, slabs, vent-pipes

20.



Upgrades

Bill of Quantities

1. *Wooden Post (pc)*
5cm x 5cm x 4m



x39

2. *Wooden Plank (pc)*
2.5cm x 20cm x 4m



x7

3. *Nails 10cm (kg)*



x4

4. *Nails 5cm (kg)*



x3

5. *Latrine Slab (pc)*
80cm x 120cm



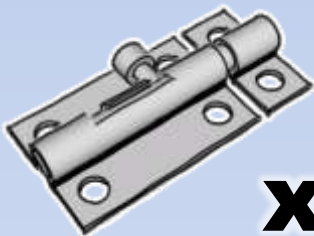
x5

6. *Plastic Sheeting*
50m x 4m (roll)



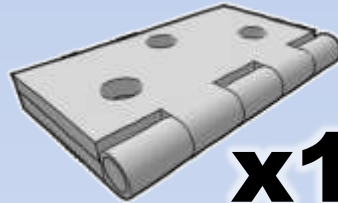
x1/4

7. *Door Bolt 4cm (pc)*



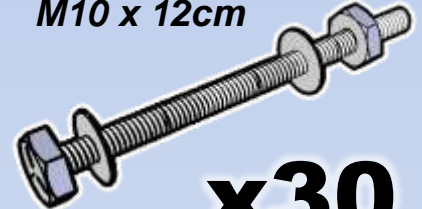
x4

8. *Door Hinge (pc)*
4cm x 8cm



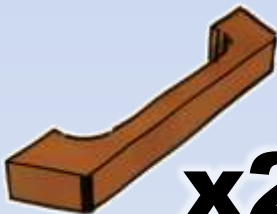
x12

9. *Metal Bolt + Washers*
M10 x 12cm



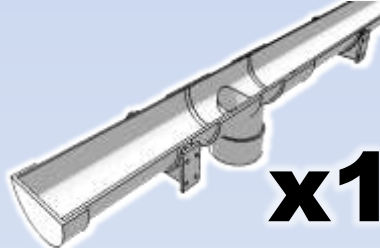
x30

10. *Grab Rails and Door*
Handles 50cm (pc)



x21

11. *Gutter Assembly*
430m + Downpipe



x1

12. *Handwashing*
Reservoir 200l (pc)



x1

13. *Sand (m3)*



x0.4

14. *Gravel (m3)*



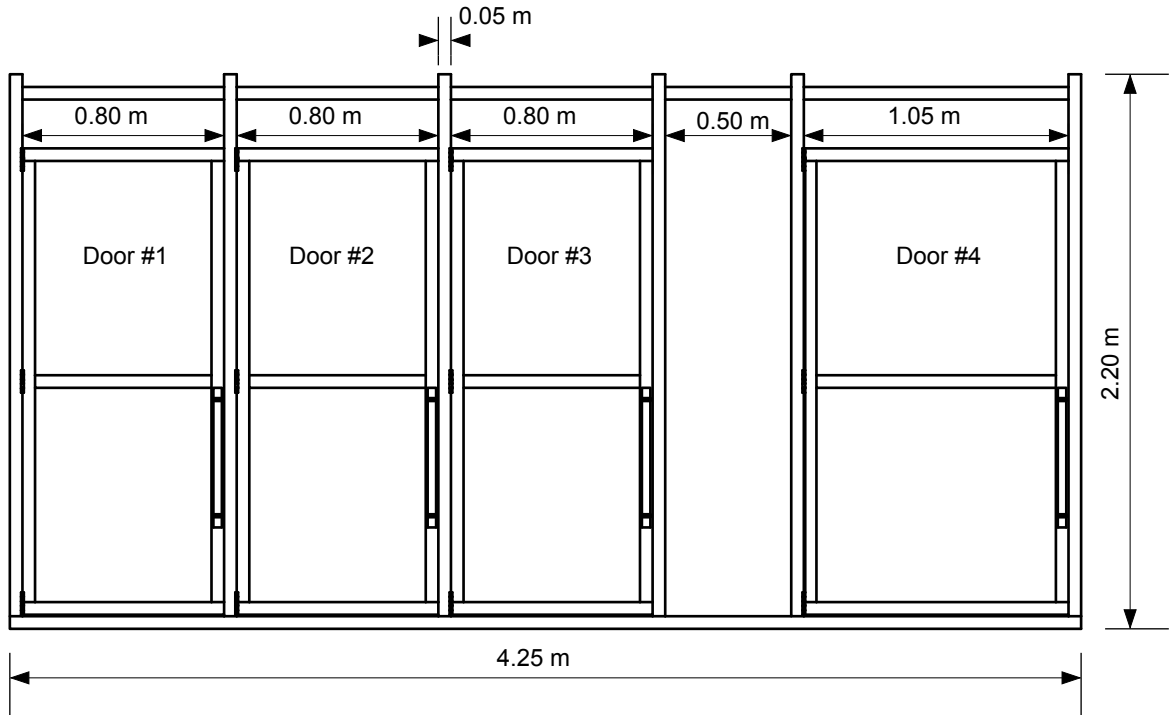
x0.8

15. *Cement 50kg (sacks)*

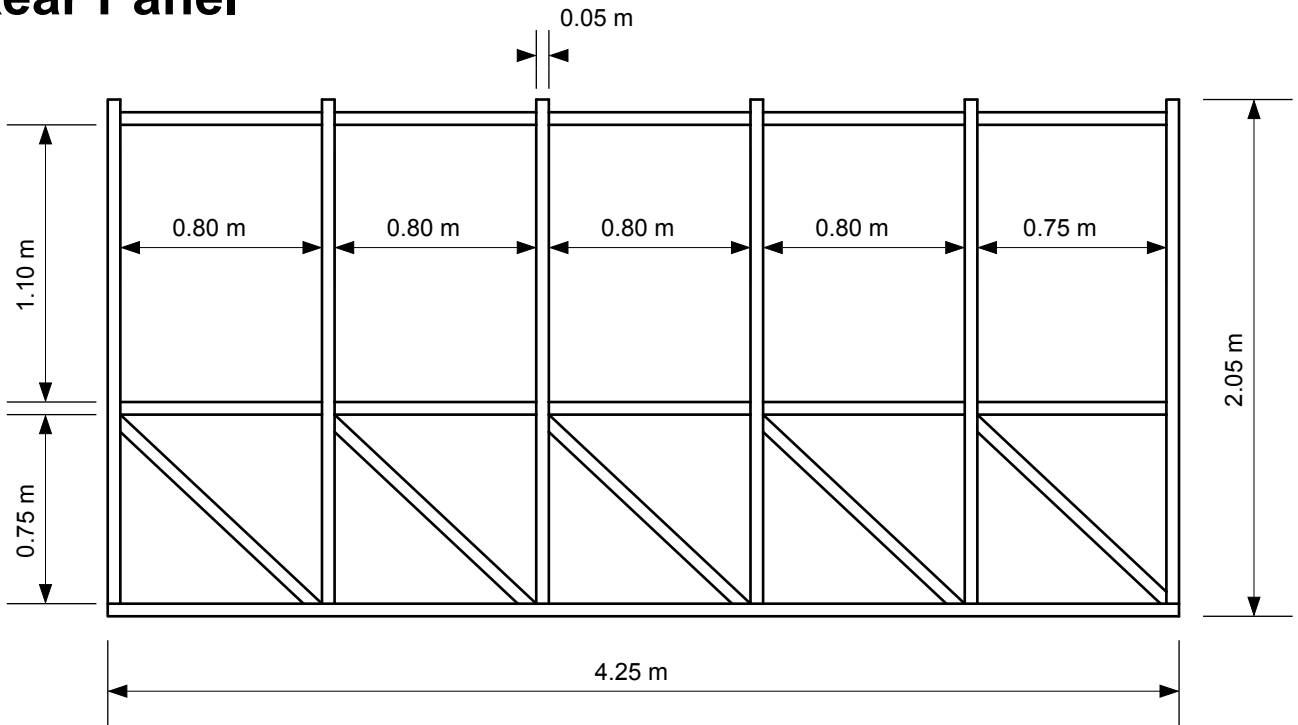


x1

Front Panel



Rear Panel



A.01

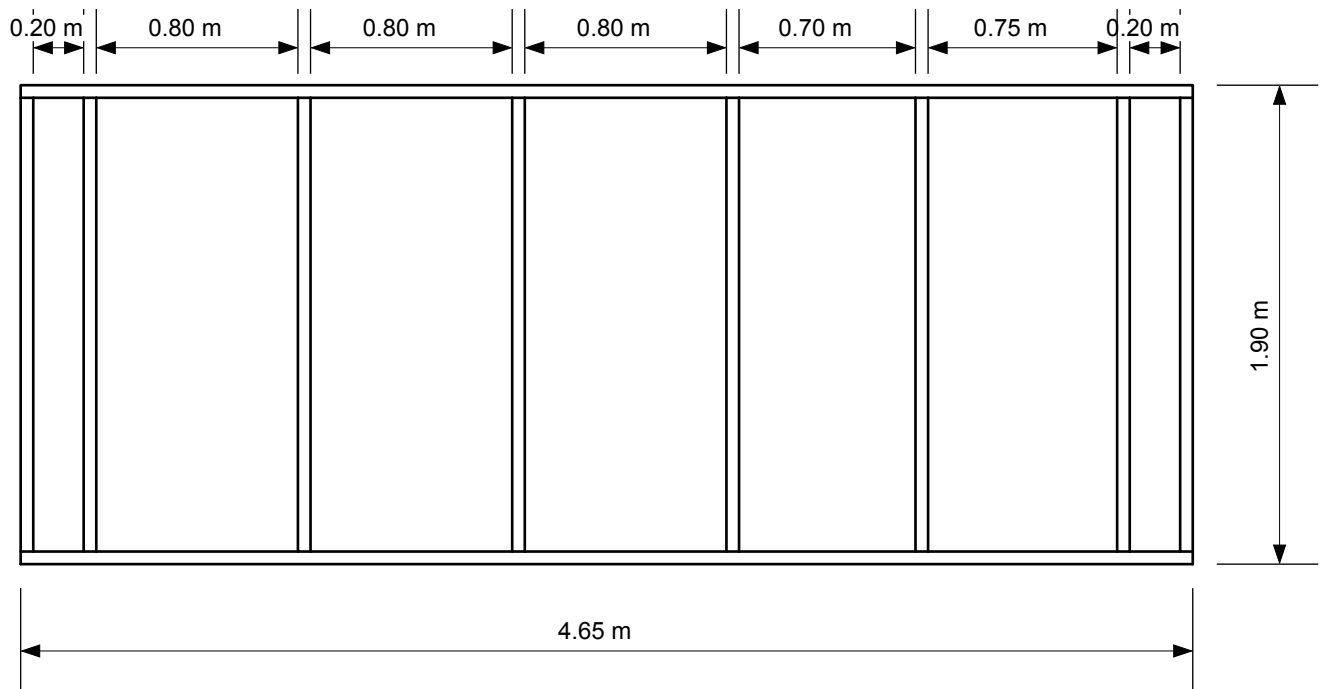
TITLE
Communal Trench Latrine
 General Layout
PROJECT
 Project Name, Country

DRAWN BY
 B. Harvey - 11/12/13
APPROVED BY
 D. Porteaud - 15/01/14
SCALE
 1:30

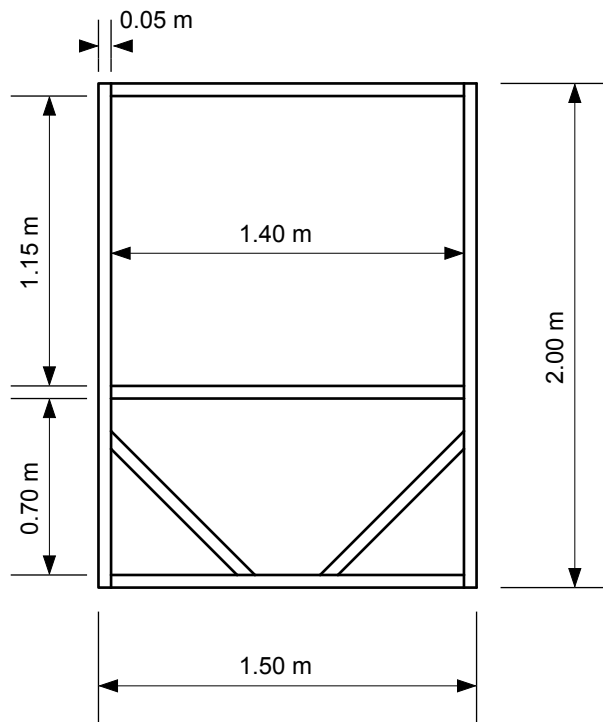
UNITS
 metres
SHEET
 1 of 5
DATE PUBLISHED
 02/02/14



Roof Panel



Side Panels



x5

A.02

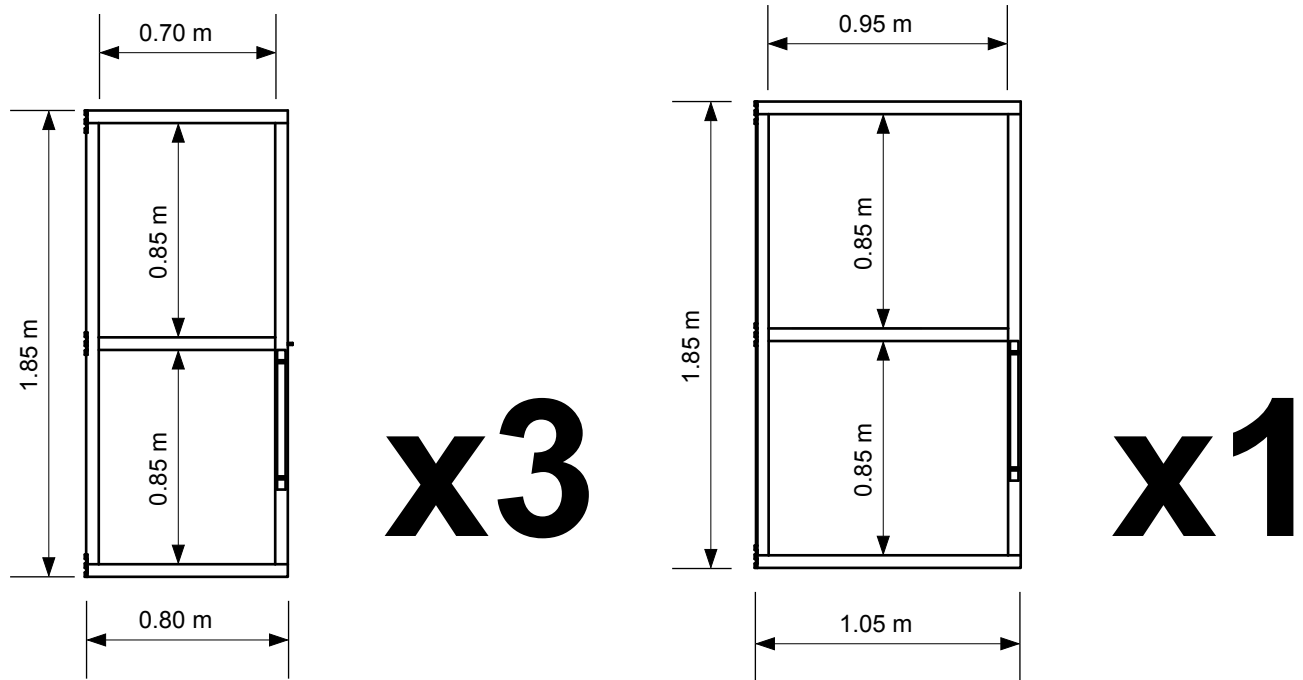
TITLE
Communal Trench Latrine
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PROJECT
 Project Name, Country

DRAWN BY
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APPROVED BY
 D. Porteaud - 15/01/14
SCALE
 1:30

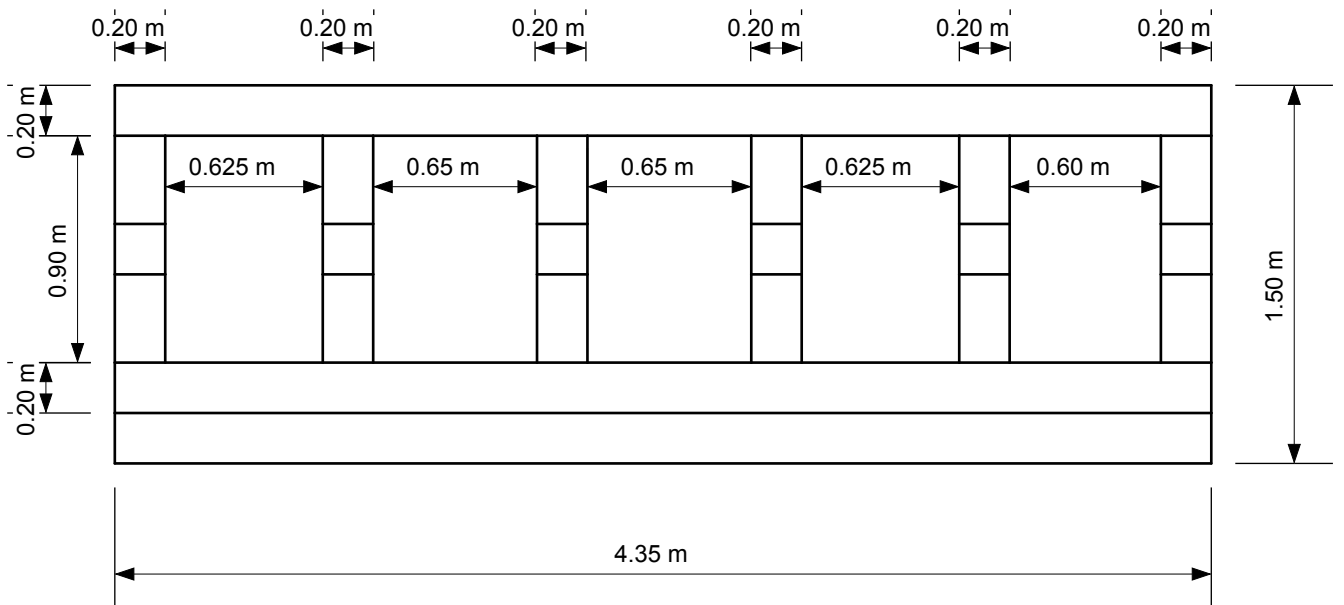
UNITS
 metres
SHEET
 2 of 4
DATE PUBLISHED
 02/02/14



Doors Detail



Latrine Slab Support Planks



A.03

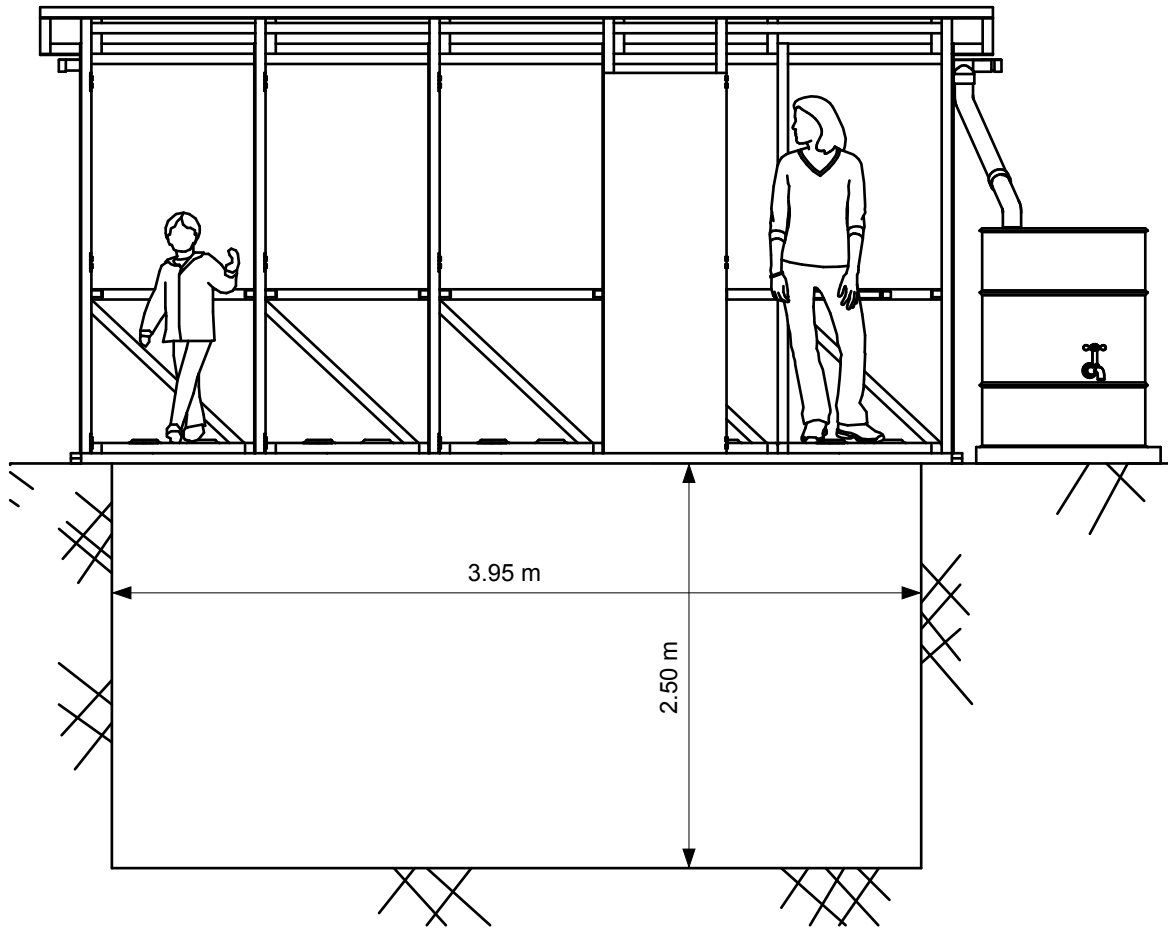
TITLE
Communal Trench Latrine
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PROJECT
 Project Name, Country

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 B. Harvey - 11/12/13
APPROVED BY
 D. Porteaud - 15/01/14
SCALE
 1:30

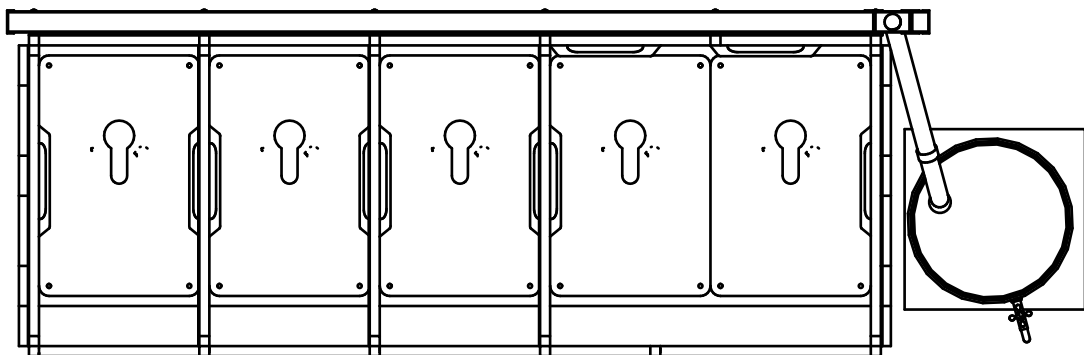
UNITS
 metres
SHEET
 3 of 5
DATE PUBLISHED
 02/02/14



Assembly Front



Plan View



A.04

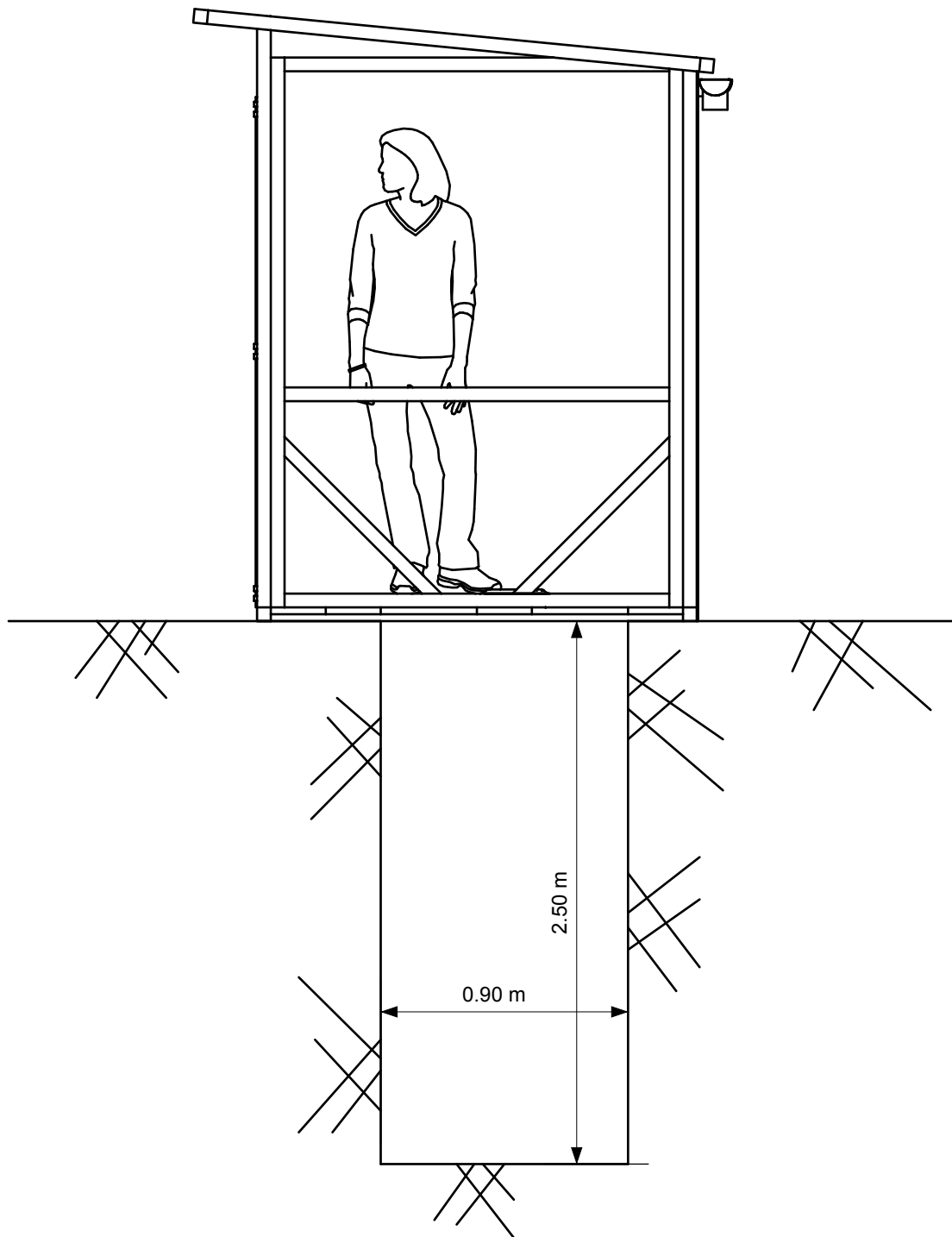
TITLE
Communal Trench Latrine
General Layout
PROJECT
Project Name, Country

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SCALE
1:30

UNITS
metres
SHEET
4 of 5
DATE PUBLISHED
02/02/14

 **UNHCR**
The UN Refugee Agency

Assembly Side



A.05

TITLE
Communal Trench Latrine
General Layout
PROJECT
Project Name, Country

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APPROVED BY
D. Porteaud - 15/01/14
SCALE
1:30

UNITS
metres
SHEET
5 of 5
DATE PUBLISHED
02/02/14



HOUSEHOLD LATRINE DIGGING PROGRAMME KIT

Description:

This kit is intended to provide tools to support a household pit latrine programme at the block level (1 block = 16 communities = 256 households = 1,250 persons).

Dimensions:

- Gross weight: 632 kg
- Volume: 2.9 m³
- Length, width, height: 367 × 76 × 74 cm
- Approximate unit cost: USD\$ 1,982

Photo:



Item:	Qty:	Specification:
1.	32	Pointed trenching shovels with handles, pressed from high steel, fitted with graded wooden shaft. Stock polished for comfort in use. Weatherproofed handle. Size no. 2. Round mouth with T-type hilt, shovel size. 28" shaft × 12 × 9.1/2" blade.
2.	32	Flat trenching spades with handles, pressed from high quality steel, fitted with 28" graded wooden shaft and PY-type hilt. Socket polished for comfort in use. Weatherproofed handle. Blade type: square mouth. Blade size: 12" × 10", size no. 2
3.	32	Pickaxes (chisel and point) with handles. 3.2 kg pick axe head. Eye size 70 × 50 mm. Will accept standard pick axe shafts. Weight 3.2 kg. Hardwood pick/mattock shaft, 900 mm, sanded and waxed. For pick axes and mattocks with eye size 78 × 54 mm.
4.	32	13.5 litre buckets (galvanised)
5.	16	Roll of site marking tape, red/white (100m)
6.	16	Contractors' rakes with handles, 12-tooth head with epoxy-coated finish. Head securely fixed to tubular steel handle. With black plastic hand grip with hang hole. Blade width 280 mm.
7.	16	Miners' bars, one end chisel, one end point, 3 cm dia., length 1.5 m
8.	16	Cold chisels, length 225 mm, blade width 75 mm
9.	16	4 lb lump hammers, forged head from fine high carbon, correctly hardened and tempered. Shaft from first-quality straight-grained hickory. Weight 1.8 kg (4 lb).
10.	16	Measuring tape, length 30 m, width 13 mm
11.	16	8 mm polypropylene rope, 30 m coils

Technical Considerations:

- If this kit is used to set up a household pit latrine programme it is recommended that it is procured in conjunction with the household concrete latrine slab mould kit.
- Pits should be as deep as possible (up to 2.5 m) but never so deep as to risk pit collapse and injury to personnel. Round pits are more stable than square or oblong pits, so round pit digging should be encouraged.
- This kit can also be used to provide tools to set up defecation zones, trench latrines, or VIP latrines in which case it is recommended that the kit is procured in conjunction with the self-supporting plastic squatting plate kit.

EXCRETA MANAGEMENT KEY INFORMANT / FOCUS GROUP PRIMER QUESTIONS

- This assessment tool has been designed to assist UNHCR field staff and their partners collect data on excreta management. The aim of the tool is to help collect background information on excreta management issues that may not be obvious from direct observation, in particular any underlying non-technical causes.
- If the questions are used during key informant interviews, try to interview a number of key different individuals (community leaders, teachers, religious leaders, medical staff, women, men and any other knowledgeable individuals) and triangulate responses.
- If the questions are used during focus groups, try to keep the group as small as possible (max 8 persons) of the same sex, age and social standing. Try to triangulate response between different focus groups.
- The list of questions is not exhaustive and is merely intended as a conversation primer.
- The questions have been designed as an aide memoire so try not to simply read the questions directly off the list. Instead use the themes as conversation starters.
- Additional questions should be formulated based on the replies received and the emergency context.
- Try to keep questions as open-ended as possible. Ask staff for their opinions. Keep asking 'why?'.
- Try to avoid overburdening respondents - concentrate on factors that pose the greatest health risk first.
- It is often better to carry out interviews after any infrastructure assessments and observation walks have been completed so the questions can be directly related to what has been observed.

UNHCR PRIMER QUESTIONS - EXCRETA MANAGEMENT IN DISPLACED SETTINGS

General background information and population numbers.

- How many displaced women, men, children and families are present?
- Have you seen the number increase as a result of the emergency or do you expect it to increase?

General perceptions of excreta management in the displaced population

- Are there any existing toilet facilities?
- If so are they used? Are they sufficient? Is there sufficient space for toilets?
- Are they being operated successfully? Can they be adapted, improved or extended?
- Do you like the design of the toilets? Is it culturally acceptable? Comfortable? Safe to use?
- What designs are the displaced population familiar with back home?
- Are people familiar with the design and construction of toilets?
- What local materials are available for constructing toilets?
- Is there any existing toilet infrastructure nearby (e.g. sewer networks or treatment facilities)?
- How many communal toilet facilities exist and how many households have their own toilets?
- If open defecation is practiced, is there a designated area?
- Are there any threats from defecation to water supplies or living areas?
- Would the community be willing to move directly to shared toilets or are communal facilities preferred?
- Is there permission from the land owner to construct toilets?
- Where in the displaced community are the biggest sanitation related hazards in the community?
- What do you feel are the solutions?

Discussion concerning protection of users at toilet facilities.

- Do users feel safe using the toilet facilities during the day? How about at night time?
- Have there been any security problems related to use of the toilet facilities?
- Is there sufficient privacy? Do the locks on the doors function adequately?
- Is there sufficient night time lighting? Would the use of night-time community patrols be beneficial?
- What do you think can be done to improve the security of toilet facility users?

Perceptions concerning water availability for toilet facilities.

- What is the practice for anal cleansing? Is water preferred?
- How much water is needed for toilet flushing, handwashing and cleaning of toilet facilities?
- How much water is available for toilet flushing, handwashing and cleaning of toilet facilities?
- What do you feel could be done to increase the availability of water?
- What are the main sources of water for toilet facilities?
- How far are these water sources? What recommendations do you have to improve the situation?

Discussion concerning geographical conditions

- What is the level of the groundwater table?
- What is the soil like? Is the ground hard and difficult to dig?
- Is there sufficient soil infiltration capacity? Is there sufficient soil bearing capacity?
- Does the soil have a high sand content? Is there a risk of pit collapse?
- When does the winter season start and end? Are temperatures below zero?
- What excreta management difficulties are encountered during the winter season?
- What solutions do you propose for the winter season?

Discussion concerning operation and maintenance.

- Are there any toilet facilities with problems (e.g. full, leaking, fly infestation, cleanliness)?
- Who is responsible for cleaning the toilets and how often are they cleaned?
- Whose responsibility is it to get the system working when it breaks down?
- Do you feel there are enough staff to operate and maintain the toilet systems?
- Do you feel they have sufficient tools, materials, and training?

Discussion concerning public health hazards from toilet facilities.

- Where along the sanitation chain do you feel are the biggest public health hazards?
- Is any part of the system leaking or open to the exterior?
- Are there any high risk activities such as excreta conveyance, handling, tankering, lagooning?
- Where is the excreta finally disposed?

Discussion concerning universal access, disabled users, and child friendly designs

- Do you think the toilet design is generally acceptable to children, the elderly, the infirm, disabled users?
- Do you have any suggestions for improving the design?

Discussion concerning handwashing.

- How is water stored for handwashing and cleaning of toilet facilities?
- Do you feel there is enough water storage? Does water ever run out?
- Are there handwashing points in every toilet block?
- Do you feel that generally there are enough handwashing points?
- Do any of the handwashing points have problems (e.g. low flowrates, blockages, lack of soap)?
- Can you suggest any ways that handwashing operation and maintenance can be improved?

Discussion concerning the management of children's faeces.

- How and where are children's faeces disposed?
- Does the population require potty, trowels or chamber pots?

Discussion concerning surface water management.

- When it rains, are there any problems with surface water intrusion around toilet facilities?
- Do you have any suggestions for improving surface water management?

Discussion concerning disease vectors.

- Do you have any problems with the presence of disease vectors in and around the toilets (such as vermin, bats, birds, mosquitoes, ants, cats, dogs)?

Use this section for any notes or recommendations

SAMPLE COMMUNITY AGREEMENT

UNHCR COMMUNITY AGREEMENT – COMMUNAL TOILET FACILITIES

- COMMUNITY AGREEMENT -

BETWEEN

COMMUNITY _____, BLOCK _____, SECTOR _____, CAMP _____

AND

 (Implementing partner of the United Nations Refugee Agency)

INTRODUCTION

The community _____ residing in block _____, and sector _____ within camp _____, hereinafter referred to as “the community” – and the non-governmental organisation implementing partner of the United Nations Refugee Agency (UNHCR) _____, hereinafter referred to as “the organisation” - have agreed on the following articles..

1. Whereas both the community and the organisation recognises the public health importance of well managed toilet facilities with accompanying hygiene promotion interventions.
2. Whereas the organisation is a non-political, non-religious and non-profit humanitarian non-governmental organisation (NGO), which endeavours to bring humanitarian assistance.
3. Whereas the organisation has previously obtained all the necessary agreements from the land owners and relevant national authorities to carry out the activities described below;

CONTRIBUTIONS AND RESPONSIBILITIES

The contribution and responsibilities of the organisation and the community are as follows:

Contributions and responsibilities of the community:

1. To hold a meeting with all members of the community to discuss the acceptability of household vs. shared vs. communal facilities in addition to any cultural design requirements.
2. If the community decides that household and shared toilets are unacceptable, the community must reach a decision on the following:
 - A) Identification for suitable locations for communal facilities that poses the minimum security risk for all users in particular women and girls.
 - B) Identification of a focal person living within 50m of the communal toilet facilities with the following responsibilities:
 - a. Cleaning of the toilet facilities with detergent and 0.2% chlorine solution (during times of risk of epidemics) at least four times a day.
 - b. Ensuring that handwashing facilities are continuously topped up with soap and water and that waste water is safely removed.
 - c. Ensuring toilet flushing or anal cleansing water is available (if required).
 - d. Undertaking small-scale minor repairs as required.
 - e. Informing the organisation at least seven (7) days in advance of the need for major repairs or desludging activities.

Contributions and responsibilities of the organisation:

1. To ensure the community is empowered to make their own decisions concerning the toilet facilities to ensure that designs are to the greatest degree possible, culturally appropriate, comfortable, transparently managed, and safe to use.

2. To provide materials for the construction of _____ household toilet cubicles, _____ shared toilet cubicles, and _____ communal toilet cubicles, fabricated from _____ materials, equipped with _____ hand washing units, and _____ accessories.
3. To provide routine maintenance and desludging services for communal toilet facilities as required.
4. To provide _____ mops, _____ buckets, _____ brushes, _____ wheelbarrows, _____ jerry cans, _____ shovels, _____ handwashing dispensers with drainage, _____ pairs of gloves, _____ backpack sprayers, _____ pairs of boots and _____ overalls to support the daily cleaning and maintenance of the communal toilet facilities.
5. To provide a monthly provision of _____ bars of soap, _____ litres of chlorine, _____ litres of detergent, and _____ rolls of toilet paper to support the daily use of the communal toilet facilities.
6. To provide a system of security lighting, door locks, and privacy screen for the communal toilet facilities and _____ padlocks for shared and household toilets.
7. To support and train a communal toilet attendant identified by the community.
8. To support the community through a programme of hygiene promotion in particular the linkages between excreta and disease.
9. To keep the community and national authorities informed about the implementation progress of the programme.

MISCELLANEOUS

1. This Community Agreement is the unique basis of collaboration between the community and the organisation. All amendments, alterations and termination need to be elaborated in writing and duly signed and agreed by both parties. The community agreement is made in the following languages _____ and _____.
2. In case a dispute related to operational or administrative issues for the activities envisaged under terms of this Community Agreement arises between the community and the organisation, the resolution of such kind of difficulties shall be negotiated through open discussion and in good faith in order to find mutually agreeable solutions before having an impact on the programme beneficiaries.

This Community Agreement is entered into effect on the following date: ____/____/____

Signed on behalf of the community...

Representative 1: _____

Representative 2: _____

Representative 3: _____

Signed on behalf of the organisation ...

Name: _____ Title: _____

The sample should be used as a guide only. It can and should be adapted to meet locally specific conditions.

SOLID WASTE KEY INFORMANT INTERVIEW PRIMER

- These key informant primer questions have been compiled as an aide memoire to help collect information related to solid waste management practices in particular:
 - i). *What key informants from the displaced population feel are the key problems related to solid waste management including their underlying causes?*
 - ii). *What key informants from the displaced population feel are the solutions?*
- In order to obtain a complete picture, interview a number of key informants (e.g. Community Leaders, Teachers, Medical Staff, and Religious Leaders) and triangulate responses.
- Note that the questions are intended merely as a conversation primer and are not exhaustive.
- Additional questions should be formulated based on the replies received and the context.
- Try not to simply read the questions directly, instead use the questions as reminders.
- There is no need to ask all questions, choose only the themes that are relevant to the context.
- Try to keep questions as open as possible. Ask the key informants for their personal opinions?
- Try not to overburden respondents - concentrate on the factors that pose the greatest risk first.

A. General Information

Name of displaced setting: _____ Population Size: _____

Key informant undertaken by: _____ Organisation: _____

Date: ___/___/_____ Email: _____ Contact Phone: _____

B. Key Informant Information

Name of key informant: _____

Title of key informant: _____

Address of key informant: _____

Email: _____ Contact Phone: _____

C. Key Informant Primer Questions

Current practice related to solid waste management

- How is solid waste currently managed?*
- Are there designated waste collection points? How frequently is waste collected?*
- Are wastes handled or transferred manually in any way during collection and disposal?*
- Where is waste taken and how is it disposed?*
- Are there any locations with uncontrolled dumping of wastes?*
- Are there any problems of festering wastes? How can this be prevented?*
- Is the waste service accessible to children, the elderly, the infirm, or disabled users?*
- What are current solid waste management related beliefs and practices? How did people manage solid waste in their place of origin?*
- Is there evidence of any open burning of wastes? How can this be prevented?*

General perceptions of solid waste management related public health risks

- What do you feel are the biggest challenges in ensuring that the community is free from waste?*
- What do you feel are the biggest hazards related to solid waste?*
- Are current waste management practices a threat to water supplies or living areas?*
- Where in the displaced setting are the biggest hazards located?*
- What do you feel are the solutions?*

Estimation of waste types and volumes

- What types and volumes of wastes are being produced each day?*
 - Paper and cardboard*
 - Plastics and rubber*
 - Metals and Glass*
 - Organic wastes*
 - Market, slaughter and animal wastes*
- What are the most optimal systems for collection, and management of each of the waste streams?*

Capacity assessment of local solid waste service providers

- Who is responsible for waste collection and disposal within the displaced or host population?*
- Can the organizations responsible for waste management cope?*
- What resources (excavators / trucks / staff) do they have?*
- Do you have any suggestions for improving the waste management services provided?*

Existing resources for waste management

- What resources are available locally for waste management (excavators / trucks / staff)?*
- Are there existing landfill sites? Who owns the site? Is there a tipping fee? Is the site operating successfully? Can they be improved, extended or adapted?*
- Is there sufficient space for a new landfill? What is the slope of the terrain? What is the level of the groundwater table? Are geological conditions suitable for landfill?*

Reduction, recycling, reuse and composting

- What activities are being undertaken to reduce, recycle or reuse solid wastes? Are there any recycling companies? Is composting of organic wastes being undertaken?*

Waste collection from public spaces

- Who is responsible for cleaning public spaces and how often are they cleaned?*
- Do you feel there are enough street cleaners considering the size of the displaced setting?*
- Do you feel the waste collection staff have the correct tools, cleaning equipment, and personal protective equipment?*

Hazardous wastes

- How are the following hazardous wastes managed? Where are these wastes created or situated?*
 - Used batteries*
 - Used engine oils*
 - Paints, solvents, and varnishes*
 - Broken electrical equipment*
 - Medical waste – sharps*
 - Medical waste – infectious*
 - Medical waste – non-sharp, non-infectious*

Market waste management

- What sorts of wastes are created in market areas?*
- Who is responsible for wastes from market areas and how often are they managed?*
- How can waste management in market places be improved?*

Medical waste management

- How are sharps, infectious waste, and non-sharp non-infectious waste managed?*
- Do you feel there are enough appropriate waste collection containers?*
- Do you feel health-care wastes are adequately separated and managed?*
- Do you have any suggestions for improving current practices?*
- How is the health-care waste transported within the facility?*
- Is health-care waste stored anywhere while it waits for treatment, collection or final disposal?*
- What do you feel could be done to improve the transport or storage of wastes?*
- Do you have any suggestions for improving how health-care waste is treated or disposed?*

Disease vector control

- Is solid waste creating problems with disease vectors (such as vermin, bats, birds, mosquitoes, flies, ants, cats, or dogs)?*
- Are landfills covered daily with at least 20cm soil cover?*
- Is solid waste creating problems of stagnant water, or, blocked ditches?*
- Do you have any suggestions how vector populations can be reduced?*

Leachate management

- Are there any problems of leachates from waste dumps or landfills contaminating local water supplies or the local environment?*
- Are groundwater supplies effectively protected from waste dumps*
- When it rains, are landfills protected from surface waters with diversion canals?*

Solid waste legislative environment

- What national or local legislation exists for waste management and environmental protection?*

SOLID WASTE ASSESSMENT TEMPLATE

UNHCR field staff and their partners must conduct a waste survey within the first three months and then at least once a year. Activities must be reevaluated and reorganised according to the findings of the survey (see Section 7.26).

A. General Information				
Name of displaced setting: _____		Population: _____		
Waste survey undertaken by: _____		Organisation: _____		
Email: _____		Contact Phone: _____		
B. Displaced setting waste creation rates			Waste survey date ___/___/___	
Waste constituent	(tons/week)	(kg/pers/week)	%	(kg/m ³)
1. Paper / cardboard				
2. Glass				
3. Metals				
4. Plastic				
5. Rubber				
6. Misc. combustible				
7. Misc. incombustible				
8. Organic matter > 50mm				
9. Organic matter 10–50mm				
10. Organic matter <10mm				
11. Lead-acid batteries				
12. Household batteries				
13. Used engine oils				
14. Paints, solvents, & varnishes				
15. Broken electrical apparatus				
16. Other toxic wastes				
17.				
18.				
TOTALS			100%	

TYPE OF WASTE:	Kgs per week _____
-----------------------	---------------------------

a) Description of current practice for this waste type

- Reduce Reuse Recycle Recover Uncontrolled dumping
 Controlled dumping Sanitary landfill Other _____
-
-
-

b) Description of medium term strategy (< 6 months)

- Reduce Reuse Recycle Recover Uncontrolled dumping
 Controlled dumping Sanitary landfill Other _____
-
-
-

c) Description of longer term strategy (> 6 months)

- Reduce Reuse Recycle Recover Uncontrolled dumping
 Controlled dumping Sanitary landfill Other _____
-
-
-

PUBLIC HEALTH AND ENVIRONMENTAL HAZARD ASSESSMENT

Summarize the waste management chain from point of creation to point of final disposal or reuse. Note the top three hazards for each step. Do not include hazards that are unlikely or that have minor or insignificant consequences.

Waste Management Chain	Current / Potential Hazards	Level	Control Measures
<div style="border: 1px solid black; width: 100%; height: 40px; margin-bottom: 10px;"></div>	1. _____ 2. _____ 3. _____	<input type="checkbox"/> High <input type="checkbox"/> Med <input type="checkbox"/> High <input type="checkbox"/> Med <input type="checkbox"/> High <input type="checkbox"/> Med	1. _____ 2. _____ 3. _____
<div style="border: 1px solid black; width: 100%; height: 40px; margin-bottom: 10px;"></div>	1. _____ 2. _____ 3. _____	<input type="checkbox"/> High <input type="checkbox"/> Med <input type="checkbox"/> High <input type="checkbox"/> Med <input type="checkbox"/> High <input type="checkbox"/> Med	1. _____ 2. _____ 3. _____
<div style="border: 1px solid black; width: 100%; height: 40px; margin-bottom: 10px;"></div>	1. _____ 2. _____ 3. _____	<input type="checkbox"/> High <input type="checkbox"/> Med <input type="checkbox"/> High <input type="checkbox"/> Med <input type="checkbox"/> High <input type="checkbox"/> Med	1. _____ 2. _____ 3. _____
<div style="border: 1px solid black; width: 100%; height: 40px; margin-bottom: 10px;"></div>	1. _____ 2. _____ 3. _____	<input type="checkbox"/> High <input type="checkbox"/> Med <input type="checkbox"/> High <input type="checkbox"/> Med <input type="checkbox"/> High <input type="checkbox"/> Med	1. _____ 2. _____ 3. _____

SOLID WASTE INFRASTRUCTURE ASSESSMENT FORMS

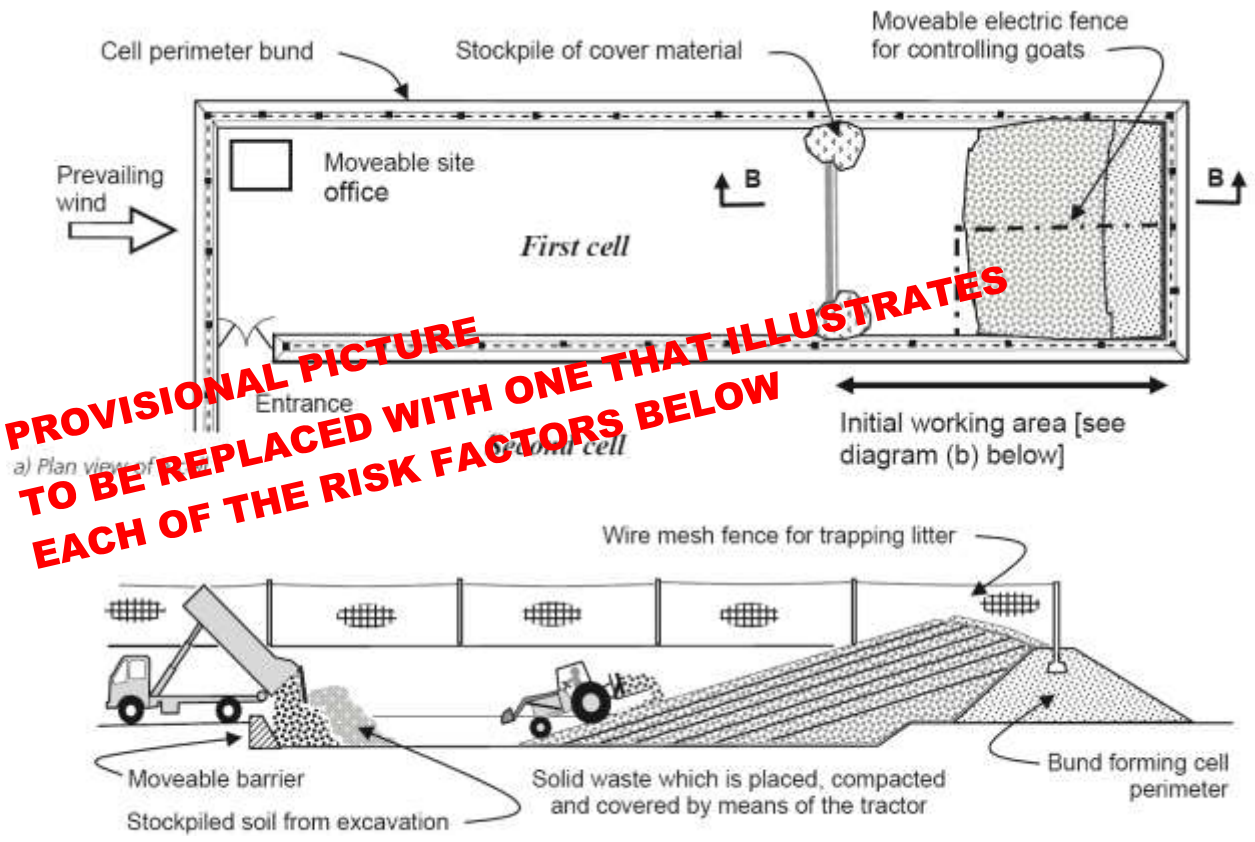
LANDFILL SANITARY SURVEY FORM

A. General Information

Location: Camp _____ Sector _____ Block _____ Community _____

GPS Long: _____° _____' _____" GPS Lat: _____° _____' _____" Number of toilet cubicles: _____

Contact person: _____ Position: _____ Date of visit: ____/____/____



PROVISIONAL PICTURE TO BE REPLACED WITH ONE THAT ILLUSTRATES EACH OF THE RISK FACTORS BELOW

B. Identification of risk factors

	Risk
1. Is there evidence of uncontrolled dumping of wastes outside of the landfill area?	Y <input type="checkbox"/> / N <input type="checkbox"/>
2. Are there any natural water bodies or drinking water supplies within 50m of the landfill?	Y <input type="checkbox"/> / N <input type="checkbox"/>
3. Are there any residential houses or shelters within 50m of the landfill?	Y <input type="checkbox"/> / N <input type="checkbox"/>
4. Is there a lack of fencing around the landfill area?	Y <input type="checkbox"/> / N <input type="checkbox"/>
5. Is there a lack of a surface water diversion canal around the landfill area?	Y <input type="checkbox"/> / N <input type="checkbox"/>
6. Is the landfill missing an impermeable rock or clay base layer preventing leaching of wastes into groundwater supplies?	Y <input type="checkbox"/> / N <input type="checkbox"/>
7. Is the landfill cell visibly cracked / broken / leaking / flooded in any way?	Y <input type="checkbox"/> / N <input type="checkbox"/>
8. Is there a lack of daily 20cm landfill soil cover to reduce disease vectors?	Y <input type="checkbox"/> / N <input type="checkbox"/>
9. Is there any evidence of fly infestation at the landfill site? (presence of one or more flies)?	Y <input type="checkbox"/> / N <input type="checkbox"/>
10. Are hazardous wastes allowed to enter the landfill (e.g. batteries, solvents, paints, varnishes, broken electrical equipment, medical wastes)?	Y <input type="checkbox"/> / N <input type="checkbox"/>
11. Is there evidence of any open burning of wastes in the displaced setting?	Y <input type="checkbox"/> / N <input type="checkbox"/>
12. Are wastes handled or transferred manually in any way during collection and disposal?	Y <input type="checkbox"/> / N <input type="checkbox"/>
13. Do waste collection staff lack basic personal protective equipment (gloves, boots, overalls)?	Y <input type="checkbox"/> / N <input type="checkbox"/>
14. Is the landfill full? (less than 0.5m remaining space in the pit)?	Y <input type="checkbox"/> / N <input type="checkbox"/>
15. Is there a lack of a functional hand-washing station and shower at the landfill site? (functional = soap + water + drainage)	Y <input type="checkbox"/> / N <input type="checkbox"/>
Total score of risks	/ 15

Signature of Inspector Community representative

Note: Risk score: 10-15 = very high, 6-9 = high, 3-5 = intermediate, 0-2 = low

SOLID WASTE ACTION PLAN

WHAT? (List of priority activities)	BY WHOM?	BY WHEN?	TOOLS / EQUIPMENT REQUIRED? (e.g. spades, wheelbarrows)	MATERIALS / CONSUMMABLES REQUIRED? (e.g. cement, pipes, soap, chlorine)	SKILLED LABOR REQUIRED? (man-days)	UNSKILLED LABOR REQUIRED? (man-days)	APPROX. COST? (USD\$)	WHO PAYS?	WHO MONITORS?
e.g. Establishment of 5 hazardous domestic waste collection points	Camp Committee	End of week	Spade, pick, wheelbarrow, hammer, spirit level, measuring tape	Metallic containers, information boards, fence posts, gates, nails, hinges, barbed wire	1 man-day	7 man-days	300 USD\$	NGO	NGO / Camp Committee
1.									
2.									
3.									
4.									
5.									
6.									
7.									
8.									
9.									
10.									



UNHCR



OXFAM
ATARIMO
NEUNE






UNHCR
UN
Agency



OXFAM
WASH
EARLY RECOVERY PROJECT
هتئن توئر حوینائی