REQUEST FOR QUOTATION (RFQ)



RFQ Reference: RFQ-BD-2021-005(Revised)

Date: 23-June-2021

SECTION 1: REQUEST FOR QUOTATION (RFQ) for Construction Works at Ukhiya and Teknaf, Cox's Bazar

UNDP kindly requests your quotation for the provision of goods, works and/or services as detailed in Annex 1 of this RFQ.

This Request for Quotation comprises the following documents:

Section 1: This request letter

Section 2: RFQ Instructions and Data

Annex 1: Schedule of Requirements

Annex 2: Quotation Submission Form

Annex 3: Technical and Financial Offer

Annex 4: Design Layout/ Drawings

Annex 5: General Terms and Conditions

Annex 6: Self Declaration

When preparing your quotation, please be guided by the RFQ Instructions and Data. Please note that quotations must be submitted using Annex 2: Quotation Submission Form and Annex 3 Technical and Financial Offer, by the method and by the date and time indicated in Section 2. It is your responsibility to ensure that your quotation is submitted on or before the deadline. Quotations received after the submission deadline, for whatever reason, will not be considered for evaluation.

<u>Deadline for the Submission of Quotation</u> 06-July-2021,4.30 pm (Bangladesh time) (Please refer to ETender indicating EST/ EDT Time is same aligning with deadline)

Thank you and we look forward to receiving your quotations.

Issued by:

Signature:

Name: Krishna Raj Adhikari

Title: Senior Operations Manager

Date: 23-June-2021



SECTION 2: RFQ INSTRUCTIONS AND DATA

DECTION 2.	RFQ INSTRUCTIONS AND DATA
Introducti on	Bidders shall adhere to all the requirements of this RFQ, including any amendments made in writing by UNDP. This RFQ is conducted in accordance with the UNDP Programme and Operations Policies and Procedures (POPP) on Contracts and Procurement
	Any Bid submitted will be regarded as an offer by the Bidder and does not constitute or imply the acceptance of the Bid by UNDP. UNDP is under no obligation to award a contract to any Bidder as a result of this RFQ.
	UNDP reserves the right to cancel the procurement process at any stage without any liability of any kind for UNDP, upon notice to the bidders or publication of cancellation notice on UNDP website.
Deadline	06 July, 2021, 4.30 PM, (Bangladesh Time)
for the Submissio n of	If any doubt exists as to the time zone in which the quotation should be submitted, refer to http://www.timeanddate.com/worldclock/ .
Quotation	For eTendering submission - as indicated in eTendering system. Note that system time zone is in EST/EDT (New York) time zone.
Method of	Quotations must be submitted as follows:
Submissio	□ E-tendering
n	☐ Dedicated Email Address
	☐ Courier / Hand delivery
	Other Click or tap here to enter text.
	Bid submission address: https://etendering.partneragencies.org
	Bid submission address: https://etendering.partneragencies.org
	Bids must be submitted in the online e-Tendering system in the following link: https://etendering.partneragencies.org ; using your username and password. If you have not registered in the system before, you can register now by logging in using
	registered in the system before, you can register now by logging in using
	Username: event.guest Password: why2change
	and follow the registration steps as specified in the system user guide.
	+ File Format: PDF files only
	★ File names must be maximum 60 characters long and must not contain any letter or special character other than from Latin alphabet/keyboard.
	→ Financial quotation – PDF and Excel Version
	→ All files must be free of viruses and not corrupted.
	→ Max. File Size per transmission: 30 MB
	 Mandatory subject of email: Construction Works – at Ukhiya and Teknaf, Cox's Bazar against RFQ-BD-2021-005(Revised)
	→ Multiple emails must be clearly identified by indicating in the subject line "email no. X of Y", and the final "email no. Y of Y.
	It is recommended that the entire Quotation be consolidated into as few attachments as possible.
	★ The bidder should receive an email acknowledging email receipt.
	[For eTendering method, click the link https://etendering.partneragencies.org and insert Event ID information]
	ঝ Insert BU Code and Event ID number: BGD10 and RFQ-21-005(Rev)

Detailed instructions on how to submit, modify or cancel a bid in the eTendering system are provided in the eTendering system Bidder User Guide and Instructional videos available on this link: http://www.undp.org/content/undp/en/home/operations/procurement/business/procurementnotice s/resources/

Pre-Bid conference will be conducted Date: June 30, 2021 ; 11:00 am Link:

https://undp.zoom.us/j/88096097823?pwd=LzBxYTU5a21VSHA5Yk9YRnB

argw2QT09, Join Zoom Meeting

Cost of preparation of quotation	UNDP shall not be responsible for any costs associated with a Supplier's preparation and submission of a quotation, regardless of the outcome or the manner of conducting the selection process.				
Supplier Code of Conduct, Fraud, Corruption,	All prospective suppliers must read the United Nations Supplier Code of Conduct and acknowledge that it provides the minimum standards expected of suppliers to the UN. The Code of Conduct, which includes principles on labour, human rights, environment and ethical conduct may be found at: https://www.un.org/Depts/ptd/about-us/un-supplier-code-conduct Moreover, UNDP strictly enforces a policy of zero tolerance on proscribed practices, including fraud, corruption, collusion, unethical or unprofessional practices, and obstruction of UNDP vendors and requires all bidders/vendors to observe the highest standard of ethics during the procurement process and contract implementation. UNDP's Anti-Fraud Policy can be found at http://www.undp.org/content/undp/en/home/operations/accountability/audit/office_of_audit_andinvestigation.html#anti				
Gifts and Hospitality	Bidders/vendors shall not offer gifts or hospitality of any kind to UNDP staff members including recreational trips to sporting or cultural events, theme parks or offers of holidays, transportation, or invitations to extravagant lunches, dinners or similar. In pursuance of this policy, UNDP: (a) Shall reject a bid if it determines that the selected bidder has engaged in any corrupt or fraudulent practices in competing for the contract in question; (b) Shall declare a vendor ineligible, either indefinitely or for a stated period, to be awarded a contract if at any time it determines that the vendor has engaged in any corrupt or fraudulent practices in competing for, or in executing a UNDP contract.				
Conflict of Interest	UNDP requires every prospective Supplier to avoid and prevent conflicts of interest, by disclosing to UNDP if you, or any of your affiliates or personnel, were involved in the preparation of the requirements, design, specifications, cost estimates, and other information used in this RFQ. Bidders shall strictly avoid conflicts with other assignments or their own interests, and act without consideration for future work. Bidders found to have a conflict of interest shall be disqualified. Bidders must disclose in their Bid their knowledge of the following: a) If the owners, part-owners, officers, directors, controlling shareholders, of the bidding entity or key personnel who are family members of UNDP staff involved in the procurement functions and/or the Government of the country or any Implementing Partner receiving goods and/or services under this RFQ. The eligibility of Bidders that are wholly or partly owned by the Government shall be subject to UNDP's further evaluation and review of various factors such as being registered, operated and managed as an independent business entity, the extent of Government ownership/share, receipt of subsidies, mandate and access to information in relation to this RFQ, among others. Conditions that				

may lead to undue advantage against other Bidders may result in the eventual rejection of the Bid.



General Conditions of Contract Special Conditions of Contract	Any Purchase Order or contract that will be issued as a result of this RFQ shall be subject to the General Conditions of Contract Select the applicable GTC: General Terms and Conditions / Special Conditions for Contract. General Terms and Conditions for de minimis contracts (services only, less than \$50,000) General Terms and Conditions for Works Applicable Terms and Conditions and other provisions are available at UNDP/How-we-buy Cancellation of PO/Contract if the delivery/completion is delayed by [Number of days as Per Liquidity Damage Clause] Others [pls. specify]
Eligibility	A vendor who will be engaged by UNDP may not be suspended, debarred, or otherwise identified as ineligible by any UN Organization or the World Bank Group or any other international Organization. Vendors are therefore required to disclose to UNDP whether they are subject to any sanction or temporary suspension imposed by these organizations. Failure to do so may result in termination of any contract or PO subsequently issued to the vendor by UNDP.
	It is the Bidder's responsibility to ensure that its employees, joint venture members, sub-contractors, service providers, suppliers and/or their employees meet the eligibility requirements as established by UNDP. Bidders must have the legal capacity to enter a binding contract with UNDP and to deliver in the country, or through an authorized representative [amend in case of other eligibility requirements].
Currency of Quotation	Quotations shall be quoted in BDT
Joint Venture, Consortium or Association	If the Bidder is a group of legal entities that will form or have formed a Joint Venture (JV), Consortium or Association for the Bid, they shall confirm in their Bid that : (i) they have designated one party to act as a lead entity, duly vested with authority to legally bind the members of the JV, Consortium or Association jointly and severally, which shall be evidenced by a duly notarized Agreement among the legal entities, and submitted with the Bid; and (ii) if they are awarded the contract, the contract shall be entered into, by and between UNDP and the designated lead entity, who shall be acting for and on behalf of all the member entities comprising the joint venture, Consortium or Association. Refer to Clauses 19 – 24 under Solicitation policy for details on the applicable provisions on Joint Ventures, Consortium or Association.
Only one Bid	The Bidder (including the Lead Entity on behalf of the individual members of any Joint Venture, Consortium or Association) shall submit only one Bid, either in its own name or, if a joint venture, Consortium or Association, as the lead entity of such Joint Venture, Consortium or Association. Bids submitted by two (2) or more Bidders shall all be rejected if they are found to have any of the following: a) they have at least one controlling partner, director or shareholder in common; or b) any one of them receive or have received any direct or indirect subsidy from the other/s; or b) they have the same legal representative for purposes of this RFQ; or c) they have a relationship with each other, directly or through common third parties, that puts them in a position to have access to information about, or influence on the Bid of, another Bidder regarding this RFQ process; d) they are subcontractors to each other's Bid, or a subcontractor to one Bid also submits another Bid under its name as lead Bidder; or e) some key personnel proposed to be in the team of one Bidder participates in more than one Bid received for this RFQ process. This condition relating to the personnel, does not apply to subcontractors being included in more than one Bid.



Duties and	Article II, Section 7, of the Convention on the Privileges and Immunities provides, inter alia, that							
taxes	the the							
	United Nations, including UNDP as a subsidiary organ of the General Assembly of the United							
	Nations, is exempt from all direct taxes, except charges for public utility services, and is exempt							
	from customs restrictions, duties, and charges of a similar nature in respect of articles imported or							
	<u>exported for its official use</u> . All quotations shall be submitted net of any direct taxes and any other							
	taxes and duties, unless otherwise specified below:							
	All prices must:							
	□ be exclusive of VAT and other applicable indirect taxes							
	[Vendor has to mention the VAT & Other applicable taxes percentage separately with the offer].							
_								
Language of	English							
quotation	Including documentation including catalogues, instructions and operating manuals.							
Documents	Bidders shall include the following documents in their quotation:							
to be	☑ Annex 2: Quotation Submission Form duly completed and signed							
submitted	☑ Annex 3: Technical and Financial Offer duly completed and signed and in accordance with the Schedule of Requirements in Annex 1. [This form is mandatory]							
	☑ Company Profile not more than 15 pages							
	☑ Updated Registration certificate BIN, VAT & TIN copy.							
	☑ Copy of at least 3 Purchase Order/Work Order of delivering similar kind of construction works along with completion certificate with contact details of clients. Client's contact details who may be contacted for further information on those contracts/PO. UNDP Reserves the right to conduct reference checks with previous clients.							
	☑ Experience of working with UN agencies/INGO/NGO/Corporate house/Govt.							
	☑ Minimum average annual turnover of USD 20,000.00 within last 3 years over a period of 2017-2020.							

Quotation validity period	Quotations shall remain valid for 90 days from the deadline for the Submission of Quotation.
Lquidated Damages	☑ Will be imposed under the following conditions: Liquidated damages for delay caused by the Vendor shall be 0.05% of the price of the Contract per each working day of delay after contract end date but not exceeding 10% of the total value of the contract. After which UNDP may terminate the Contract.
Price variation	No price variation due to escalation, inflation, fluctuation in exchange rates, or any other market factors shall be accepted at any time during the validity of the quotation after the quotation has been received.
Partial Quotes	☑Not permitted☐ Permitted
Alternative Quotes	Not permitted □ Permitted If permitted, an alternative quote may be submitted only if a conforming quote to the RFQ requirements is submitted. Where the conditions for its acceptance are met, or justifications are clearly established, Click or tap here to enter text. reserves the right to award a contract based on an alternative quote. If multiple/alternative quotes are being submitted, they must be clearly marked as "Main Quote" and "Alternative Quote"



Payment Terms	☑Other As per below schedule						
	Payment milestones	Indicative timelines (Tentative)					
	1st instalment of the total contract amount will be paid upon submission of work plan & work schedule. all project visit layout complete and materials caring on the working area and start work.						
	2nd instalment of the total contract amount will be paid upon completion of 50 % work as a running bill (will be determined by the value of work done). 30-September2021						
	3 rd instalment of the total contract value will be paid upon completion of 100 % works by the acceptance and Certification of the and UNDP Contract administrator / Engineer.	20%	14-Oct-2021				
	4 th instalment of the total contract value will be paid upon getting performance report. [Final payment after the last one-month observation and final report to Engineer.]						
Conditions for Release of Payment	 ☑ Passing Inspection [specify method, if possible] Complet ☐ Passing all Testing [specify standard, if possible] ☐ Completion of Training on Operation and Maintenance training, if possible 						
	☑ Written Acceptance of Goods, Services and Works, base☑ Payment will be released upon clearance from the requAdministrator						
Contact Person for corresponde nce, notifications and clarifications	E-mail address: bd.procurement@undp.org Attention: Quotations shall not be submitted to this address but to the e-tendering platform as indicated above. Otherwise, offer shall be disqualified. Any delay in UNDP's response shall be not used as a reason for extending the deadline for submission, unless UNDP determines that such an extension is necessary and communicates a new deadline to the Proposers.						
Clarifications	Requests for clarification from bidders will not be accepte Responses to request for clarification will be communicat or tap to enter a date.		=				
Evaluation method	☑The Contract or Purchase Order will be awarded to the	Lowest complaint I	pidder for total job.				
Evaluation criteria	 ☑ Full compliance with all requirements as specified in Annex 1 ☑ Full acceptance of the General Conditions of Contract ☐ Comprehensiveness of after-sales services ☐ Earliest Delivery /shortest lead time ☑ Others Click or tap here to enter text. 						

Right not to	UNDP is not bound to accept any quotation, nor award a contract or Purchase Order
accept any	
quotation	

Right to vary requirement at time of award	At the time of award of Contract or Purchase Order, UNDP Cox;s Bazar Crisis Response Office reserves the right to vary (increase or decrease) the quantity of services and/or goods, by up to a maximum twenty-five per cent (25%) of the total offer, without any change in the unit price or other terms and conditions.
Type of Contract to be awarded	 ☑ Purchase Order ☐ Contract Face Sheet (Goods and-or Services) (this template is also utilised for Long-Term Agreement) and if an LTA will be signed, specify the document that will trigger the call-off. E.g., PO, etc.) ☑ Contract for Works ☐ Other Type/s of Contract [pls. specify]
Expected date for contract award.	01 August, 2021
Publication of Contract Award	UNDP will publish the contract awards valued at USD 100,000 and more on the websites of the CO and the corporate UNDP Web site.
Policies and procedures	This RFQ is conducted in accordance with <u>UNDP Programme and Operations Policies and Procedures</u>
UNGM registration	Any Contract resulting from this RFQ exercise will be subject to the supplier being registered at the appropriate level on the United Nations Global Marketplace (UNGM) website at www.ungm.org . The Bidder may still submit a quotation even if not registered with the UNGM, however, if the Bidder is selected for Contract award, the Bidder must register on the UNGM prior to contract signature.

Annexes to the RFQ:

Annex 1: Schedule of Requirements

Annex 2: Quotation Submission Form

Annex 3: Technical and Financial Offer

Annex 4: Design Layout/ Drawings

Annex 5: UNDP General Terms & Conditions

Annex 6: Self Declaration



ANNEX 1: SCHEDULE OF REQUIREMENTS

[FOR SERVICES OR WORKS: Insert here the Terms of Reference or Statement of Works and include the appropriate version of Annex 3]

Top Sheet- Please below all Details

Sl No	Work Item	Project Location, Teknaf Thana, Baharchora Union,	Remark
1	Public	Shamlapur Bazar Ward No. 1, Public toilet.	
2	Toilet Deep Tube	Deep Tube well and Twin pit toilet are required in the hill area on the East side	
	well and Twin pit toilet	of Shamlapur 2No ward	
3	Twin pit toilet	Twin pit-toilet - Jame Mosque North Shil Khali Kunar, 3 No Ward	
4	Twin pit toilet	Twin Pit toilet- Baitul Jame Mosque and Madrasa in Uttar Hazam Para.4 No Ward.	
<u> </u>		Hnihla Union	
5	Brick Flat soling	CMB Main Road to Sufia Government Primary School Brick Flat Soling ROAD,5 No Ward.	1 Job
6	Brick Flat soling	Brick Flat soling Rangikhali Lamar Para Main Road,7 No Ward	
<u> </u>	Joing	Whaykhang Union	
7	Boundary	Kharanga-Ghona Jamalul Quran Madrasa Boundary Wall,2 No Ward	
0	Wall	Construction of Durane, West Heil Cons Miels house to Martin Jelille show in	
8	Dranage Work	Construction of Dranage Work Haji Gura Mia's house to Maulvi Jalil's shop in Kutubdia Para,3 No Ward	
9	Brick Flat soling	Kanjarpara Union Parishad to Ghona Para Brick Flat Soling Road,5 No Ward.	
	somg	Project Location, Ukhiya Thana, Haldiya Palong Union	
10	Earthen road	Earthen road with box culvert from Mariccha High School to Bashir Ahmed's	
10	with box	house .1no ward	
11	culvert Brick Flat	Gorachan Matbar Para to Advocate Anil Barua's house road Brick flat soling. 9	
11	soling	No ward	
	Ŭ	Project Location: Ukhiya Thana, Palongkhali Union,	
12	Box culvert	Construction of Box culvert East Balukhali fornt side of Manik's shop,1 No Ward.	
13	Brick Flat	North Rahmat bill Brick Flat soling road Abdul Gafur's shop to Rashida	
	soling	Begum's house.3 No Ward.	
14	Brick Flat soling	Construction of Brick Flat Soling road by Darut Tahajib Mosque from Maulvi Abdus Sattar Mosque to Arakan Road.4 No Ward	
15	Brick Flat soling	Brick Flat Soling Road from Pandit Para Amin Hossain's house to Manik's house,5 No Ward.	
16	Box culvert	Construction a new Box culvert in front of Shariat's house from Peer Ali's shop,6 No Ward.	
17	Brick Flat soling	Brick Flat soling Maulvi Abdur Rahman house to Late Abdur Halim House	
		Project Name: Rajapalong Union, Ukhiya Thana	
18	Boundary Wall	Rezurkul Gov Primary School Boundary Wall,1 No Ward.	
19	Deep Tube well	Installation of Deep Tube well at Golzar Begum Primary School in Siler Chhora. 6 No Ward.	
20	Boundary Wall,	Doil Para Gov Primary School Boundary Wall, 7 No Ward.	

ANNEX 1: SCHEDULE OF REQUIREMENTS

[FOR SERVICES OR WORKS: Insert here the Terms of Reference or Statement of Works and include the appropriate version of Annex 3]

ANNEX-1

Technical Specification

Baharchora Union, Teknaf Thana,

Location: Shamlapur Bazar Ward No. 1, public Toilet.

Item Code	Specification	Unit	Quanti ty	Product photo (Refere nce Purpose	Brand	R e m a r k	Technica l Complia nce (Yes/ No)	Details of your offer					
5.02.02	Sand (FM 0.50) filling drainage with 150mm/75 mm layers I/c levelling, watering, and consoling each layer up to finished level etc. all complete as per direction of the E/C. 2x4.5'x4x.75=27	cft	27	Ref: Annex- 4: Design									
5.03.05.02	Mass concrete (1:2:4) in foundation or floor with cement, sand (F.M. 1.2) and picked jhama chips including breaking chips, screening, mixing, laying, compacting to levels and including the supply of water, electricity and other charges and costs of tools and plants etc. all complete 2x4.5'x4'x.25'=9	cft	9	Layout, Plan ,Section, 01-01	Plan ,Section,								
5.04.10	5" Brick Wall 125 mm brick works with first class bricks in cement sand (F.M. 1.2) mortar (1:4) and making bond with connected walls including necessary scaffolding, raking out joints, (31.5'x8=252)-(2x2.5'x7'=35)=217	sft	221		Brick Size 9.5"x4.5"x2.75"								
5.04.02	10" Brick Wall 250mm Brick work with 1st class brick cement mortar (1:4) in foundation wall and plinth with Portland Composite cement (CEM ii/AM,42.5N) and best quality sand (minimum FM 1.2), filling the interstices tightly with mortar raking out joints, cleaning and soaking brick at least for 24 hour before use, washing of sand curing for requisite period etc. All complete as per direction of the ENGINEER IN CHARGE	cement mortar (1:4) in foundation wall and plinth with Portland Composite cement (CEM ii/AM,42.5N) and best quality sand (minimum FM 1.2), filling the interstices tightly with mortar raking out joints, cleaning and soaking brick at least for 24 hour before use, washing of sand curing for requisite period etc. All complete as per direction of the	cft 22.04	cft	mortar (1:4) in foundation wall and plinth with Composite cement (CEM ii/AM,42.5N) and best sand (minimum FM 1.2), filling the interstices tightly ortar raking out joints, cleaning and soaking brick at r 24 hour before use, washing of sand curing for e period etc. All complete as per direction of the								
5.05.03	RCC WORKS: 1:2:4 (measured on gross concrete section) (fc = 19 MPa, minimum fcr = 24 MPa in nominal mix 1:2:4), with brick-chips (Sand of F.M. 1.2 and F.M. 2.2 in equal proportion) RCC Casting Roof slab, T-beam, L-beam and rectangular beam, tie beam, lintel, stair cases lab and step etc. up to ground floor 11'x7.25'x.33'=26.31	cft	26.32		Cement Supercrete/Bashun dhara /Crown or Equivalent								

			_	_		
5.06.01.02	RB 400 / 400W: Ribbed or Deformed bar produced and marked as per BDS ISO 6935-2:2006 with minimum yield stress, fy (ReH) = 400 MPa, but the actual yield strength based on mill tests does not exceed fy by more than the 125 MPa, the ratio of actual ultimate strength, fu (Re) to actual tensile yield strength (fy) shall be at least 1.25 and minimum elongation after fracture (A5.65) & minimumtotal elongation at maximum force (Agt) is 14% and 2.5% respectively.	kg	75		KSRM/ AKS/BSRM or Equivalent	
5.12.01	Plaster with Net Cement Finishing. Minimum 12 mm thick cement sand (F.M. 1.2) plaster with neat cement finishing to plinth wall (1:4) with cement up to 150 mm below ground level with neat cement finishing including washing of sand, finishing the edges and corners and curing at least for 7 days, cost of water, electricity and other charges etc. all complete in all respect as per drawing and accepted by the Engineer. Wall and ceiling=673.5	sft	721			
	Supplying, fitting and fixing Ventilator (Size: 300mm x 300mm),	Each	4		RFL/N-POLY or Equivalent	
	Supplying, fitting and fixing PVC cowl (50mm dia),	Each	1		RFL,N-POLY or Equivalent	
	Supplying, fitting and fixing of GI hand rail for disable people (25mm dia)	Each	2		Any Equivalent	
	Supplying, fitting and fixing of soap case.	Each	2		RFL,N-POLY or Equivalent	
7.08.04.03	Supplying, fitting and fixing of PVC Tee (100mmx100mmx50mm dia)	Each	2		RFL,N-POLY all All Equivalent	
7.01.02.01	Supplying, fitting and fixing Bangladesh pattern "BISF STANDARD"Long Pan (Model-320E, size 540mmx 425mmx 270mm, Bowl size3900mmx 210mm x190mm or equivalent) with foot rest of vitreous China and preparing the base of pan with cement concrete (1:2:4) and wire net or rods including making holes wherever required and mending good the damages, etc. all complete as per direction of the EI-C	Each	2		Stella, RAK, Charu or Equivalent	
	100 mm dia uPVC ,, 90 Degree Bend	Each	2		RFL,N-POLY or Equivalent	
7.08.04.02	100 mm dia uPVC "P" or "S" trap	Each	2		RFL,N-POLY or Equivalent	
10.33.02	100mm dia PVC Pipe-C class	rft	15		RFL,N-POLY or Equivalent	
10.11.02	50mm dia PVC Pipe-C class	rft	15		RFL,N-POLY or Equivalent	
	Steel door shutter with 18 BWG MS plain plat hinged with 38mm x 38mm x 5mm angel and 25mm x 6mm flat bar stiffener etc. and Synthetic Enamel Painting to door shutter with all complete as per direction of the E/C.(As per Design)	each	2			

1	I -	Steel door shutter (6'x2'-6")	1	l I	I	İ	1	1
	5.06.02.01	Colour wash with yellow orchard/any other colour pigment by two coats over a prime coat of white wash, lime mixture prepared at least 12 hours before use, slacking stone lime, supplying of gums, blue, stirring thoroughly, removing the floating materials from the mixer, surface cleaning to free from all foreign materials before application of each coat, applying one vertical and one horizontal wash for each coat and successive coat is to be applied after drying up of previous coat including hair brass, providing necessary scaffolding and cleaning plinth, floors, doors, windows,	sft	721.75	A	ERGER Romana sian or quivalent Paint		
		portions and ventilators by washing, rubbing, oiling if necessary after white wash for all floors including cost of water, electricity and other charges etc. complete in all respect in all floors and accepted by the Engineer-in-charge. Wall + ceiling+ Carnish=680						
	7.11.04.05	Construction of Septic Tank with brick masonry works in main and partition walls in cement mortar (1:6) as per standard drawing enumerated in Appendix-6 (Typical septic tank design) over a single layer brick flat soling and 150mm thick cement concrete flooring (1:2:4), in/c 20mm thick cement plaster (1:4) to inside of walls with neat cement finishing, 25mm thick patent stone (1:2:4) flooring with neat cement finishing including supplying fitting and fixing of two RCC Tees and providing 450mm dia water sealed heavy type C.I. M.H. cover with necessary locking arrangements, 100mm thick RCC (1:2:4) top slab & 125mm thick RCC (1:2:4) wall around inside of the main wall of septic tank with minimum 1% reinforcement including centering, shuttering, fabricating, casting, curing etc. complete up to required depth. The item is inclusive of necessary earth work in excavation and shoring, bailing out water and side filling including the cost of all materials, operations and incidental charges etc. All complete as per the approved plan and direction of the EI-C. Asper Drawing Construction of septic tank. For 20 users	Each	For 20 users				
	7.11.02.01	Construction and placing of R.C.C inspection pit cover (slab) with supplying and provisions for placing, fitting, fixing 450 mm dia C.I. man-hole cover with locking/unlocking arrangement including concrete (1:2:4) with approx. 1% reenforcement,necessary earth cutting, or cleaning, side filling, curing etc. with minimum 12 mm cement plaster (1:4) and neat cement finishing on edges and top all complete and accepted by the Engineer- in- charge. 900 mm x 900 mm x 75 mm R.C.C. pit cover	Each	1				

ANNEX-1 Technical Specification Baharchora Union ,Taknaf Thana

Installation of Deep tube well and twin pit Latrine at hill area on the East side of Shamlapur 2No ward,.

Ite m Co de	Specification	Uni t	Qua ntit y	Product photo (Reference Purpose)	Brand	Re mar ks	Technic al Compli ance (Yes/ No)	Detail s of your offer
10.1	Mobilization of test boring or observation well: Transportation of materials, equipment's, tools and plants and boring rig to work site. Construction of derrick and dismantling the same. Cleaning the site after completion of the work accepted by the Engineer-in-charge.	L/S	1	Ref: Annex-4: Design Layout, Plan ,Section, 02-02				
10.2	Boring by using 100 mm dia cutter and 40 mm dia heavy type G.I pipe (wall thickness 2.9 mm, outside diameter min 47.8 mm, weight 3.517 kg/m, capable to withstand 50 kg/cm2 pressure) and other equipment's capable of drilling up to a depth of 500 meter by water jet system through all sorts of soil strata providing protection of caving by supplying necessary casing pipe. Collection of soil samples at every 3 meter interval and at every change of soil strata and preserving them in a controlled environment for analysis and laboratory test. Finally, withdrawal of boring and casing pipes etc. complete and accepted by the Engineer-in-charge.	RFT	164					
10.2 .01	a) From 0.0 RFT to 164 RFT = 164 RFT		164					

10.0 2.0 2 10.0 2.0 3 10.0 2.0 4 10.0 2.0 5	b) From 164.00 rft to 328 rft = 164 RFT (Add +10.00% with Item No 10.02.01) c) From 328.00 rft to 498 rft = 170 RFT (Add +21.00% with Item No 10.02.01) d) From 498.00 rft to 656.00 rft = 158 RFT (Add +33.00% with Item No 10.02.01) e) From 656.00 rft to 820.00 rft = 164 RFT (Add +46.00% with Item No 10.02.01)		170 185 164	
10.0 3.0 1	Hand pump No.6 complete set (RFL /National Polymar Brand)(Heavy Duty, Weight 25-28 kg) all complete as per Design, Drawing, Specification and direction of the Engineer- in-charge.	Eac h	1	RFL/Nation al Polymer or equivalent) (Heavy Duty, Weight 25- 28 kg) or Equivalent
10.0 3.0 2	GI Pipe Supplying and fitting 38/40 mm dia heavy type G.I pipe conforming to standard BS-1387 & BDS-1031, having chemical composition (in%) carbon 0.17-0.25, manganese 0.95-1.20, Sulphur 0.060 max, phosphorous 0.060 max, tensile properties: minimum yield strength 188 MPa, minimum tensile strength 313 MPa and marking for a) manufacturer b) material c) wall thickness d) nominal outside dia e) intended use etc. on the body of the pipe having wall thickness 2.9 mm, weight 3.517 kg/m capable to withstand 50 kg/cm2 hydraulic pressure	rft	5	NPOLY- Hatim-RFL or Equivalent
10.0 3.0 3	uPVC Blind Pipe (Rising pipe/ Sand Trap Pipe) Supplying & lowering of uPVC pipe of dia 1.5" (D Grade-Water Class, having physical, chemical, thermal, fire resistivity properties etc. as per BSTI approved manufacturer such as RFL/Bashundhara/National Polymer or any approved brand including required Solvent Cement (Adhesive Glue) & Coarse Sand with necessary fitting and fixing.	rft	798	NPOLY- Hatim-RFL or Equivalent

10.0 3.0 4	PVC Strainer Supplying & lowering the PVC Strainer (water grade) of 38 mm dia with uniform thickness (2.5mm - 3.00mm) without any defect and fitting and fixing.	rft	20	NPOLY- Hatim-RFL or Equivalent	
	Earth cutting and Earth filling and Construction of concrete platform (6'-0"x6'0") with stair (following as per the attached design and specification) will be constructed with 19 mm downgraded brick chips (1st class), coarse sand (FM=1.2-1.5) and ordinary Portland cement in proportion of 1:2:4 including plastering (12mm thick, 1:4) & neat cement finishing (NCF) Mixed with best quality of Red Oxide Powder to the outer visible surface which laying above the Ground level with drainage provision and 07 days curing(two times each day). Brick chips	each	1	All Complete as per Drawing	
	and Sand will be netted and washed accordingly. Inside Earth will be compacted enough, all complete as per design and specification; direction of Engineer In Charge. Tube-well Platform(6'-0"x6'-0"x2'-6")				
	Drainage System Supplying of Drainage pipe (3 inch in dia, C Grade-Water Class, minimum thickness 3.50 mm to 4.10 mm, Brand: RFL/Bashundhara/National Polymer) with necessary earth cutting, earth filling and fittings such as bend, elbow, stainless steel screen etc as per attached design. Sand (3inch) will be around the drainage pipe below the ground level along with the platform. The length of drainage pipe may be vary as per field actual requirement and as per instruction of Engineer In Charge.	each	1	as per Drawing Brand: RFL/Bashu ndhara/Nati onal Polymer or Equivalent	

Twin pit Latrine

Item	Specification	Unit	Quantit	Product photo	Brand	Remar	Technical	Details
Code			у	(Reference Purpose)		ks	Complianc	of your
				_			e	offer
							(Yes/No)	

5.02.01	Earthwork in excavation of foundation trenches, including layout, by excavating earth to the lines, grades and elevation as shown in the drawing providing center lines, local bench mark pillars, fixing bamboo spikes and marking layout with chalk powder filling baskets, carrying and disposing of all excavated materials at a safe distance designated by the ENGINEER IN CHARGE in all types of soils except rocky, gravelly, slushy or organic soil, leveling, ramming, dressing and preparing the base, etc.all complete for an initial excavation depth of 2m and an initial lead not exceeding 20m, including arranging all necessary tools and equipment at work site, etc. complete as per direction of the ENGINEER IN CHARGE. Foundation+ Step+ Y-Junction+ Floor+ Twin Pit=7.308	cum	7.308	Ref: Annex-4: Design Layout, Plan ,Section, 02-02		
5.03.01.0	Single layer brick flat soling with 1st class or picked bricks, true to level, camber/super elevation and grade including carrying bricks, filling the interstices tightly with sand of minimum FM 0.80, etc. all complete as per direction of the ENGINEER IN CHARGE. Foundation+ Floor+ Under Junction=1681	sqm	1.681			
5.02.02	Sand filling in foundation trenches and inside plinth with sand (minimum FM 0.50) in 150mm layers in/c leveling, watering and consolidating each layer up to finished level etc. all complete as per direction of the ENGINEER IN CHARGE. Dry density after compaction shall not be less than 95% of MDD (STD). Foundation +Step +Y-Junction +Floor=.815	cum	.817			
5.03.04.0	Mass concrete in foundation (1:3:6) with Portland Composite Cement (CEM II/AM, 42.5N), sand (minimum FM 1.20) and 20mm down well graded 1st class/picked brick chips Foundation +Step +Y-Junction +Floor=0.151	cum	0.151			

5.05.01.0 1	RCC:1:2:4, 17MPa, Brick Chips (BC): Reinforced cement concrete works with minimum cement content relates to mix ratio (tentative 1:2:4) and maximum water cement ratio 0.45 having minimum required average strength, fcr = 24 Mpa and satisfied a specified compressive strength fc = 17 Mpa at 28 days on standard cylinders as per standard practice of Code AASHTO/ ASTM and Portland Composite Cement conforming to BDS EN 197-1: 2003 CEM-II 42.5N sand of minimum FM 1.8 and 20mm down well graded picked brick chips (LAA value and maximum water absorption not exceeding 38 and 15% respectively) conforming to ASTM C 33 or Aggregate Grading Appendix-3 LGED Schedule of Rates or any other International recognized envelop in/c breaking chips and screening through proper sieves centering shuttering in position	cum	0.383	Cement Supercre Bashund a /Crown o Equivale	nar r	
	sieves, centering, shuttering in position, making shuttering fully leak proof & shuttering with plain 16 BWG steel sheet fitted over 38mm thick wooden plank panels and Standard size Bamboo Props suitably braced, placing of reinforcement in position, mixing the aggregates with standard mixer machine with hoper, fed by standard measuring boxes, maintaining allowable slump of 50mm (without plasticizer) & 75mm to 100mm (when plasticizer use),pouring, casting, compacting by mechanical vibrator machine					
	and curing at least for 28 days, removing centering-shuttering after approved specified time period, i/c cost of additional testing charges of materials and cylinders required. Excluding the cost of reinforcement and its fabrication, welding, coupling, placing, binding etc. Additional quantity of cement and Plasticizer. Water reducing chemical admixture of complying type A under ASTM C 494 to reduce mixing water required for normal workability and to maintain low watercement (W/C) ratio (Doses of admixture to be fixed by the mix design from approved laboratory instruction by the Engineer) Additional quantity of cement to be added if required to attain the strength at the contractor's own cost) etc. all complete as per direction and approval of the Engineer in charge.					

5.06.01.0	Grade 400 (RB 400/ 400W): Ribbed or Deformed bar produced and marked as per BDS ISO 6935-2:2006 with minimum yield strength, fy (ReH) = 400 MPa, but the tested yield strength shall not exceed fy by more than the 125 MPa and the ratio of tested ultimate strength, fu (Re) to tested yield strength (fy) shall be at least 1.25 and minimum elongation after fracture (A5.65) & minimum total elongation at maximum force	kg	37.5	KSRM/AK S/BSRM or Equivalent	
	(Agt) is 14% and 2.5% respectively. (10mm and 8 mm)				
5.03.09	Providing single layer polythene sheet (0.18mm thick) weighing 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.	squ	6.659		
	Foundation +Step +Y-Junction +Floor +Roof Slab +Pit cover slab=6.659				
5.04.02	250mm B/W (1:4) Brick work with 1st class bricks in cement mortar (1:4) in foundation and plinth with Portland Composite cement (CEM II/AM, 42.5N) and best quality sand (minimum FM1.2), filling the interstices tightly with mortar, raking out joints, cleaning and soaking bricks at least for 24hours before use, washing of sand, curing for requisite period, etc. all complete as per direction of the ENGINEER IN CHARGE. Foundation +Step-1+ Step-2+ Step-3=1.451	cum	1.451		
			_		
5.04.10.0 1.1	125mm B/W (1:4) 125mm brick work with Kiln 1st class bricks/automatic machine-made first-class bricks in cement mortar (1:4) with Portland Composite cement (CEM II/AM, 42.5N) and best quality sand (minimum FM1.2) and making bond with connected walls with uniform width and depth joints, true to vertical and horizontal lines in/c necessary scaffolding, raking 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 Wall (Below Plinth level)+ Wall (Above Plinth level)	sqm	12.285		

			1	1		1	1
5.12.01	Plaster with Net Cement Finishing. Minimum 12 mm thick cement sand (F.M. 1.2) plaster with neat cement finishing to plinth wall (1:4) with cement up to 150 mm below ground level with neat cement finishing including washing of sand, finishing the edges and corners and curing at least for 7 days, cost of water, electricity and other charges etc. all complete in all respect as per drawing and accepted by the Engineer. Outer+foundation+Inside Wall+Floor+Step+Step=6.773	sqm	6.773				
5.03.07	25mm thick Damp Proof Course (DPC) with cement concrete (1:2:4) in Portland Composite Cement (CEM II/AM, 42.5N), sand (minimum FM 1.80) and 10mm down well graded 1st class/picked brick chips (LAA value not exceeding 38), in/c casting by concrete mixture machine, compacting, curing for requisite period, coal tar/bitumen painting, etc. 4x1.2mx.125m=0.6 m2	m2	0.6				
5.12.02.0	Minimum 12mm thick cement plaster (1:6) with Portland Composite cement (CEM II/AM, 42.5N) and best quality sand (minimum FM1.2) to wall both inner and outer surface, finishing the corner and edges in/c washing of sand cleaning the surface, scaffolding and curing for the requisite period etc. all complete as per direction of the ENGINEER IN CHARGE	sqm	16.079				
5.12.10	Providing drip course/nosing/throating at the edge of sunshade or cornice with cement mortar (1:2) with Portland Composite cement (CEM II/AM, 42.5N) and best quality sand (minimum FM1.2) in/c. scaffolding, curing at least for 7 days etc. all complete for all floors as per direction of the ENGINEER IN CHARGE.	М	6.5				
7.12.01.0	Manufacturing and supplying of RCC ring of 40mm wall thickness and 1m internal diameter and 0.3m of height including casting, curing for requisite period, fixing in position etc. all complete as per direction of the ENGINEER IN CHARGE. (The cost is inclusive of reinforcement and its fabrication) Size: Inner dia 1000mm & Height 300mm	nos	12				

					1	T
7.12.01.0	Construction of Y-junction pit mortar for	nos	1			
4	twin pit sanitary latrine, with					
	depth 300mm and octagonal in shape with					
	each arm of 150mm in length with 75mm					
	thick CC (1:2:4) wall and 50mm thick CC					
	(1:2:4) base and with 50mm thick RCC					
	(1:2:4) top slab having reinforcement with					
	10 BWG wire @125mm c/c both way					
	including necessary earth excavation, side					
	filling and one layer brick flat soling on a					
	75mm thick CC (1:3:6) base for making					
	invert channel (shape should be from one					
	inlet to two outlet with one CC separator)					
	including 12mm thick Cement Plaster (1:2)					
	with neat cement finishing, casting, curing,					
	reinforcement fabrication etc. all complete as					
	per drawing and direction of the ENGINEER					
	IN CHARGE. (The item is inclusive of the					
	cost of reinforcement.					
	Supply 300mm depth Y-Junction					
7.01.02.0			1		C4 - 11 -	
	upplying, fitting and fixing Bangladesh	nos	1	`	Stella,	
1	pattern				RAK,	
	"BISF STANDARD"Long Oriental Pan				haru) or	
	(Model-320, size 540mmx 425mmx 270mm,			Ec	quivalent	
	Bowlsize-390mmx 210mm x 190mm or					
	equivalent) with foot rest of					
	vitreous China and preparing the base of pan					
	with cement concrete(1:2:4) and with wire					
	net or rods including making holes wherever					
	required and mending good the damages, etc.					
	all complete as per					
	direction of the E-I-C					
5.16.02.0	Colour wash 3-coats	sqm	16.079	E	Berger	
1	Same as item no 12 (Plastering)			/.	Ashian/	
	(····· 6)			Re	omana or	
					quivalent	
10.33.02	100mm dia PVC Pipe-C class.	rm	3.50		NPOLY-	
10.33.02	100mm dia 1 v C 1 ipe-C class.	1111	0.00		atim-RFL	
				or		
					quivalent	
10.11.02	50mm dia PVC Pipe-C class	rm	2.30	N	NPOLY-	
				H	atim-RFL	
				or	•	
					quivalent	
5.08.20	Steel door shutter with 18 BWG MS plain	sqm	1.485		•	
3.00.20	plat hinged with 38mm x 38mm x 5mm	54111				
	angel and 25mm x 6mm flat bar stiffener etc.					
	anger and 25mm x omm nat oar sufferer etc.					<u> </u>

5.16.10.0 3	Synthetic Enamel Painting to door shutter	sqm	2.970	Berger /Ashian/ Romana or Equivalent		
7.08.04.0 2	100 mm dia uPVC 'P' or 'S' trap	each		NPOLYHatim- RFL Equivalent		
	Supplying, fitting and fixing Ventilator (Size: 300mm x 250mm),	each	3	NPOLY- Hatim-RFL or Equivalent		
	Supplying, fitting and fixing PVC cowel (50mm dia),	each	1	NPOLY- Hatim-RFL or Equivalent		
	Supplying, fitting and fixing of soap case.	each	1	NPOLY- Hatim-RFL or Equivalent		
	Supplying, fitting and fixing of PVC Tee. (100mmx100mmx50mm dia)	each	1	NPOLY- Hatim-RFL or Equivalent		
	Supplying, fitting and fixing of GI hand rail for disable people (25mm dia)	each	1			

ANNEX-1 Technical Specification Baharchora Union,Teknaf Thana Twin pit-toilet - Jame Mosque North Shil Khali Kunar, 3 No Ward

Code it y	Product photo (Reference Brand Purpose)	Remar	Technical Complianc	Details of your
Code	1 dipose)	KS	e (Yes/ No)	offer

5.02.01	Earthwork in excavation of foundation trenches, including layout, by excavating earth to the lines, grades and elevation as shown in the drawing providing center lines, local bench mark pillars, fixing bamboo spikes and marking layout with chalk powder filling baskets, carrying and disposing of all excavated materials at a safe distance designated by the ENGINEER IN CHARGE in all types of soils except rocky, gravelly, slushy or organic soil, leveling, ramming, dressing and preparing the base, etc.all complete for an initial excavation depth of 2m and an initial lead not exceeding 20m, including arranging all necessary tools and equipment at work site, etc. complete as per direction of the ENGINEER IN CHARGE. Foundation+ Step+ Y-Junction+ Floor+ Twin Pit=7.308	cu m	7.308	Ref: Annex-4: Design Layout, Plan ,Section, 03-03			
5.03.01.0	Single layer brick flat soling with 1st class or picked bricks, true to level, camber/super elevation and grade including carrying bricks, filling the interstices tightly with sand of minimum FM 0.80, etc. all complete as per direction of the ENGINEER IN CHARGE. Foundation+ Floor+ Under Junction=1681	sq m	1.081				
5.02.02	Sand filling in foundation trenches and inside plinth with sand (minimum FM 0.50) in 150mm layers in/c leveling, watering and consolidating each layer up to finished level etc. all complete as per direction of the ENGINEER IN CHARGE. Dry density after compaction shall not be less than 95% of MDD (STD). Foundation +Step +Y-Junction +Floor=.815	cu m	.817				
5.03.04.0 1	Mass concrete in foundation (1:3:6) with Portland Composite Cement (CEM II/AM, 42.5N), sand (minimum FM 1.20) and 20mm down well graded 1st class/picked brick chips Foundation +Step +Y-Junction +Floor=0.151	cu m	0.151				
5.05.01.0 1	RCC:1:2:4, 17MPa, Brick Chips (BC): Reinforced cement concrete works with	cu m	0.383		Cement		

minimum cement content relates to mix ra	io	Supercrete/		
(tentative 1:2:4) and maximum water ceme	nt	Bashundhar		
ratio 0.45 having minimum required avera	re l	a		
strength, f'cr = 24 Mpa and satisfied		/Crown or		
specified compressive strength $fc = 17 \text{ M}$		Equivalent		
at 28 days on standard cylinders as r		Equivalent		
standard practice of Code AASHTO/ AST				
and Portland Composite Cement conformi				
to BDS EN 197-1 : 2003 CEM-II 42.5N sa				
of minimum FM 1.8 and 20mm down w				
graded picked brick chips (LAA value a				
maximum water absorption not exceeding				
and 15% respectively) conforming to AST	VI			
C 33 or Aggregate Grading Appendix-3				
LGED Schedule of Rates or any oth				
International recognized envelop in				
breaking chips and screening through prop				
sieves, centering, shuttering in position				
making shuttering fully leak proof				
shuttering with plain 16 BWG steel sho				
fitted over 38mm thick wooden plank pane				
and Standard size Bamboo Props suitab				
braced, placing of reinforcement in position				
mixing the aggregates with standard mix	er			
machine with hoper, fed by standa	rd			
measuring boxes, maintaining allowal	le			
slump of 50mm (without plasticizer) & 75m	m			
to 100mm (when plasticizer use), pouring				
casting, compacting by mechanical vibration	or			
machine and curing at least for 28 da	s,			
removing centering-shuttering after approv				
specified time period, i/c cost of addition				
testing charges of materials and cylinde				
required. Excluding the cost of reinforcement				
and its fabrication, welding, coupling				
placing, binding etc. Additional quantity				
cement and Plasticizer. Water reduci				
chemical admixture of complying type				
under ASTM C 494 to reduce mixing wa				
required for normal workability and				
maintain low watercement (W/C) ra				
(Doses of admixture to be fixed by the n				
design from approved laboratory instructi				
by the Engineer) Additional quantity				
cement to be added if required to attain t				
strength at the contractor's own cost) etc.				
complete as per direction and approval of t	ie			
Engineer in charge.				
Roof Slab+Pit Cover=.382				
		1		

5.06.01.0	Grade 400 (RB 400/ 400W): Ribbed or Deformed bar produced and marked as per BDS ISO 6935-2:2006 with minimum yield strength, fy (ReH) = 400 MPa, but the tested yield strength shall not exceed fy by more than the 125 MPa and the ratio of tested ultimate strength, fu (Re) to tested yield strength (fy) shall be at least 1.25 and minimum elongation after fracture (A5.65) & minimum total elongation at maximum force (Agt) is 14% and 2.5% respectively. (10mm and 8 mm)	kg	37.5	KSRM/AK S/BSRM or Equivalent		
5.03.09	Providing single layer polythene sheet (0.18mm thick) weighing 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. Foundation +Step +Y-Junction +Floor +Roof Slab +Pit cover slab=6.659	squ	6.659			
5.04.02	250mm B/W (1:4) Brick work with 1st class bricks in cement mortar (1:4) in foundation and plinth with Portland Composite cement (CEM II/AM, 42.5N) and best quality sand (minimum FM1.2), filling the interstices tightly with mortar, raking out joints, cleaning and soaking bricks at least for 24hours before use, washing of sand, curing for requisite period, etc. all complete as per direction of the ENGINEER IN CHARGE. Foundation +Step-1+ Step-2+ Step-3=1.451	cu m	1.451			
5.04.10.0	125mm B/W (1:4) 125mm brick work with Kiln 1st class bricks/automatic machinemade first-class bricks in cement mortar (1:4) with Portland Composite cement (CEM II/AM, 42.5N) and best quality sand (minimum FM1.2) and making bond with connected walls with uniform width and depth joints, true to vertical and horizontal lines in/c necessary scaffolding, raking 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 Wall (Below Plinth level)+ Wall (Above Plinth level)	sq m	12.285			

5.12.01	Plaster with Net Cement Finishing. Minimum 12 mm thick cement sand (F.M. 1.2) plaster with neat cement finishing to plinth wall (1:4) with cement up to 150 mm below ground level with neat cement finishing	sq m	6.773			
	including washing of sand, finishing the edges and corners and curing at least for 7 days, cost of water, electricity and other charges etc. all complete in all respect as per drawing and accepted by the Engineer. Outer+foundation+Inside Wall+Floor+Step+Step=6.773					
5.03.07	25mm thick Damp Proof Course (DPC) with cement concrete (1:2:4) in Portland Composite Cement (CEM II/AM, 42.5N), sand (minimum FM 1.80) and 10mm down well graded 1st class/picked brick chips (LAA value not exceeding 38), in/c casting by concrete mixture machine, compacting, curing for requisite period, coal tar/bitumen painting, etc. 4x1.2mx.125m=0.6 m2	m2	0.6			
5.12.02.0	Minimum 12mm thick cement plaster (1:6) with Portland Composite cement (CEM II/AM, 42.5N) and best quality sand (minimum FM1.2) to wall both inner and outer surface, finishing the corner and edges in/c washing of sand cleaning the surface, scaffolding and curing for the requisite period etc. all complete as per direction of the ENGINEER IN CHARGE	sq m	16.079			
5.12.10	Providing drip course/nosing/throating at the edge of sunshade or cornice with cement mortar (1:2) with Portland Composite cement (CEM II/AM, 42.5N) and best quality sand (minimum FM1.2) in/c. scaffolding, curing at least for 7 days etc. all complete for all floors as per direction of the ENGINEER IN CHARGE.	М	6.5			
7.12.01.0	Manufacturing and supplying of RCC ring of 40mm wall thickness and I m internal diameter and 0.3m of height including casting, curing for requisite period, fixing in position etc. all complete as per direction of the ENGINEER IN CHARGE. (The cost is inclusive of reinforcement and its fabrication) Size: Inner dia 1000mm & Height 300mm	nos	12			

				٦		1	1
7.12.01.0	Construction of Y-junction pit mortar for twin pit sanitary latrine, with depth 300mm and octagonal in shape with each arm of 150mm in length with 75mm thick CC (1:2:4) wall and 50mm thick CC (1:2:4) base and with 50mm thick RCC (1:2:4) top slab having reinforcement with 10 BWG wire @125mm c/c both way including necessary earth excavation, side filling and one layer brick flat	nos	1				
7.01.02.0	soling on a 75mm thick CC (1:3:6) base for making invert channel (shape should be from one inlet to two outlet with one CC separator) including 12mm thick Cement Plaster (1:2) with neat cement finishing, casting, curing, reinforcement fabrication etc. all complete as per drawing and direction of the ENGINEER IN CHARGE. (The item is inclusive of the cost of reinforcement. Supply 300mm depth Y-Junction upplying, fitting and fixing Bangladesh	nos	1		(Stella,		
1	pattern "BISF STANDARD"Long Oriental Pan (Model-320, size 540mmx 425mmx 270mm, Bowlsize-390mmx 210mm x 190mm or equivalent) with foot rest of vitreous China and preparing the base of pan with cement concrete(1:2:4) and with wire net or rods including making holes wherever required and mending good the damages, etc. all complete as per direction of the E-I-C	nos	1		RAK, Charu) or Equivalent		
5.16.02.0	Colour wash 3-coats Same as item no 12 (Plastering)	sq m	16.079		Berger /Ashian/ Romana or Equivalent		
10.33.02	100mm dia PVC Pipe-C class.	rm	3.50		NPOLY- Hatim-RFL or Equivalent		
10.11.02	50mm dia PVC Pipe-C class	rm	2.30		NPOLY- Hatim-RFL or Equivalent		
5.08.20	Steel door shutter with 18 BWG MS plain plat hinged with 38mm x 38mm x 5mm angel and 25mm x 6mm flat bar stiffener etc.	sq m	1.485				

5.16.10.0	Synthetic Enamel Painting to door shutter	sq	2.970]	Berger		
3		m			/Ashian/		
					Romana or		
					Equivalent		
7.08.04.0	100 mm dia uPVC 'P' or 'S' trap	eac			NPOLYHatim-		
2	_	h			RFL		
					Equivalent		
	Supplying, fitting and fixing Ventilator (Size:	ea	3		NPOLY-		
	300mm x 250mm),	ch			Hatim-RFL		
					or		
					Equivalent		
	Supplying, fitting and fixing PVC cowel	ea	1		NPOLY-		
	(50mm dia),	ch			Hatim-RFL		
					or		
					Equivalent		
	Supplying, fitting and fixing of soap case.	ea	1		NPOLY-		
		ch			Hatim-RFL		
					or		
					Equivalent		
	Supplying, fitting and fixing of PVC Tee.	ea	1	1	NPOLY-		
	(100mmx100mmx50mm dia)	ch			Hatim-RFL		
					or		
					Equivalent		
				-	Î		
	Supplying, fitting and fixing of GI hand rail	ea	1				
	for disable people (25mm dia)	ch					

ANNEX-1 Technical Specification Location:Baharchora Union,Teknaf Thana Twin Pit toilet- Baitul Jame Mosque and Madrasa in Uttar Hazam Para.4 No Ward.

Item	Specification	Unit	Quantit	Product	Brand	Remar	Technical	Details
Code			у	photo		ks	Complianc	of your
				(Reference			e	offer
				Purpose)			(Yes/No)	

5.02.01	Earthwork in excavation of foundation trenches, including layout, by excavating earth to the lines, grades and elevation as shown in the drawing providing center lines, local bench mark pillars, fixing bamboo spikes and marking layout with chalk powder filling baskets, carrying and disposing of all excavated materials at a safe distance designated by the ENGINEER IN CHARGE in all types of soils except rocky, gravelly, slushy or organic soil, leveling, ramming, dressing and preparing the base, etc.all complete for an initial excavation depth of 2m and an initial lead not exceeding 20m, including arranging all necessary tools and equipment at work site, etc. complete as per direction of the ENGINEER IN CHARGE. Foundation+ Step+ Y-Junction+ Floor+ Twin Pit=7.308	cum	7.308	Same As Ref: Annex-4: Design Layout, Plan ,Section, 03-03		
5.03.01.0	Single layer brick flat soling with 1st class or picked bricks, true to level, camber/super elevation and grade including carrying bricks, filling the interstices tightly with sand of minimum FM 0.80, etc. all complete as per direction of the ENGINEER IN CHARGE. Foundation+ Floor+ Under Junction=1681	sqm	1.681			
5.02.02	Sand filling in foundation trenches and inside plinth with sand (minimum FM 0.50) in 150mm layers in/c leveling, watering and consolidating	cum	.817			
	each layer up to finished level etc. all complete as per direction of the ENGINEER IN CHARGE. Dry density after compaction shall not be less than 95% of MDD (STD). Foundation +Step +Y-Junction +Floor=.815					
5.03.04.0	Mass concrete in foundation (1:3:6) with Portland Composite Cement (CEM II/AM, 42.5N), sand (minimum FM 1.20) and 20mm down well graded 1st class/picked brick chips Foundation +Step +Y-Junction +Floor=0.151	cum	0.151			

5.05.04.0	DOC 1.4.4 17MD D 1.1 CI: (DC)		0.202	C	
5.05.01.0	RCC:1:2:4, 17MPa, Brick Chips (BC):	cum	0.383	Cement	
1	Reinforced cement concrete works with			Supercrete/	
	minimum cement content relates to mix ratio			Bashundhar	
	(tentative 1:2:4) and maximum water cement			a	
	ratio 0.45 having minimum required average			/Crown or	
	strength, f'cr = 24 Mpa and satisfied a specified			Equivalent	
	compressive strength f'c = 17 Mpa at 28 days				
	on standard cylinders as per standard practice of				
	Code AASHTO/ ASTM and Portland				
	Composite Cement conforming to BDS EN				
	197-1: 2003 CEM-II 42.5N sand of minimum				
	FM 1.8 and 20mm down well graded picked				
	brick chips (LAA value and maximum water				
	absorption not exceeding 38 and 15%				
	respectively) conforming to ASTM C 33 or				
	Aggregate Grading Appendix3 LGED				
	Schedule of Rates or any other International				
	recognized envelop in/c breaking chips and				
	screening through proper sieves, centering,				
	shuttering in position, making shuttering fully				
	leak proof & shuttering with plain 16 BWG				
	steel sheet fitted over 38mm thick wooden				
	plank panels and Standard size Bamboo Props				
	suitably braced, placing of reinforcement in				
	position, mixing the aggregates with standard				
	mixer machine with hoper, fed by standard				
	measuring boxes, maintaining allowable slump				
	of 50mm (without plasticizer) & 75mm to				
	100mm (when plasticizer use), pouring, casting,				
	compacting by mechanical vibrator machine				
	and curing at least for 28 days, removing				
	centeringshuttering after approved specified				
	time period, i/c cost of additional testing				
	charges of materials and cylinders required.				
	Excluding the cost of reinforcement and its				
	fabrication, welding, coupling, placing, binding				
	etc. Additional quantity of cement and				
	Plasticizer. Water reducing chemical admixture				
	of complying type A under ASTM C 494 to				
	reduce mixing water required for normal				
	•				
	workability and to maintain low water-cement				
	(W/C) ratio (Doses of admixture to be fixed by				
	the mix design from approved laboratory				
	instruction by the Engineer) Additional quantity				
	of cement to be added if		1		
			 	T	
	required to attain the strength at the contractor's				
	own cost) etc. all complete as per direction and				
	approval of the Engineer in charge. Roof				
	Slab+Pit Cover=.382				

			1		1
5.06.01.0	Grade 400 (RB 400/ 400W): Ribbed or	kg	37.5	KSRM/AK	
2	Deformed bar produced and marked as per BDS			S/BSRM or	
	ISO 6935-2:2006 with minimum yield strength,			Equivalent	
	fy (ReH) = 400 MPa, but the tested yield			1	
	strength shall not exceed fy by more than the				
	125 MPa and the ratio of tested ultimate				
	strength, fu (Re) to tested yield strength (fy)				
	shall be at least 1.25 and minimum elongation				
	after fracture (A5.65) & minimum total				
	elongation at maximum force (Agt) is 14% and				
	2.5% respectively. (10mm and 8 mm)				
5.03.09	Providing single layer polythene sheet (0.18mm	squ	6.659		
3.03.09	thick) weighing one kilogram per 6.5 square	squ	0.039		
	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.				
	Foundation +Step +Y-Junction +Floor +Roof				
	Slab +Pit cover slab=6.659				
5.04.02	250mm B/W (1:4) Brick work with 1st class	cum	1.451		
	bricks in cement mortar (1:4) in foundation and				
	plinth with Portland Composite cement (CEM				
	II/AM, 42.5N) and best quality sand (minimum				
	FM1.2), filling the interstices tightly with				
	mortar, raking out joints, cleaning and soaking				
	bricks at least for 24hours before use, washing				
	of sand, curing for requisite period, etc. all				
	complete as per direction of the ENGINEER IN				
	CHARGE.				
	Foundation +Step-1+ Step-2+ Step-3=1.451				
5.04.10.0	125mm B/W (1:4) 125mm brick work with	sqm	12.285		
1.1	Kiln 1st class bricks/automatic machine-made	Sqiii	12.203		
1.1	first class bricks in cement mortar (1:4) with				
	Portland Composite cement (CEM II/AM,				
	42.5N) and best quality sand (minimum FM1.2)				
	and making bond with connected walls with				
	uniform width and depth joints, true to vertical				
	and horizontal lines in/c necessary scaffolding,				
	raking 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				
	Wall (Below Plinth level)+ Wall (Above				
	Plinth level)				
	,				
5.12.01	Plaster with Net Cement Finishing. Minimum	sqm	6.773		
	12 mm thick cement sand (F.M. 1.2) plaster with				

	neat cement finishing to plinth wall (1:4) with cement up to 150 mm below ground level with neat cement finishing including washing of sand, finishing the edges and corners and curing at least for 7 days, cost of water, electricity and other charges etc. all complete in all respect as per drawing and accepted by the Engineer. Outer+foundation+Inside Wall+Floor+Step+Step=6.773					
5.03.07	25mm thick Damp Proof Course (DPC) with cement concrete (1:2:4) in Portland Composite Cement (CEM II/AM, 42.5N), sand (minimum FM 1.80) and 10mm down well graded 1st class/picked brick chips (LAA value not exceeding 38), in/c casting by concrete mixture machine, compacting, curing for requisite period, coal tar/bitumen painting, etc. 4x1.2mx.125m=0.6 m2	m2	0.6			
5.12.02.0	Minimum 12mm thick cement plaster (1:6) with Portland Composite cement (CEM II/AM, 42.5N) and best quality sand (minimum FM1.2) to wall both inner and outer surface, finishing the corner and edges in/c washing of sand cleaning the surface, scaffolding and curing for the requisite period etc. all complete as per direction of the ENGINEER IN CHARGE	sqm	16.079			
5.12.10	Providing drip course/nosing/throating at the edge of sunshade or comice with cement mortar (1:2) with Portland Composite cement (CEM II/AM, 42.5N) and best quality sand (minimum FM1.2) in/c. scaffolding, curing at least for 7 days etc. all complete for all floors as per direction of the ENGINEER IN CHARGE.	М	6.5			
7.12.01.0	Manufacturing and supplying of RCC ring of 40mm wall thickness and 1m internal diameter and 0.3m of height including casting, curing for requisite period, fixing in position etc. all complete as per direction of the ENGINEER IN CHARGE. (The cost is inclusive of reinforcement and its fabrication) Size: Inner dia 1000mm & Height 300mm	nos	12			

7.12.01.0	Construction of Y-junction pit mortar for twin pit sanitary latrine, with depth 300mm and octagonal in shape with each arm of 150mm in length with 75mm thick CC (1:2:4) wall and 50mm thick CC (1:2:4) base and with 50mm thick RCC (1:2:4) top slab having reinforcement with 10 BWG wire @125mm c/c both way including necessary earth excavation, side filling and one layer brick flat soling on a	nos	1			
	75mm thick CC (1:3:6) base for making invert channel (shape should be from one inlet to two outlet with one CC separator) including 12mm thick Cement Plaster (1:2) with neat cement finishing, casting, curing, reinforcement fabrication etc. all complete as per drawing and direction of the ENGINEER IN CHARGE. (The item is inclusive of the cost of reinforcement. Supply 300mm depth Y-Junction					
7.01.02.0	upplying, fitting and fixing Bangladesh pattern "BISF STANDARD"Long Oriental Pan (Model320, size 540mmx 425mmx 270mm, Bowlsize390mmx 210mm x 190mm or equivalent) with foot rest of vitreous China and preparing the base of pan with cement concrete(1:2:4) and with wire net or rods including making holes wherever required and mending good the damages, etc. all complete as per direction of the E-I-C	nos	1	(Stella, RAK, Charu) or Equivalent		
5.16.02.0	Colour wash 3-coats Same as item no 12 (Plastering)	sqm	16.079	Berger /Ashian/ Romana or Equivalent		
10.33.02	100mm dia PVC Pipe-C class.	rm	3.50	NPOLY- Hatim-RFL or Equivalent		
10.11.02	50mm dia PVC Pipe-C class	rm	2.30	NPOLY- Hatim-RFL or Equivalent		
5.08.20	Steel door shutter with 18 BWG MS plain plat hinged with 38mm x 38mm x 5mm angel and 25mm x 6mm flat bar stiffener etc.	sqm	1.485			

5.16.10.0	Synthetic Enamel Painting to door	sqm	2.970	Berger		
3	shutter	sqiii	2.0.0	/Ashian/		
3	shutter			Romana or		
				Equivalent		
7.08.04.0	100 mm dia uPVC 'P' or 'S' trap	each		NPOLYHatim-		
2				RFL		
				Equivalent		
	Supplying, fitting and fixing Ventilator (Size:	each	3	NPOLY-		
	300mm x 250mm),			Hatim-RFL		
				or		
				Equivalent		
	Supplying, fitting and fixing PVC cowel	each	1	NPOLY-		
	(50mm dia),			Hatim-RFL		
	, , , , , , , , , , , , , , , , , , , ,			or		
				Equivalent		
	Supplying, fitting and fixing of soap	each	1	NPOLY-		
	case.	Caon	1	Hatim-RFL		
	case.					
				or		
				Equivalent		
	Supplying, fitting and fixing of PVC Tee.	each	1	NPOLY-		
	(100mmx100mmx50mm dia)			Hatim-RFL		
				or		
				Equivalent		
				•		
	Supplying, fitting and fixing of GI hand rail for	each	1			
	disable people (25mm dia)					

ANNEX-1

Technical Specification Hnihla Union, Teknaf Thana

CMB Main Road to Sufia Government Primary School Brick Flat Soling ROAD,5 No Ward.

Sl	Item	Specification	Unit	Quantity	Product	Brand	Remarks	Technical	Details
	Code				photo			Compliance	of your
					(Reference			(Yes/ No)	offer
					Purpose)			` ,	

1	3.01.03.2	BC (300mm): Earth work in box cutting on road crest up to 300mm depth, maintaining proper grade, camber and alignment, super elevation on curves, removing soil to a safe distance, watering, if necessary, spreading the excavated earth on road flanks and slopes uniformly including leveling, dressing, compacting the subgrade by manual labour, etc. all complete as per direction of the ENGINEER IN CHARGE. 230'x7'=1610	sft	1610	Ref: Annex-4: Design Layout, Plan ,Section, 05-05			
2	3.02.1.1	Sand Filling 4" Box in road work. Sand (FM 0.50) filling on the road bed in the improved sub-grade with sand free from dust, earth, other vegetable growth and foreign materials including supplying all materials, spreading, watering, compacting by appropriate mechanical means to obtain a minimum Soaked CBR 8% or Design CBR at minimum	cft	531.3				
		compaction 98% of MDD (Modified), etc. all complete as per direction of the ENGINEER IN CHARGE. 230'x7'x.33'=531.3						
3	3.08.4.2	Single layer brick flat soling in road work with first class or picked jhama bricks as per alignment, camber and grade including filling joints with sand (F.M. 0.80) etc. complete including cost of all materials and accepted by the Engineer-in-charge. 230'x6.5'=1495	sft	1495		First class Brick 9.5"x4.5"x2.75"		
4	3.04.3.1	Brick on end edging (75 mm across the road) with first class or picked jhama bricks and filling the gaps with fine sand (F.M. 0.80) including cutting trenches, true to level and grade, removing earth, refilling and ramming the sides properly including cost of all materials and accepted by the Engineer-in-charge.	rft	474				

	2x237'=474				

ANNEX-1 Technical Specification Hnihla Union,Teknaf Thana Brick Flat soling Rangikhali Lamar Para Main Road,7 No Ward

Sl	Item Code	Specification	Unit	Quantity	Product photo (Reference Purpose)	Brand	Remarks	Technical Compliance (Yes/ No)	Details of your offer
1	3.01.03.2	BC (300mm): Earth work in box cutting on road crest up to 300mm depth, maintaining proper grade, camber and alignment, super elevation on curves, removing soil to a safe distance, watering, if necessary, spreading the excavated earth on road flanks and slopes uniformly including leveling, dressing, compacting the sub-grade by manual labour, etc. all complete as per direction of the ENGINEER IN CHARGE. 370'x8'=2960	sft	2960	Ref: Annex-4: Design Layout, Plan ,Section, 06-06				
2	3.02.1.1	Sand Filling 4" Box in road work. Sand (FM 0.50) filling on the road bed in the improved sub-grade with sand free from dust, earth, other vegetable growth and	cft	976.8					
		foreign materials including supplying all materials, spreading, watering, compacting by appropriate mechanical means to obtain a minimum Soaked CBR 8% or Design CBR at minimum compaction 98% of MDD (Modified), etc. all complete as per direction of the ENGINEER IN CHARGE. 370'x8'x.33'=976.8							
3	3.08.4.2	Single layer brick flat soling in road work with first class or picked jhama bricks as per alignment, camber and grade including filling joints with sand (F.M. 0.80) etc. complete including cost of all materials and accepted by the Engineer-in-charge. 370'x7.5'=2775	sft	2775					

4	3.04.3.1	Brick on end edging (75 mm across the	rft	748			
		road) with first class or picked jhama bricks					
		and filling the gaps with fine sand (F.M.					
		0.80) including cutting trenches, true to					
		level and grade, removing earth, refilling					
		and ramming the sides properly including					
		cost of all materials and accepted by the					
		Engineer-in-charge.					
		2x374'=748					

ANNEX-1 Technical Specification Whaykhang Union,Teknaf Thana. Kharanga-Ghona Jamalul Quran Madrasa Boundary Wall,2 No Ward

Sl.	Item	Specification	Unit	Quantity	Product	Brand	Remarks	Technical	Details
No	Code				photo			Compliance	of your
					(Reference			(Yes/ No)	offer
					Purpose)				

1	5.02.01	Earth work in excavation in all kinds of soil for foundation trenches including. layout, providing center lines, local bench-mark pillars, leveling, ramming and preparing the base, fixing bamboo spikes and marking layout with chalk powder, providing necessary tools and plants, protecting and maintaining the trench dry etc., stacking, cleaning the excavated earth at a safe distance out of the area enclosed by the layout etc. all complete and accepted by the Engineer, subject to submit method statement of carrying out excavation work to the Engineer for approval. However, Engineer's approval shall not relieve the contractor of his responsibilities and obligations under the contract. Earthwork in excavation in foundation trenches up to 3 feet depth and maximum 50 feet lead: in medium stiff clayey soil 6x2.5'x2.5'x2.=100	CFT	75	Ref: Annex-4: Design Layout, Plan ,Section, 07-07		
2	5.02.02	Sand (FM 0.50) filling drainage with 150mm/75 mm layers I/c levelling, watering, and consoling each layer up to finished level etc. all complete as per direction of the E/C. 6x2.5'x2.5x.25'=9.38	cft	9.38			
3	5.03.01.01	3" Brick Flat Soling One layer of brick flat soling in foundation or in floor with first class or picked jhama bricks including preparation of bed and filling the interstices with local sand, leveling etc. complete and accepted by the Engineer. 6x2.5'x2.5'=37.5	sft	37.5			

	1			1	1	1		
4	5.05.03	Brick Chips.; Reinforced cement	cft	79.78				
		concrete works using wooden						
		shutter with minimum cement						
		content relates to mix ratio						
1		Reinforced cement concrete works						
		using wooden shutter with				Supercrete/B		
		minimum cement content relates				ashundhara		
		to mix ratio 1:1.5:3 having				/Crown or		
		minimum f'cr = 26 Mpa, and				Equivalent		
		satisfying a specified compressive				Cement.		
		strength f'c = 21 Mpa at 28 days on				Coment.		
		standard cylinders as per standard						
		practice of Code ACI/BNBC/ASTM						
		& Cement conforming to BDS						
		EN197-1- CEM 1, 52.5N (52.5MPa)						
		/ ASTM-C 150 Type – I, best quality						
		Sylhet sand or coarse sand [F.M. 2.2]						
		and 20 mm down well graded picked jhama brick chips conforming to						
		ASTM C-33, including breaking						
		chips and screening, making, placing						
		shutter in position and maintaining						
		true to plumb, making shutter						
		watertight properly, placing						
		reinforcement in position; mixing in						
		standard mixer machine with hoper						
		and fed by standard measuring						
		boxes, casting in forms, compacting						
		by vibrator machine and curing at						
		least for 28 days, removing						
		centering-shuttering after specified						
		time approved; including cost of						
		water, electricity, additional testing						
		charges of materials and cylinders						
		required by engineer, other charges						
		etc. all complete approved and						
		accepted by the Engineer. (Rate is						
		excluding the cost of reinforcement						
		and its						
		fabrication, placing and binding etc)						
		Footing +Grread Beam						
		+Column=79.7888						
5	5.06.01.02	RB 400 / 400W: Ribbed or Deformed	KG	470	1	BSRM/KSR		
		bar produced and marked as per BDS				M/AKS or		
1		ISO 6935-2:2006 with minimum				Equivalent		
		yield stress, fy (ReH) = 400 MPa, but				2 qui vaient		
1		the actual yield strength based on						
1		mill tests does not exceed fy by more						
		than the 125 MPa, the ratio of actual						
		ultimate strength, fu (Re) to actual						
1		tensile yield strength (fy) shall be at						
1								
_								

					-			
		least 1.25 and minimum elongation after fracture (A5.65) & minimum						
		total elongation at maximum force (Agt) is 14% and 2.5% respectively.						
6	5.04.10	5" Brick wall 125 mm brick works with first class bricks in cement sand (F.M. 1.2) mortar (1:4) and making bond with connected walls including necessary scaffolding, raking out joints 31'x5'=155	sft	155		First class brick 9.5"x4.5'x2. 75"		
7	5.12.01	Minimum 12 mm thick cement sand (F.M. 1.2) plaster with neat cement finishing to plinth wall (1:4) with cement up to 150 mm below ground level with neat cement finishing including washing of sand, finishing the edges and corners and curing at least for 7 days, cost of water, electricity and other charges etc. all complete in all respect as per drawing and accepted by the Engineer. 2x40''x6'=480	Sft	480				

-					=			
8	5.16.02.01	PAINTING AND POLISHING	Sft	480		Berger		
		Work Colour wash with yellow				/Ashian		
		orchard/any other colour pigment by				Roman or		
		two coats over a prime coat of white				Equivalent		
		wash, lime mixture prepared at						
		least 12 hours before use, slacking						
		stone lime, supplying of gums,						
		blue, stirring thoroughly, removing						
		the floating materials from the						
		mixer, surface cleaning to free from						
		all foreign materials before						
		application of each coat, applying						
		one vertical and one horizontal wash						
		for each coat and successive coat is						
		to be applied after drying up of						
		previous coat including hair brass,						
		providing necessary scaffolding and						
		cleaning plinth, floors, doors,						
		windows, portions and ventilators						
		by washing, rubbing, oiling if						
		necessary after white wash for all						
		floors including cost of water,						
		electricity and other charges etc.						
		complete in all respect in all floors						
		and accepted by the Engineer-						
		incharge.						
		2x40''x6'=480						

ANNEX-1 Technical Specification Whaykhang Union,Teknaf Thana

Construction of Dranage Work Haji Gura Mia's house to Maulvi Jalil's shop in Kutubdia Para,3 No Ward

Sl. No	Item Code	Specification	Unit	Quantity	Product photo (Reference Purpose)	Brand	Remarks	Technical Compliance (Yes/ No)	Details of your offer
1	5.02.01	Earth work in excavation in all kinds of soil for foundation trenches including. layout, providing center lines, local bench-mark pillars, leveling, ramming and preparing the base, fixing bamboo spikes and marking layout with chalk powder, providing necessary tools and plants, protecting and maintaining the trench dry etc., stacking, cleaning the excavated earth at a safe distance out of the area enclosed by the layout etc. all complete and accepted by the Engineer, subject to submit method statement of carrying out excavation work to the Engineer for approval. However, Engineer's approval shall not relieve the contractor of his responsibilities and obligations under the contract.	CFT	596.38	Ref: Annex- 4: Design Layout, Plan ,Section, 07-07				
2	5.02.02	Sand (FM 0.50) filling dranage with 150mm/75 mm layers I/c levelling, watering, and consolading each layer up to finished level etc. all complete as per direction of the E/C. 163'x3.66'x.25'=149.15	cft	149.15					

	5000101	0 1 0111 ~	_	=0 < =0	1	ı	
3	5.03.01.01	One layer of brick flat soling in foundation or in floor with first class or picked jhama bricks including preparation of bed and filling the interstices with local sand, leveling etc. complete and accepted by the Engineer. 163'x3.66'=596.58	sft	596.58			
4	5.03.05.02	Mass concrete (1:2:4) in foundation or floor with cement, sand (F.M. 1.2) and picked jhama chips including breaking chips, screening, mixing, laying, compacting to levels and including the supply of water, electricity and other charges and costs of tools and plants etc. all complete Mass concrete in foundation (1:2:4) with brick chips and local sand of F.M. 1.2 and accepted by the Engineer. (Cement: CEM-II/A-M)	cft	149.145	Supercrete/Bashundhara /Crown or Equivalent Cement.		
5	5.04.02	10" Brick Work.250mm Brick work with 1st class brickin cement mortar (1:4) in foundation wall and plinth with Portland Composit cement (CEM ii/AM,42.5N) and best quality sand (minimum FM 1.2), filling the interstics tightly with mortar raking out joints,cleaning and soaking brick at least for 24 houre before use,washing of sand curing for requisite period,etc.all complete as per direction of the ENGINEER IN CHARGE	cft	338.225			

6	5.12.02	Plaster With Net st	ìt			
		Cement Finishing.	407.5			
		Minimum 12 mm thick				
		cement sand (F.M. 1.2)				
		plaster with neat cement				
		finishing to plinth wall				
		(1:4) with cement up to				
		150 mm below ground				
		level with neat cement				
		finishing including				
		washing of sand,				
		finishing the edges and				
		corners and curing at least				
		for 7 days, cost of water,				
		electricity and other				
		charges etc. all complete				
		in all respect as per				
		drawing and accepted by				
		the Engineer.				

ANNEX-1 Technical Specification Whaykhang Union,Teknaf Thana Kanjarpara Union Parishad to Ghona Para Brick Flat Soling Road,5 No Ward

	em ode	Specification	Unit	Quantity	Product photo (Reference Purpose)	Brand	Remarks	Technical Compliance (Yes/ No)	Details of your offer
1 3.01	.03.2	BC(300mm): Earth work in box cutting on road crest up to 300mm depth, maintaining proper grade, camber and alignment, super elevation on curves, removing soil to a safe distance, watering, if necessary, spreading the excavated earth on road flanks and slopes uniformly including leveling, dressing, compacting the sub-grade by manual labour, etc. all complete as per direction of the ENGINEER IN CHARGE. 960'x9'=8640	sft	8640	Ref: Annex-4: Design Layout, Plan ,Section, 08-08				

2	3.02.1.1	4" Sand Filling Box. Sand (FM 0.50)	cft	2851.20					
		filling on the road bed in the improved							
		sub-grade with sand free from dust,							
		earth, other vegetable growth and							
		foreign materials including supplying							
		all materials, spreading, watering,							
		compacting by appropriate mechanical							
			T		T	T	T	T	
		means to obtain a minimum Soaked							
		CBR 8% or Design CBR at minimum							
		compaction 98% of MDD (Modified),							
		etc. all complete as per direction of the ENGINEER IN CHARGE.							
		960'x9'x.33'=2851.20							
3	3.08.4.2	Single layer brick flat soling in road	sft	8160					
		work. Single layer brick flat soling in							
		road work with first class or picked							
		jhama bricks as per alignment, camber							
		and grade including filling joints with							
		sand (F.M. 0.80) etc. complete							
		including cost of all materials and							
		accepted by the Engineer-in-charge.							
		960'x8.5'=8160							
4	3.04.3.1	Brick on end edging (75 mm across the	rft	1938					
		road) with first class or picked jhama							
		bricks and filling the gaps with fine							
		sand (F.M. 0.80) including cutting							
		trenches, true to level and grade,							
		removing earth, refilling and ramming							
		the sides properly including cost of all							
		materials and accepted by the							
		Engineerin-charge.							
		2x965'=1930							

ANNEX-1 Technical Specification Haldiya Palong Union,Ukhiya Thana Earthen road With Box culvert from Mariccha High School to Bashir Ahmed's house.

Sl.	Item	Specification	Unit	Qu	Prod	Brand	Remarks	Technical	Details
No	Code			anti	uct			Compliance	of your
				ty	phot			(Yes/ No)	offer
				·	0			, , ,	
					(Refe				
					rence				
					Purp				
					ose)				

1	2.02.1.4	EFW: Earth filling work by manual labour with specified soil in any type of embankment and bridge approaches including cutting, carrying filling and compacting to	cft	3360 0	Ref: Annex -4: Design		
		carrying, filling, and compacting to 85% maximum dry density at optimum moisture content, with reference to laboratory density test AAHSTO standard hammer by throwing earth in layers not more than 150mm in each layer in proper alignment, grade, camber and side slope in all types of soil other than rocky, gravelly and slushy including clod breaking to a maximum size of 100mm, benching not more than 300mm vertical and 600mm horizontal steps along the sides while widening any embankment, etc. all complete as per direction of the EIC.Earth is to be borrowed from the road side for all lead. Payment will be made on compacted volume. (compaction will be done by the contractor/LCS worker with approved equipment, including all ancillary charges for compaction and testing).			Layou t, Plan ,Sectio n, 09-09		
		1120'x7.5'x4'=33600					
2	2.06.2	Creating turf on the side slopes and top of embankment with good quality turf not less than 225 mm square chunk, watering till the grass grown including all leads and lifts etc. complete and accepted by the Engineer. 2x1120'x4.67'=10460.8	sft	1046 0.8			

3	5.02.01	Earth work in excavation in all kinds	cft	337.			
J	2.02.01	of soil for foundation trenches		5			
		including. layout, providing center		_			
		lines, local bench-mark pillars,					
		leveling, ramming and preparing the					
		base, fixing bamboo spikes and					
		marking layout with chalk powder,					
		providing necessary tools and plants,					
		protecting and maintaining the trench					
		dry etc., stacking, cleaning the					
		excavated earth at a safe distance out					
		of the area enclosed by the layout etc.					
		all complete and accepted by the					
		Engineer, subject to submit method					
		statement of carrying out excavation					
		work to the Engineer for approval.					
		However, Engineer's approval shall					
		not relieve the contractor of his					
		responsibilities and obligations under					
		the contract.					
		10'x6.75'x5'=337.5					
4	5.02.02	Sand (FM 0.50) filling dranage with	cft	16.8			
		150mm/75 mm layers I/C levelling,		8			
		watering, and consolading each layer					
		up to finished level etc. all complete					
		as per direction of the E/C.					
		10'x6.75'x.25'=16.88					
	5.02.01.01		C	67.5			
5	5.03.01.01	One layer of brick flat soling in	sft	67.5			
		foundation or in floor with first class					
		or picked jhama bricks including					
		preparation of bed and filling the					
		interstices with local sand, leveling					
		etc. complete and accepted by the					
		Engineer.					
		10'x6.75'=67.5					
6	5.03.05.02	Mass concrete (1:2:4) in foundation or	cft	16.8			
		floor with cement, sand (F.M. 1.2)		75			
		and picked jhama chips including					
		breaking chips, screening, mixing,					
		laying, compacting to levels and					
		including the supply of water,					
		electricity and other charges and costs					
		of tools and plants etc. all complete					
		Mass concrete in foundation (1:2:4)					
		with brick chips and local sand of F.M. 1.2 and accepted by the					
		Engineer. (Cement: CEM-II/A-M)					
	_	10'x6.75'x.25'=16.875					
ļ					1		

7	5.04.02	15" Brick Work 375mm Brick work with 1st class brickin cement mortar (1:4) in foundation wall and plinth with Portland Composit cement (CEM ii/AM,42.5N) and best quality sand (minimum FM 1.2), filling the interstics tightly with mortar raking out joints,cleaning and soaking brick at least for 24 houre before use,washing of sand curing for requisite period,etc.all complete as per direction of the ENGINEER IN CHARGE 2x10'x2.17'x1.25'=54.25	cft	54.2			
8	5.04.02	10" Brick Work 250mm Brick work with 1st class brickin cement mortar (1:4) in foundation wall and plinth with Portland Composit cement (CEM ii/AM,42.5N) and best quality sand (minimum FM 1.2), filling the interstics tightly with mortar raking out joints,cleaning and soaking brick at least for 24 houre before use,washing of sand curing for requisite period,etc.all complete as per direction of the ENGINEER IN CHARGE 2x10'x2.17'x.83'=36.02	Sft	432			
9	5.12.01	Plaster with Net Cement Finishing. Minimum 12 mm thick cement sand (F.M. 1.2) plaster with neat cement finishing to plinth wall (1:4) with cement up to 1.5 m ground level with neat cement finishing including washing of sand, finishing the edges and corners and curing at least for 7 days, cost of water, electricity and other charges etc. all complete in all respect as per drawing and accepted by the Engineer. 10'x12.66'=126.6	sft	126. 6			

10	5.05.03	Reinforced cement concrete works	cft	37.9	Supercrete/Bashundhara		
10	3.03.03	using wooden shutter with minimum	CIT		_		
				89	/Crown or Equivalent		
		cement content relates to mix ratio			Cement.		
		1:1.5:3 having minimum f'cr = 26					
		Mpa, and satisfying a specified					
		compressive strength $f'c = 21$ Mpa at					
		28 days on standard cylinders as per					
		standard practice of Code					
		ACI/BNBC/ASTM & Cement					
		conforming to BDS EN-197-1- CEM					
		1, 52.5N (52.5MPa) / ASTM-C 150					
		Type – I, best quality Sylhet sand or					
		coarse sand [F.M. 2.2] and 20 mm					
		down well graded picked jhama brick					
		chips conforming to ASTM C-33,					
		including breaking chips and					
		screening, making, placing shutter in					
		position and maintaining true to					
		plumb, making shutter water-tight					
		properly, placing reinforcement in					
		position; mixing in standard mixer					
		machine with hoper and fed by					
		standard measuring boxes, casting in					
		forms, compacting by vibrator					
		machine and curing at least for 28					
		days, removing centering-shuttering					
		after specified time approved;					
		including cost of water, electricity,					
		additional testing charges of materials					
		additional testing charges of materials					
		and cylinders required by engineer,					
		other charges etc. all complete					
		approved and accepted by the					
		Engineer. (Rate is excluding the cost					
		of reinforcement and its fabrication,					
		placing and binding etc)					
		F88)					
		10'x5.67'x.67'=37.989					
11	5.06.01.02	RB 400 / 400W: Ribbed or Deformed	kg	95=	KSRM/AKS/BSRM or		
		bar produced and marked as per BDS	-		Equivalent		
		ISO 6935-2:2006 with minimum			1		
		yield stress, fy (ReH) = 400 MPa, but					
		the actual yield strength based on mill					
		tests does not exceed fy by more than					
		the 125 MPa, the ratio of actual					
		ultimate strength, fu (Re) to actual					
		tensile yield strength (fy) shall be at					
		least 1.25 and minimum elongation					
		after fracture (A5.65) & minimum					
		total elongation at maximum force					
		ě					
		(Agt) is 14% and 2.5% respectively.					

ANNEX-1 Technical Specification

Haldiya Palong Union, Ukhiya Thana Gorachan Matbar Para to Advocate Anil Barua's house road Brick flat soling,9 No Ward.

Sl. No	Item Code	Specification	Unit	Quantity	Product photo (Reference Purpose)	Brand	Remarks	Technical Compliance (Yes/ No)	Details of your offer
1	3.01.03.2	BC (300mm): Earth work in box cutting on road crest up to 300mm depth, maintaining proper grade, camber and alignment, super elevation on curves, removing soil to a safe distance, watering, if necessary, spreading the excavated earth on road flanks and slopes uniformly including leveling, dressing, compacting the subgrade by manual labour, etc. all complete as per direction of the ENGINEER IN CHARGE.	sft	7200	Ref: Annex-4: Design Layout, Plan ,Section, 110-10				
2	3.02.1.1	Sand (FM 0.50) filling on the road bed in the improved sub-grade with sand free from dust, earth, other vegetable growth and foreign materials including supplying all materials, spreading, watering, compacting by appropriate mechanical means to obtain a minimum Soaked CBR 8% or Design CBR at minimum compaction 98% of MDD (Modified), etc. all complete as per direction of the ENGINEER IN CHARGE. 900'x8'x.33'=2376	cft	2376					
3	3.08.4.2	Single layer brick flat soling in road work with first class or picked jhama bricks as per alignment, camber and grade including filling joints with sand (F.M. 0.80) etc. complete including cost of all materials and accepted by the Engineer-in-charge. 900'x7.5'=6750	sft	6750					

4	3.04.3.1	Brick on end edging (75 mm across	rft	1816			
		the road) with first class or picked					
		jhama bricks and filling the gaps					
		with fine sand (F.M. 0.80) including					
		cutting trenches, true to level and					
		grade, removing earth, refilling and					
		ramming the sides properly					
		including cost of all materials and					
		accepted by the Engineer-in-charge.					
		2x908'=1816					

ANNEX-1 Technical Specification Palongkhali Union, Ukhiya Thana Construction of Box culvert East Balukhali fornt side of Manik's shop,1 No Ward.

Sl. No	Item Code	Specification	Uni t	Quanti ty	Product photo (Referen ce Purpose)	Brand	Remarks	Technical Compliance (Yes/ No)	Details of your offer
	5.02.01	Earth work in excavation in all kinds of soil for foundation trenches including. layout, providing center lines, local bench-mark pillars, leveling, ramming and preparing the base, fixing bamboo spikes and marking layout with chalk powder, providing necessary tools and plants, protecting and maintaining the trench dry etc., stacking, cleaning the excavated earth at a safe distance out of the area enclosed by the layout etc. all complete and accepted by the Engineer, subject to submit method statement of carrying out excavation work to the Engineer for approval. However, Engineer's approval shall not relieve the contractor of his responsibilities and obligations under the contract. 15'x6.75'x2'=202.5	cft	202.5	Ref: Annex-4: Design Layout, Plan ,Section, 12-12				

3	5.02.02	Sand (FM 0.50) filling drainage with 150mm/75 mm layers I/c levelling, watering, and consoling each layer up to finished level etc. all complete as per direction of the E/C. 15'x6.75'x.25'=25.31 One layer of brick flat soling in foundation or in floor with first class or picked jhama bricks	cft	25.31			
		including preparation of bed and filling the interstices with local sand, leveling etc. complete and accepted by the Engineer. 15'x6.75'=101.25					
4	5.03.05.02	Mass concrete (1:2:4) in foundation or floor with cement, sand (F.M. 1.2) and picked jhama chips including breaking chips, screening, mixing, laying, compacting to levels and including the supply of water, electricity and other charges and costs of tools and plants etc. all complete Mass concrete in foundation (1:2:4) with brick chips and local sand of F.M. 1.2 and accepted by the Engineer. (Cement: CEMII/A-M) 15'x6.75'x.25'=25.315	cft	25.315			
5	5.04.02	15" Brick Work 375mm Brick work with 1st class bricking cement mortar (1:4) in foundation wall and plinth with Portland Composite cement (CEM ii/AM,42.5N) and best quality sand (minimum FM 1.2), filling the interstices tightly with mortar raking out joints, cleaning and soaking brick at least for 24 hour before use, washing of sand curing for requisite period,etc.all complete as per direction of the ENGINEER IN CHARGE 2x15'x1.5'x1.25'=56.25	cft	56.25	BSRM/KSRM/AKS or Equivalent		
6	5.04.02	10" Brick Work 250mm Brick work with 1st class bricking cement mortar (1:4) in foundation wall and plinth with Portland Composite cement (CEM	cft	49.8			

8	5.05.03	Reinforced cement concrete works using wooden shutter with	cft	49.32	Supercrete/Bashundhara /Crown or Equivalent		
		minimum cement content relates			Cement.		
		to mix ratio 1:1.5:3 having			Cement.		
		minimum f'cr = 26 Mpa, and					
		satisfying a specified compressive					
		strength f'c = 21 Mpa at 28 days					
		on standard cylinders as per					
		standard practice of Code					
		ACI/BNBC/ASTM & Cement					
		conforming to BDS EN-197-1-					
		CEM 1, 52.5N (52.5MPa) /					
		ASTM-C 150 Type – I, best					
		quality Sylhet sand or coarse sand					
		[F.M. 2.2] and 20 mm down well					
		graded picked jhama brick chips					
		conforming to ASTM C-33,					
		including breaking chips and					
		screening, making, placing shutter					
		in position and maintaining true to					
		plumb, making shutter water-tight					
		properly, placing reinforcement in position; mixing in standard mixer					
		machine with hoper and fed by					
		standard measuring boxes, casting					
		in forms, compacting by vibrator					
		machine and curing at least for 28					
		days, removing centering-					
		shuttering after specified time					
		approved; including cost of water,					
		electricity, additional testing					
		charges of materials and cylinders					
		required by engineer, other					
		charges etc. all complete approved					
		and accepted by the Engineer.					
		(Rate is excluding the cost of					
		reinforcement and its fabrication,					
		placing and binding etc)					
		15'x5.67'x.58'=49.32					

9	5.06.01.02	RB 400 / 400W: Ribbed or	KG	160	KSRM/AKS/BSRA or		
		Deformed bar produced and			Equivalent		
		marked as per BDS ISO			•		
		69352:2006 with minimum yield					
		stress, fy $(ReH) = 400 MPa$, but					
		the actual yield strength based on					
		mill tests does not exceed fy by					
		more than the 125 MPa, the ratio					
		of actual ultimate strength, fu (Re)					
		to actual tensile yield strength (fy)					
		shall be at least 1.25 and minimum					
		elongation after fracture (A5.65)					
		& minimum total elongation at					
		maximum force (Agt) is 14% and					
		2.5% respectivelyquality sand					
		(minimum FM 1.2), filling the					
		interstics tightly with mortar					
		raking out joints, cleaning and					
		soaking brick at least for 24 houre					
		before use, washing of sand curing					
		for requisite period,etc.all					
		complete as per direction of the					
		ENGINEER IN CHARGE					

ANNEX -1 Technical Specification Palongkhali Union, Ukhiya Thana North Rahmat bill Brick Flat soling road Abdul Gafur's shop to Rashida Begum's house.3 No Ward.

Sl.	Item	Specification	Unit	Quantity	Product photo	Brand	Remarks	Technical	Details
No	Code				(Reference			Compliance	of your
					Purpose)			(Yes/ No)	offer

1	3.01.03.2	BC (300mm): Earth work in box cutting on road crest up to 300mm depth, maintaining proper grade, camber and alignment, super elevation on curves, removing soil to a safe distance, watering, if necessary, spreading the excavated earth on road flanks and slopes uniformly including leveling, dressing, compacting the sub-grade by manual labour, etc. all complete as per direction of the ENGINEER IN CHARGE. 300'x7.5'=2250	sft	2250	Ref: Annex-4: Design Layout, Plan ,Section, 13-13		
2	3.02.1.1	Sand (FM 0.50) filling on the road bed in the improved sub-grade with sand free from dust, earth, other vegetable growth and foreign materials including supplying all materials, spreading, watering, compacting by appropriate mechanical means to obtain a minimum Soaked CBR 8% or Design CBR at minimum compaction 98% of MDD (Modified), etc. all complete as per direction of the ENGINEER IN CHARGE. 300'x7.5'x.33'=742.5	cft	742.5			
3	3.08.4.2	Single layer brick flat soling in road work with first class or picked jhama bricks as per alignment, camber and grade including filling joints with sand (F.M. 0.80) etc. complete including cost of all materials and accepted by the Engineer-in-charge. 300'x7'=2100	sft	2100			
4	3.04.3.1	Brick on end edging (75 mm across the road) with first class or picked jhama bricks and filling the gaps with fine sand (F.M. 0.80) including cutting trenches, true to level and grade, removing earth, refilling and ramming the sides properly including cost of all materials and accepted by the Engineer-in-charge. 2x308'=616	rft	630			

ANNEX -1 Technical Specification Palongkhali Union,Ukhiya Thana

Palongkhali Union,Ukhiya Thana
Construction of Brick Flat Soling road by Darut Tahajib Mosque from Maulvi Abdus Sattar Mosque to Arakan Road.4 No Ward

SI. No	Item Code	Specification	Unit	Quantity	Product photo (Reference Purpose)	Brand	Remarks	Technical Compliance (Yes/ No)	Details of your offer
1	3.01.03.2	BC (300mm): Earth work in box cutting on road crest up to 300mm depth, maintaining proper grade, camber and alignment, super elevation on curves, removing soil to a safe distance, watering, if necessary, spreading the excavated earth on road flanks and slopes uniformly including leveling, dressing, compacting the sub-grade by manual labour, etc. all complete as per direction of the E-I-C.	sft	6750	Ref: Annex-4: Design Layout, Plan ,Section, 14-14				
2	3.02.1.1	Sand (FM 0.50) filling on the road bed in the improved subgrade with sand free from dust, earth, other vegetable growth and foreign materials including supplying all materials, spreading, watering, compacting by appropriate mechanical means to obtain a minimum Soaked CBR 8% or Design CBR at minimum compaction 98% of MDD (Modified), etc. all complete as per direction of the E-I-C.	cft	2227.5					
		900'x7.5'x.33'=2227.5							

3	3.08.4.2	Single layer brick flat soling in road work with first class or picked jhama bricks as per alignment, camber and grade including filling joints with sand (F.M. 0.80) etc. complete including cost of all materials and accepted by the Engineerincharge. 900'x7'=6300	sft	6300			
4	3.04.3.1	Brick on end edging (75 mm across the road) with first class or picked jhama bricks and filling the gaps with fine sand (F.M. 0.80) including cutting trenches, true to level and grade, removing earth, refilling and ramming the sides properly including cost of all materials and accepted by the Engineer-in-charge. 2x904'=108		108			

ANNEX-1 **Technical Specification**

Palongkhali Union,Ukhiya Thana, Brick Flat Soling Road from Pandit Para Amin Hossain's house to Manik's house,5 No Ward.

Sl. No	Item Code	Specification	Unit	Quantity	Product photo (Reference Purpose)	Brand	Remarks	Technical Compliance (Yes/ No)	Details of your offer
1	3.01.03.2	BC (300mm): Earth work in box cutting on road crest up to 300mm depth, maintaining proper grade, camber and alignment, super elevation on curves, removing soil to a safe distance, watering, if necessary, spreading the excavated earth on road flanks and slopes uniformly including leveling, dressing, compacting the sub-grade by manual labour, etc. all complete as per direction of the E-I-C. 220'x8'=1760	sft	1760	Ref: Annex-4: Design Layout, Plan ,Section, 15- 15				

2	3.02.1.1	Sand (FM 0.50) filling on the road bed in the improved subgrade with sand free from dust, earth, other vegetable growth and foreign materials including supplying all materials, spreading, watering, compacting by appropriate mechanical means to obtain a minimum Soaked CBR 8% or Design CBR at minimum compaction 98% of MDD (Modified), etc. all complete as per direction of the E-I-C. 220'x8'x.33'=580.8	cft	580.8			
3	3.08.4.2	Single layer brick flat soling in road work with first class or picked jhama bricks as per alignment, camber and grade including filling joints with sand (F.M. 0.80) etc. complete including cost of all materials and accepted by the Engineerincharge. 220'x7.5'=1650	sft	1650			
4	3.04.3.1	Brick on end edging (75 mm across the road) with first class or picked jhama bricks and filling the gaps with fine sand (F.M. 0.80) including cutting trenches, true to level and grade, removing earth, refilling and ramming the sides properly including cost of all materials and accepted by the Engineer-in-charge. 2x220*=440	rft	456			

ANNEX-1 Technical Specification Palongkhali Union, Ukhiya Thana, Construction a new Box culvert in front of Shariat's house from Peer Ali's shop,6 No Ward.

Sl.	Item	Specification	Unit	Quantity	Product	Brand	Remarks	Technical	Details
No	Code				photo			Compliance	of your
					(Reference			(Yes/No)	offer
					Purpose)				

1	5.02.01	Earth work in excavation in all kinds of soil for foundation trenches including. layout, providing center lines, local bench-mark pillars, leveling, ramming and preparing the base, fixing bamboo spikes and marking layout with chalk powder, providing necessary tools and plants, protecting and maintaining the trench dry etc., stacking, cleaning the excavated earth at a safe distance out of the area enclosed by the layout etc. all complete and accepted by the Engineer, subject to submit method statement of carrying out excavation work to the Engineer for approval. However, Engineer's approval shall not relieve the contractor of his responsibilities and obligations under the	cft	202.5	Ref: Annex- 4: Design Layout, Plan ,Section, 16- 16.		
		obligations under the contract. 15'x6.75'x2'=202.5					
2	5.02.02	Sand (FM 0.50) filling dranage with 150mm/75 mm layers I/c levelling, watering, and consolading each layer up to finished level etc. all complete as per direction of the E/C. 15'x6.75'x.25'=25.31	cft	25.31			

					_			
3	5.03.01.01	One layer of brick flat soling in foundation or in floor with first class or picked jhama bricks including preparation of bed and filling the interstices with local sand, leveling etc. complete and accepted by the Engineer. 15'x6.75'=101.25	sft	101.25				
4	5.03.05.02	Mass concrete (1:2:4) in foundation or floor with cement, sand (F.M. 1.2) and picked jhama chips including breaking chips, screening, mixing, laying, compacting to levels and including the supply of water, electricity and other charges and costs of tools and plants etc. all complete Mass concrete in foundation (1:2:4) with brick chips and local sand of F.M. 1.2 and accepted by the Engineer. (Cement: CEM-II/A-M)	cft	25.31		Supercrete/Bashundhara /Crown or Equivalent Cement.		
5	5.04.02	15" Brick Work 375mm Brick work with 1st class brickin cement mortar (1:4) in foundation wall and plinth with Portland Composit cement (CEM ii/AM,42.5N) and best quality sand (minimum FM 1.2), filling the interstics tightly with mortar raking out joints,cleaning and soaking brick at least for 24 houre before use,washing of sand curing for requisite period,etc.all complete	cft	56.25		BSRM/KSRM/AKS or Equivalent		

					į l		I	
		as per direction of the EI-						
		С						
		2x15'x1.5'x1.25'=56.25						
	5.04.02			40.0				
6	5.04.02	10'' Brick Work	cft	49.8				
		250mm Brick work with						
		1st class brickin cement						
		mortar (1:4) in						
		foundation wall and						
		plinth with Portland						
		Composite cement						
		(CEM ii/AM,42.5N) and						
		best quality sand						
		(minimum FM 1.2),						
		£11: 4b - :						
		filling the interstices						
	1						T	-
		tightly with mortar						
		raking out						
		joints, cleaning and						
1		soaking brick at least for						
		24 houre before use,						
1		weeking of 1i-						
1		washing of sand curing						
1		for requisite						
1		period,etc.all complete						
		as per direction of the EI-						
		C.						
1		2x15'x2x.83'=49.8						
		2X13 X2X.03 -49.0						
	L						l .	l .

T	T		,		
7 5.12.01	Plaster with Net Cement Finishing. Minimum 12 mm thick cement sand (F.M. 1.2) plaster with neat cement finishing to plinth wall (1:4) with cement up to 150 mm below ground level with neat cement finishing including washing of sand, finishing the edges and corners and curing at least for 7 days, cost of water, electricity and other charges etc. all complete in all respect as per drawing and accepted by the Engineer. 15'x12'=180	sft 180			
8 5.05.03	Reinforced cement concrete works using wooden shutter with minimum cement content relates to mix ratio 1:1.5:3 having minimum f'cr = 26 Mpa, and satisfying a specified compressive strength f'c = 21 Mpa at 28 days on standard cylinders as per standard practice of Code ACI/BNBC/ASTM & Cement conforming to BDS EN-197-1- CEM 1, 52.5N (52.5MPa) / ASTM-C 150 Type – I, best quality Sylhet sand	cft 49.32			

			1	1		
	or coarse sand [F.M. 2.2] and 20 mm down well graded picked jhama brick chips conforming to ASTM C-33, including breaking chips and screening, making, placing shutter in position and maintaining true to plumb, making shutter water-tight properly, placing reinforcement in position; mixing in standard mixer machine with hoper and fed by standard measuring boxes, casting in forms, compacting by vibrator machine and curing at least for 28 days, removing centering-shuttering after specified time approved; including cost of water, electricity, additional testing charges of materials and cylinders required by engineer, other charges etc. all complete approved and accepted by the Engineer. (Rate is excluding the cost of reinforcement and its fabrication, placing and binding etc)					
9 5.06.01	15'x5.67'x.58'=49.32	KG	160	BSRM/KSRM/AKS or		
	or Deformed bar produced and marked as per BDS ISO 69352:2006 with minimum yield stress, fy (ReH) = 400 MPa, but the actual yield strength based on mill tests does not exceed fy by more than the 125 MPa, the ratio of actual ultimate strength, fu (Re) to		100	Equivalate		

actual tensile yield strength (fy) shall			
be at least 1.25 and minimum elongation after fracture (A5.65) & minimum total elongation at maximum force (Agt) is 14% and 2.5% respectivelyquality sand (minimum FM 1.2), filling the interstics tightly with mortar raking out joints, cleaning and soaking brick at least for 24 houre before use, washing of sand curing for requisite period, etc. all complete as per direction of the EI-C			

Palongkhali Union, Ukhiya Thana Brick Flat soling Maulvi Abdur Rahman house to Late Abdur Halim House

Sl.	Item	Specification	Unit	Quantity	Product	Brand	Remarks	Technical	Details
No	Code	Specification	Cint	Quantity	photo (Reference Purpose)	Diana	Remarks	Compliance (Yes/ No)	of your offer
1	3.01.03.2	Sand (FM 0.50) filling on the road bed in the improved sub-grade with sand free from dust, earth, other vegetable growth and foreign materials including supplying all materials, spreading, watering, compacting by appropriate mechanical means to obtain a minimum Soaked CBR 8% or Design CBR at minimum compaction 98% of MDD (Modified), etc. all complete as per direction of the E-I-C. 312'x6.5'=2028	sft	2028	Ref: Annex-4: Design Layout, Plan ,Section, 17-17				
2	3.02.1.1	Sand (FM 0.50) filling on the road bed in the improved sub-grade with sand free from dust, earth, other vegetable growth and foreign materials including supplying all materials, spreading, watering, compacting by appropriate mechanical means to obtain a minimum Soaked CBR 8% or Design CBR at minimum compaction 98% of MDD (Modified), etc. all complete as per direction of the E-I-C. 312'x6.5'x.33'=669.24	cft	669.24					
3	3.08.4.2	Single layer brick flat soling in road work with first class or picked jhama bricks as per alignment, camber and grade including filling joints with sand (F.M. 0.80) etc. complete including cost of all materials and accepted by the Engineer-in-charge. 312'x6=1872	sft	1872					

4	3.04.3.1	Brick on end edging (75 mm across	642			
		the road) with first class or picked				
		jhama bricks and filling the gaps				
		with fine sand (F.M. 0.80) including				
		cutting trenches, true to level and				
		grade, removing earth, refilling and				
		ramming the sides properly				
		including cost of all materials and				
		accepted by the Engineer-in-charge.				
		2x315'=630				
		2.15 15 05 0				

ANNEX-1 Technical Specification Rajapalong Union,Ukhiya Thana Rezurkul Gov Primary School Boundary Wall,1 No Ward.

Sl.	Item	Specification	Unit	Quantity	Product	Brand	Remarks	Technical	Details
No	Code				photo			Compliance	of your
					(Reference			(Yes/No)	offer
					Purpose)			, , ,	

	5.02.01	Earth work in excavation in all kinds of soil for foundation trenches including. layout, providing center lines, local bench-mark pillars, leveling, ramming and preparing the base, fixing bamboo spikes and marking layout with chalk powder, providing necessary tools and plants, protecting and maintaining the trench dry etc., stacking, cleaning the excavated earth at a safe distance out of the area enclosed by the layout etc. all complete and accepted by the Engineer, subject to submit method statement of carrying out excavation work to the Engineer for approval. However, Engineer's approval shall not relieve the contractor of his responsibilities and obligations under the contract. Earthwork in excavation in foundation trenches up to 3 feet depth and maximum 50 feet lead: in medium stiff clayey soil. 8x2.5'x2.5'x2=100	cft	100	Ref: Annex- 4: Design Layout, Plan ,Section, 18-18		
2	5.02.02	Sand (FM 0.50) filling drainage with 150mm/75 mm layers I/c levelling, watering, and consoling each layer up to finished level etc. all complete	cft	12.5			

		., ,				T	I
		as per direction of the E/C.					
		E/C.					
		8x2.5'x2.5x.25'=12.5					
	5.02.01.01		C.	50			
3	5.03.01.01	3" Brick Flat Soling	sft	50			
		One layer of brick flat soling in foundation or					
		in floor with first class					
		or picked jhama bricks					
		including preparation					
		of bed and filling the					
		interstices with local					
		sand, leveling etc.					
		complete and accepted					
		by the Engineer.					
		8x2.5'x2.5'=50					
4	5.05.03	Brick Chips.;	cft	141.79	Supercrete/Bashundhara		
		Reinforced cement			/Crown or Equivalent		
		concrete works using			Cement.		
		wooden shutter with minimum cement					
		content relates to mix					
		ratio Reinforced					
		cement concrete					
		works using wooden					
		shutter with minimum cement					
		minimum cement content relates to mix					
		ratio 1:1.5:3 having					
		minimum f'cr = 26					
		Mpa, and satisfying a					
		specified compressive					
		strength f'c = 21 Mpa at 28 days on standard					
		cylinders as per					
		standard practice of					
1		Code					
1		ACI/BNBC/ASTM &					
		Cement conforming to					
1		BDS EN-197-1- CEM					
1		1, 52.5N (52.5MPa) /					
1		ASTM-C 150 Type – I,					
1		best quality Sylhet sand					
1		or coarse sand [F.M. 2.2] and 20 mm down					
1		well graded picked					
		wen graded picked					

	jhama brick chips
	conforming to ASTM
	C-33, including
	breaking chips and
	screening, making,
	placing shutter in
	position and
	maintaining true to
	plumb, making shutter
	water-tight properly,
	placing reinforcement
	in position; mixing in
	standard mixer
	machine with hoper
	and fed by standard
	measuring boxes,
	casting in forms,
	compacting by vibrator
	machine and curing at
	least for 28 days,
	removing
	centeringshuttering
	after specified time
	approved; including
	cost of water,
	electricity, additional
	testing charges of
	materials and cylinders
	required by engineer,
	other charges etc. all
	complete approved and
	accepted by the
	Engineer. (Rate is
	excluding the cost of
	reinforcement and its
	fabrication, placing and
	binding etc)
	Footing + Greed Beam +
	Column=141.79

5	5.06.01.02	RB 400 / 400W: Ribbed or Deformed bar produced and marked as per BDS ISO 6935-2:2006 with minimum yield stress, fy (ReH) = 400 MPa, but the actual yield strength based on mill tests does not exceed fy by more than the 125 MPa, the ratio of actual ultimate strength, fu (Re) to actual tensile	KG	580	BSRM/KSRM/AKS or Equivalent		
6	5.04.10	yield strength (fy) shall be at least 1.25 and minimum elongation after fracture (A5.65) & minimum total elongation at maximum force (Agt) is 14% and 2.5% respectively. 10+12mm 5" Brick wall 125 mm brick works with first class bricks in cement sand (F.M. 1.2) mortar	sft	380			
		(1:4) and making bond with connected walls including necessary scaffolding, raking out joints, 76'x5'=380					

					_			
7	5.12.01	Minimum 12 mm thick cement sand (F.M. 1.2) plaster with neat cement finishing to plinth wall (1:4) with cement up to 150 mm below ground level with neat cement finishing including washing of sand, finishing the edges and corners and curing at least for 7 days, cost of water, electricity and other charges etc. all complete in all respect as per drawing and accepted by the Engineer. 2x90'x6'=1080	sft	1080				
8	5.16.02.01	PAINTING AND POLISHING Work Colour wash with yellow orchard/any other colour pigment by two coats over a prime coat of white wash, lime mixture prepared at least 12 hours before use, slacking stone lime, supplying of gums,	sft	1080		Berger /Ashian Romana or Equivalent		

blue, stirring thoroughly, removing the floating materials from the mixer, surface cleaning to free from all foreign materials before application of each coat, applying one vertical and one horizontal wash for each coat and successive coat is to be applied after drying up of previous coat including hair brass, providing necessary scaffolding and cleaning plinth, floors, doors, windows,
thoroughly, removing the floating materials from the mixer, surface cleaning to free from all foreign materials before application of each coat, applying one vertical and one horizontal wash for each coat and successive coat is to be applied after drying up of previous coat including hair brass, providing necessary scaffolding and cleaning plinth, floors, doors, windows,
the floating materials from the mixer, surface cleaning to free from all foreign materials before application of each coat, applying one vertical and one horizontal wash for each coat and successive coat is to be applied after drying up of previous coat including hair brass, providing necessary scaffolding and cleaning plinth, floors, doors, windows,
from the mixer, surface cleaning to free from all foreign materials before application of each coat, applying one vertical and one horizontal wash for each coat and successive coat is to be applied after drying up of previous coat including hair brass, providing necessary scaffolding and cleaning plinth, floors, doors, windows,
cleaning to free from all foreign materials before application of each coat, applying one vertical and one horizontal wash for each coat and successive coat is to be applied after drying up of previous coat including hair brass, providing necessary scaffolding and cleaning plinth, floors, doors, windows,
all foreign materials before application of each coat, applying one vertical and one horizontal wash for each coat and successive coat is to be applied after drying up of previous coat including hair brass, providing necessary scaffolding and cleaning plinth, floors, doors, windows,
before application of each coat, applying one vertical and one horizontal wash for each coat and successive coat is to be applied after drying up of previous coat including hair brass, providing necessary scaffolding and cleaning plinth, floors, doors, windows,
each coat, applying one vertical and one horizontal wash for each coat and successive coat is to be applied after drying up of previous coat including hair brass, providing necessary scaffolding and cleaning plinth, floors, doors, windows,
vertical and one horizontal wash for each coat and successive coat is to be applied after drying up of previous coat including hair brass, providing necessary scaffolding and cleaning plinth, floors, doors, windows,
vertical and one horizontal wash for each coat and successive coat is to be applied after drying up of previous coat including hair brass, providing necessary scaffolding and cleaning plinth, floors, doors, windows,
each coat and successive coat is to be applied after drying up of previous coat including hair brass, providing necessary scaffolding and cleaning plinth, floors, doors, windows,
each coat and successive coat is to be applied after drying up of previous coat including hair brass, providing necessary scaffolding and cleaning plinth, floors, doors, windows,
successive coat is to be applied after drying up of previous coat including hair brass, providing necessary scaffolding and cleaning plinth, floors, doors, windows,
applied after drying up of previous coat including hair brass, providing necessary scaffolding and cleaning plinth, floors, doors, windows,
up of previous coat including hair brass, providing necessary scaffolding and cleaning plinth, floors, doors, windows,
including hair brass, providing necessary scaffolding and cleaning plinth, floors, doors, windows,
providing necessary scaffolding and cleaning plinth, floors, doors, windows,
scaffolding and cleaning plinth, floors, doors, windows,
cleaning plinth, floors, doors, windows,
doors, windows,
portions and portions
ventilators by washing,
rubbing, oiling if
necessary after white
wash for all floors
including cost of water,
electricity and other
charges etc. complete
in all respect in all
flows and accounted by
floors and accepted by
the District the D
Engineer-in-charge.
2x90'x6'=1080
2470 AU 1000

ANNEX-1 Technical Specification Rajapalong Union, Ukhiya Thana Installation of Deep Tube well at Golzar Begum Primary School in Siler Chhora. 6 No Ward.

S	Ite	Specification	Uni	Qua	Product photo	Brand	Re	Technic	Detail
l	m		t	ntit	(Reference Purpose)		mar	al	s of
	Co			y	_		ks	Compli	your
	de			· ·				ance	offer
								(Yes/	
								No)	

1 10	Mobilization of test boring or observation well: Transportation of materials, equipment's, tools and plants and boring rig to work site. Construction of derrick and dismantling the same. Cleaning the site after completion of the work accepted by the Engineer-in-charge.	L/S	1	Same As Ref: Annex-4: Design Layout, Plan ,Section, 02-02			
2 10	Boring by using 100 mm dia cutter and 40 mm dia heavy type G.I pipe (wall thickness 2.9 mm, outside diameter min 47.8 mm, weight 3.517 kg/m, capable to withstand 50 kg/cm2 pressure) and other equipment's capable of drilling up to a depth of 500 meter by water jet system through all sorts of soil strata providing protection of caving by supplying necessary casing pipe. Collection of soil samples at every 3 meter interval and at every change of soil strata and preserving them in a controlled environment for analysis and laboratory test. Finally, withdrawal of boring and casing pipes etc. complete and accepted by the Engineer-in-charge.	RFT	164				
10	2. a) From 0.0 RFT to 164 RFT = 164 RFT		164				
10	0 b) From 164.00 rft to 328 rft = 164 RFT (Add		170				
2.0	0 c) From 328.00 rft to 498 rft = 170 RFT (Add		185				
2.0 10 2.0 10 2.0	0 d) From 498.00 rft to 656.00 rft = 158 RFT (Add +33.00% with Item No 10.02.01) 0 e) From 656.00 rft to 820.00 rft = 164 RFT		164				
3 10 3.0	1 1 ,	Eac h	1		RFL/Nation al Polymer or equivalent) (Heavy Duty, Weight 25- 28 kg) or Equivalent		

4	10.0 3.02	GI Pipe Supplying and fitting 38/40 mm dia heavy type G.I pipe conforming to standard BS-1387 & BDS-1031, having chemical composition (in%) carbon 0.17-0.25, manganese 0.95-1.20, Sulphur 0.060 max, phosphorous 0.060 max, tensile properties: minimum yield strength 188 MPa,	rft	5	NPOLY- Hatim-RFL or Equivalent		
		minimum tensile strength 313 MPa and marking for a) manufacturer b) material c)					
		wall thickness d) nominal outside dia e)					
		intended use etc. on the body of the pipe					
		having wall thickness 2.9 mm, weight 3.517 kg/m capable to withstand 50					
		kg/cm2 hydraulic pressure					
5	10.0	uPVC Blind Pipe (Rising pipe/ Sand Trap	rft	798	NPOLY-		
	3.03	Pipe) Supplying & lowering of uPVC pipe of dia			Hatim-RFL		
		1.5" (D Grade-Water Class, having			or Equivalent		
		physical, chemical, thermal, fire resistivity properties etc. as per BSTI approved			1		
		manufacturer such as RFL/					
		Bashundhara/National Polymer or any					
		approved brand including required Solvent Cement (Adhesive Glue) & Coarse Sand					
		with necessary fitting and fixing.					
6	10.0	PVC Strainer Supplying & lowering the	rft	20	NPOLY-		
	3.04	PVC Strainer (water grade) of 38 mm dia	110	20	Hatim-RFL		
		with uniform thickness (2.5mm - 3.00mm)			or		
7		without any defect and fitting and fixing. Earth cutting and Earth filling and	each	1	Equivalent All		
		Construction of concrete platform (6'-	eacii	1	Complete as		
		0"x6'0") with stair (following as per the			per Drawing		
		attached design and specification) will be					
		constructed with 19 mm downgraded brick chips (1st class), coarse sand (FM=1.2-1.5)					
		and ordinary Portland cement in proportion					
		of 1:2:4 including plastering (12mm thick,					
		1:4) & neat cement finishing (NCF) Mixed					
		with best quality of Red Oxide Powder to the outer visible surface which laying above the					
		Ground level with drainage provision and 07					
		days curing(two times each day). Brick chips					
		and Sand will be netted and washed accordingly. Inside Earth will be compacted					
		enough, all complete as per design and					
		specification; direction of Engineer In					
		Charge.					
		Tube-well Platform(6'-0"x6'-0"x2'-6")					

8	Drainage System Supplying of Drainage	each	1	as per	
	pipe (3 inch in dia, C Grade-Water Class,			Drawing	
	minimum thickness 3.50 mm to 4.10 mm,				
	Brand: RFL/Bashundhara/National Polymer)			Brand:	
	with necessary earth cutting, earth filling and			RFL/Bashu	
	fittings such as bend, elbow, stainless steel			ndhara/Nati	
	screen etc as per attached design. Sand			onal Polymer or	
	(3inch) will be around the drainage pipe			Equivalent	
	below the ground level along with the			Equivalent	
	platform. The length of drainage pipe may be				
	vary as per field actual requirement and as				
	per instruction of Engineer In Charge.				

ANNEX-1 Technical Specification taianalong Union.Ukhiya Tha

Rajapalong Union,Ukhiya Thana. Doil Para Gov Primary School Boundary Wall, 7 No Ward.

Ite m Co de	Specification	Un it	Quan tity	Product photo (Reference Purpose)	Brand	Remarks	Techni cal Compl iance (Yes/ No)	Deta ils of your offer
5.02.	Earth work in excavation in all kinds of soil for foundation trenches including. layout, providing center lines, local bench-mark pillars, leveling, ramming and preparing the base, fixing bamboo spikes and marking layout with chalk powder, providing necessary tools and plants, protecting and maintaining the trench dry etc., stacking, cleaning the excavated earth at a safe distance out of the area enclosed by the layout etc. all complete and accepted by the Engineer, subject to submit method statement of carrying out excavation work to the Engineer for approval. However, Engineer's approval shall not relieve the contractor of his responsibilities and obligations under the contract. Earthwork in excavation in foundation trenches up to 3 feet depth and maximum 50 feet lead: in medium stiff clayey soil	cft	125	Ref: Annex-4: Design Layout, Plan ,Section, 19-19				

2	5.02. 02	3" Sand filling in foundation trenches and inside plinth with sand (minimum FM 0.50) in 150mm layers in/c leveling, watering and consolidating each layer up to finished level etc. all complete as per direction of the EI-C. Dry density after compaction shall not be less than 95% of MDD (STD). 10x2.5'x2.5'=62.5	cft	15.63			
3	5.03. 01.0 1	3"Brick Flat Soling One layer of brick flat soling in foundation or in floor with first class or picked jhama bricks including preparation of bed and filling the interstices with local sand, leveling etc. complete and accepted by the Engineer 10x2.5'x2.5'=62.5	sft	62.5			
4	5.05. 03	Brick Chips.;Reinforced cement concrete works using wooden shutter with minimum cement content relates to mix ratio 1:1.5:3 Reinforced cement concrete works using wooden shutter with minimum cement content relates to mix ratio 1:1.5:3 having minimum f'cr = 26 Mpa, and satisfying a specified compressive strength f'c = 21 Mpa at 28 days on standard cylinders as per standard practice of Code ACI/BNBC/ASTM & Cement conforming to BDS EN-197-1- CEM 1, 52.5N (52.5MPa) / ASTM-C 150 Type – I, best quality Sylhet sand or coarse sand [F.M. 2.2] and 20 mm down well graded picked jhama brick chips conforming to ASTM C-33, including breaking chips and screening, making, placing shutter in position and maintaining true to plumb, making shutter water-tight properly, placing reinforcement in position; mixing in standard mixer machine with hoper and fed by standard measuring boxes, casting in forms, compacting by vibrator machine and curing at least for 28 days, removing centeringshuttering after specified time approved; including cost of water, electricity, additional testing charges of materials and cylinders required by engineer, other charges etc. all complete approved and accepted by the Engineer. (Rate is excluding the cost of reinforcement and its fabrication, placing and binding etc) Footing+Bread Beam+Column=166.458	cft	166.45 8	Supercrete /Bashundh ara //Crown or Equivalen t Cement.		
5	5.06. 01.0 2	RB 400 / 400W: Ribbed or Deformed bar produced and marked as per BDS ISO 6935-2:2006 with minimum yield stress, fy (ReH) = 400 MPa, but the actual yield strength based on mill tests does not exceed fy by more than the 125 MPa, the ratio of actual ultimate strength, fu (Re) to actual tensile yield strength (fy) shall be at least 1.25 and minimum elongation after fracture (A5.65) &	KG	685	BSRM/KS RM/AKS or Equivalen t		

		minimum total elongation at maximum force (Agt) is 14% and 2.5% respectively.					
6	5.04. 10	5" Brick wall 125 mm brick works with first class bricks in cement sand (F.M. 1.2) mortar (1:4) and making bond with connected walls including necessary scaffolding, raking out joints. 92'x5'=460	sft	460			
7	5.12. 01	Plaster With Net Cement Finishing. Minimum 12 mm thick cement sand (F.M. 1.2) plaster with neat cement finishing to plinth wall (1:4) with cement up to 150 mm below ground level with neat cement finishing including washing of sand, finishing the edges and corners and curing at least for 7 days, cost of water, electricity and other charges etc. all complete in all respect as per drawing and accepted by the Engineer. 2x122'x6'=1464	sft	1464			
8	5.16. 02.0 1	Color wash with yellow orchard/any other color pigment by two coats over a prime coat of white wash, lime mixture prepared at least 12 hours before use, slacking stone lime, supplying of gums, blue, stirring thoroughly, removing the floating materials from the mixer, surface cleaning to free from all foreign materials before application of each coat, applying one vertical and one horizontal wash for each coat and successive coat is to be applied after drying up of previous coat including hair brass, providing necessary scaffolding and cleaning plinth, floors, doors, windows, portions and ventilators by washing, rubbing, oiling if necessary after white wash for all floors including cost of water, electricity and other charges etc. complete in all respect in all floors and accepted by the Engineer-in-charge. 2x122'x6'=1464	sft	1464	Berger/As hian/ Romana/ or Equivalen t		

Note:

Technical Spec:

- To supply all materials and required equipment to the site. The Contractor needs to supply all materials and required equipment to the site. The Contractor must include the cost of all materials and equipment required for performance of corresponding type of works to its financial offer.
- The supply of equipment and materials has to be supported by its installation, testing, start-up and obligatory warranty service as per engineering design documentation.
- To perform works fully in accordance with relevant national standards and regulations.
- To follow requirements, conditions, instructions and standards stipulated in technical documentation (engineering design), including those applicable for materials.
- It is not allowed to use asbestos and asbestos-containing materials.

Delivery Requirements

Denvery Requiremen	Delivery Requirements
Delivery date and time	Bidder shall deliver the goods not exceeding 90 days after Contract signature.
Delivery Terms (INCOTERMS 2020)	Not Applicable
Customs clearance (must be linked to INCOTERM	 ☑ Not applicable Shall be done by: ☐ Name of organisation (where applicable) ☐ Supplier/bidder ☐ Freight Forwarder
Exact Address(es) of Delivery Location(s)	Location: Baharchara Union, Teknaf Upazila, Cox's Bazar Location: Hnila Union, Teknaf Upazila, Cox's Bazar Location: Whaykhang Union, Teknaf Upazila, Cox's Bazar Location: Haldia Union, Ukhia Upazila, Cox's Bazar Location: Palingkhali Union, Ukhia Upazila, Cox's Bazar Location: Rajapalong Union, Ukhia Upazila, Cox's Bazar
Distribution of shipping documents (if using freight forwarder)	Not Applicable
Packing Requirements	Not Applicable
Training on Operations and Maintenance	Not Applicable
Warranty Period	Not Applicable
After-sales service and local service support requirements	Not Applicable
Preferred Mode of Transport	Not Applicable

ANNEX 2: QUOTATION SUBMISSION FORM

Bidders are requested to complete this form, including the Company Profile and Bidder's Declaration, sign it and return it as part of their quotation along with Annex 3: Technical and Financial Offer. The Bidder shall fill in this form in accordance with the instructions indicated. No alterations to its format shall be permitted and no substitutions shall be accepted.

Name of Bidder:	Click or tap here to enter text.	
RFQ reference:	Click or tap here to enter text.	Date: Click or tap to enter a date.

Company Profile

Company 1 Torne		
Item Description	Detail	
Legal name of bidder or Lead entity for JVs	Click or tap here to enter text.	
Legal Address, City, Country	Click or tap here to enter text.	
Website	Click or tap here to enter text.	
Year of Registration	Click or tap here to enter text.	
Legal structure	Choose an item.	
Are you a UNGM registered vendor?	☐ Yes ☐ No yes, insert UNGM Vendor Number	If
Quality Assurance Certification (e.g. ISO 9000 or Equivalent) (If yes, provide a Copy of the valid Certificate):	⊠ Yes □ No	
Does your Company hold any accreditation such as ISO 14001 or ISO 14064 or equivalent related to the environment? (If yes, provide a Copy of the valid Certificate):	⊠ Yes □ No	
Does your Company have a written Statement of its Environmental Policy? (If yes, provide a Copy)	⊠ Yes □ No	
Does your organization demonstrate significant commitment to sustainability through some other means, for example internal company policy documents on women empowerment, renewable energies or membership of trade institutions promoting	⊠ Yes □ No	

such issues (If yes, p a Copy)	provide								
Is your company a r of the UN Global C		l No							
Bank Information	Bank Name: C	Bank Name: Click or tap here to enter text.							
	Bank Ad	Bank Address: Click or tap here to enter text.							
	IBAN: C	IBAN: Click or tap here to enter text.							
	SWIFT/E	SWIFT/BIC: Click or tap here to enter text.							
	Account	Currency: Click of	r tap here to enter tex	xt.					
	Bank Ace	count Number: Cl	ick or tap here to ente	er text.					
	Previou	s relevant experi	ence: 3 contracts						
Name of previous contracts	Client & Reference Contact Details including email	Contract Value	Period of activity	Types of activities undertaken					
					_				

Bidder's Declaration

Yes	No	
		Requirements and Terms and Conditions: I/We have read and fully understand the RFQ, including the RFQ Information and Data, Schedule of Requirements, the General Conditions of Contract, and any Special Conditions of Contract. I/we confirm that the Bidder agrees to be bound by them.
		I/We confirm that the Bidder has the necessary capacity, capability, and necessary licenses to fully meet or exceed the Requirements and will be available to deliver throughout the relevant Contract period.
		Ethics : In submitting this Quote I/we warrant that the bidder: has not entered into any improper, illegal, collusive or anti-competitive arrangements with any Competitor; has not directly or indirectly approached any representative of the Buyer (other than the Point of Contact) to lobby or solicit information in relation to the RFQ; has not attempted to influence, or provide any form of personal inducement, reward or benefit to any representative of the Buyer.
		I/We confirm to undertake not to engage in proscribed practices, , or any other unethical practice, with the UN or any other party, and to conduct business in a manner that averts any financial, operational, reputational or other undue risk to the UN and we have read the United Nations Supplier Code of Conduct : https://www.un.org/Depts/ptd/about-us/un-supplier-codeconduct and acknowledge that it provides the minimum standards expected of suppliers to the UN.
		Conflict of interest: I/We warrant that the bidder has no actual, potential, or perceived Conflict of Interest in submitting this Quote or entering a Contract to deliver the Requirements. Where a Conflict of Interest arises during the RFQ process the bidder will report it immediately to the Procuring Organisation's Point of Contact.
		Prohibitions, Sanctions: I/We hereby declare that our firm, its affiliates or subsidiaries or employees, including any JV/Consortium members or subcontractors or suppliers for any part of the contract is not under procurement prohibition by the United Nations, including but not limited to prohibitions derived from the Compendium of United Nations Security Council Sanctions Lists and have not been suspended, debarred, sanctioned or otherwise identified as ineligible by any UN Organization or the World Bank Group or any other international Organization.
Yes	No	

	Bankruptcy : I/We have not declared bankruptcy, are not involved in bankruptcy or receivership proceedings, and there is no judgment or pending legal action against them that could impair their operations in the foreseeable future.
	Offer Validity Period: I/We confirm that this Quote, including the price, remains open for acceptance for the Offer Validity.
	I/We understand and recognize that you are not bound to accept any Quotation you receive, and we certify that the goods offered in our Quotation are new and unused.
	By signing this declaration, the signatory below represents, warrants and agrees that he/she has been authorised by the Organization/s to make this declaration on its/their behalf.

Signature:	 -
Name:	Click or tap here to enter text.

Title: Click or tap here to enter text. Date: Click or tap to enter a date.

ANNEX 3: TECHNICAL AND FINANCIAL OFFER – WORKS

Bidders are requested to complete this form, sign it and return it as part of their quotation along with Annex 2 Quotation Submission Form. The Bidder shall fill in this form in accordance with the instructions indicated. No alterations to its format shall be permitted and no substitutions shall be accepted.

Name of Bidder:	Click or tap here to enter text.	
RFQ reference:	Click or tap here to enter text.	Date: Click or tap to enter a date.

Technical Offer

Provide the following:

- a brief description of your qualification and capacity that is relevant to the Scope of Works;
- a brief method statement and implementation plan;

Financial Offer

Lot 1: (Summery Price Schedule)

Baharchara l	Union (A. Public Toilet - Shamlapur Bazar)_ Teknaf	
SL#	Description	Total Price (BDT)
1	Public Toilet	
	Total A	
Baharchara U	nion (B. Deep Tube-well and twin pit Latrine Shamlapur 2	no Word,Teknaf)
SL#	Description	Total Price (BDT)
1	Deep Tube-well	
2	Twin pit Latrine	
	Total B	
Baharchara U	nion (C. Twin pit-toilet - Jame Mosque in the field near No	th Shil Khali Kunar, Teknaf)
SL#	Description	Total Price (BDT)
1	Twin pit Latrine	
	Total C	
Baharchara U	nion (D. Twin pit-toilet - Baitul Jame Mosque and Madrasa	in Uttar Hazam Para, Teknaf)
SL#	Description	Total Price (BDT)
1	Twin pit Latrine	
	Total D	
	Total (A+B+C+D)	
	VAT (E) on (A+B+C+D)	
	Grand Total (A+B+C+D+E)	

Please use the Excel file named as <u>Annex 7</u> for LOT 1- Baharchara Union Teknaf to submit detail financial proposal/Price Schedule <u>Lot 1: (Summery Price Schedule)</u>

SL#	Description	Total Price (BDT)
1	High-low bench of Hnila Pre-Cadet School	
	Total A	
Hnhila Union	(B. Brick Flat Soling ROAD from CMB Road to Sufia Government Primary School) Teknaf	
SL#	Description	Total Price (BDT)
1	Brick Flat Soling ROAD from CMB Road to Sufia Government Primary School	
	Total B	
Hnhila Union	(C. Flat soling Rangikhali Lamar Para Main Road) Teknaf	
SL#	Description	Total Price (BDT)
1	Flat soling Rangikhali Lamar Para Main Road	
	Total C	
	Total (A+B+C)	
	VAT (D)	

Plesae use the Excel file named as <u>Annex 7</u> for LOT 2- Hnila Union Teknaf to submit detail financial proposal/Price Schedule

Lot 1: (Summery Price Schedule)

	Whykong Union (A. Boundary Wall - Kharanga-Ghona Jamalul Quran Madra	nsa) Teknaf
SL#	Description	Total Price (BDT)
1	Boundary Wall	
	Total A	
Whykong Uni	on (B. Drainage Construction, Haji Gura Mia's house to Maulvi Jalil's shop in Kutubdia	Para) Teknaf
SL#	Description	Total Price (BDT)
1	Drainage Construction- Haji Gura Mia's house to Maulvi Jalil's shop in	
	Kutubdia Para	
	Total B	
Whykong Uni	on (C. Brick Flat Soling ROAD - Kanjarpara Union Parishad to Ghona Para) Teknaf	
SL#		T (I D) (DDT)
SLπ	Description	Total Price (BDT)
1	Brick Flat Soling ROAD - Kanjarpara Union Parishad to Ghona	Total Price (BDT)
-		Total Price (BDT)
-	Brick Flat Soling ROAD - Kanjarpara Union Parishad to Ghona	Total Price (BDT)
-	Brick Flat Soling ROAD - Kanjarpara Union Parishad to Ghona Para	Total Price (BDT)
-	Brick Flat Soling ROAD - Kanjarpara Union Parishad to Ghona Para Total C	Total Price (BDT)

Plesae use the Excel file named as <u>Annex 7</u> for LOT 3- Whykong Union Teknaf to submit detail financial proposal/Price Schedule <u>Lot</u> 1: (Summery Price Schedule)

SL#	Description	Total Price (BDT)
1	Earthen Road with box culvert- from Mariccha High School playground to	
	Bashir Ahmed's house	
	Total A	
Haldiya Paloi	ng Union (B. Brick flat soling- Gorachan Matbar Para to Advocate Anil Barua's house) Ukhiya	
SL#	Description	Total Price
		(BDT)
1	Brick flat soling	
1	_	
1	Brick flat soling	
1	Brick flat soling Total B	

Plesae use the Excel file named as $\underline{Annex\ 7}$ for LOT-4 Haldiya Palong Union -Ukhiya to submit detail financial proposal/Price Schedule

Lot 1: (Summery Price Schedule)

SL#	Description	Total Price (BDT
1	Culvert Construction- East Balukhali fornt side of Manik's shop	
	Total A	
	Total A	
Palongkhali U SL#	Union (B. Brick Flat soling- North Rahmat road Abdul Gafur's shop to Rashida Begum's house Description	Total Price
	Union (B. Brick Flat soling- North Rahmat road Abdul Gafur's shop to Rashida Begum's hou	

SL#	Description	Total Price (BDT)
1	Brick Flat soling- Maulvi Abdus Sattar Mosque to Arakan Road	
	Total C	
Palongkha	ali Union (D. Brick Flat soling- in front of Pandit Para Amin Hossain's house to Manik's house	se) Ukhiya
SL#	Description	Total Price (BDT)
1	Brick Flat soling- in front of Pandit Para Amin Hossain's house to Manik's house	
	Total D	
Palongkhali Unio	n (E. Box Culvert Construction- culvert in front of Shariat's house from Peer Ali's shop) Ukl	hiya
SL#	Description	Total Price (BDT)
1	Box Culvert Construction- culvert in front of Shariat's house from Peer Ali's shop	
	Total E	
Palongkhali Unioi	ı (F. High-Low benches for Palongkhali Khadijatul KobraMadrasha) Ukhiya	-
SL#	Description	Total Price (BDT)
1	High-Low benches for Palongkhali Khadijatul KobraMadrasha	
	Total F	
SL#	Description	Total Price (BDT)
Palongkhali Unio	n (G. Brick Flat soling – from Maulvi Abdur Rahman house to late Abdur Halim House) Uk	hiya
SL#	Description	Total Price (BDT)
1	Brick Flat soling – from Maulvi Abdur Rahman house to late Abdur Halim House	
	Total G	
	Total (A+B+C+D+E+F+G)	
	VAT (H)	
	Grand Total (A+B+C+D+E+F+G+H)	
	ne Excel file named as <u>Annex 7 f</u> or LOT-5 Palongkhali Union -Ukhiya to submit detail financ mery Price Schedule)	ial proposal/Price Schedule
·	The state of A. Denneden Well, Denneden Con Deine and Color D. History	

SL#	Description	Total Price (BDT)
1	Boundary Wall- Rezurkul Gov Primary School	
	Total A	
Rajapalong U	nion (B. Deep Tube well Supply and Installation- Golzar Begum Prin	nary School in Siler Chhora)
SL#	Description	Total Price (BDT)
1	Deep Tube-well	
	Total B	
Rajapalong U	Inion (C. Boundary Wall- Doil Para Govt. Primary School) Ukhiya	•
SL#	Description	Total Price (BDT)
1	Boundary Wall- Doil Para Govt. Primary School	
	Total C	
Rajapalong U	nion (D. Football Bar- Dargabil Primary School) Ukhiya	
SL#	Description	Total Price (BDT)
1	Football Bar- Dargabil Primary School	
	Total D	
	Total (A+B+C+D)	
	VAT (E) on (A+B+C+D)	
	Grand Total (A+B+C+D+E)	

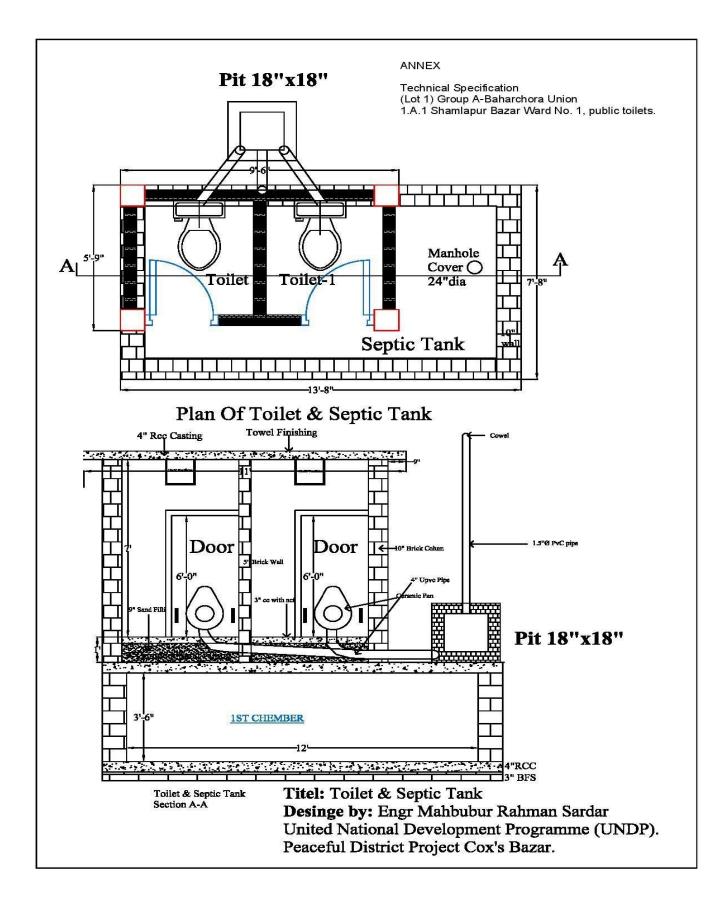
Please use the Excel file named as Annex 7 for LOT 6- Rajapalong Union Ukhiya to submit detail financial proposal/Price Schedule

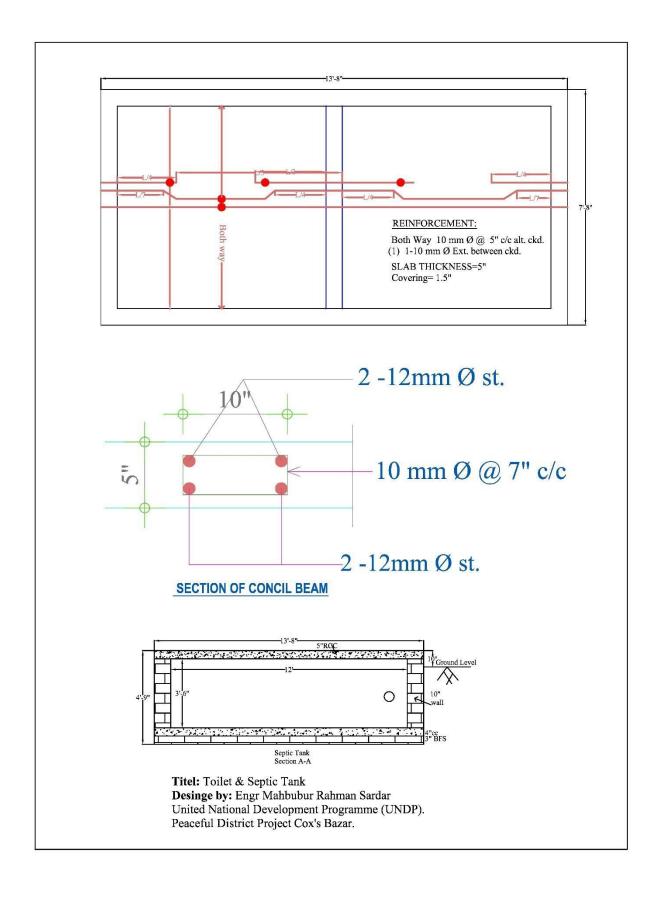
Compliance with Requirements

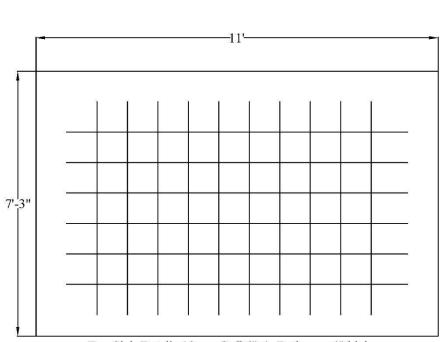
		Yo	ou Responses
	Yes, we will comply	No, we cannot comply	If you cannot comply, pls. indicate counter - offer
Minimum Technical specification			Click or tap here to enter text.

			Click or tap here to enter	
Delivery Lead Time			text.	
Validity of Quotation			Click or tap here to enter	
			text.	
Payment terms & schedule			Click or tap here to enter	
			text.	
Other requirements [pls. specify]			Click or tap here to enter	
			text.	
I, the undersigned, certify that I am duly auth	orized to sign this q	uotation and b	oind the company below in event that th	
quotation is accepted.				
	Auth	Authorized Signature:		
	Autii	Authorized Signature.		
Exact name and address of company				
Company NameClick or tap here to enter text.		Date: Click or tap here to enter text.		
Address: Click or tap here to enter text.	Nam	e:	Click or tap here to enter text.	
*	Func	Functional Title of Authorised		
Click or tap here to enter text.				
Phone No.: Click or tap here	to enter text.	itory.	Click or tap here to enter text.	
Email Address: Click or tap here to enter text.		Email Address: Click or tap here to enter text.		
email Address. Chek of tap here to enter te.	Al.			

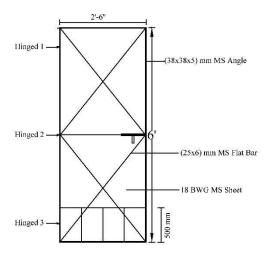
Ref: Annex-4: Design Layout, Plan ,Section, 01-01







Top Slab Details 10mm Ø @6"c/c Both way 4"thick

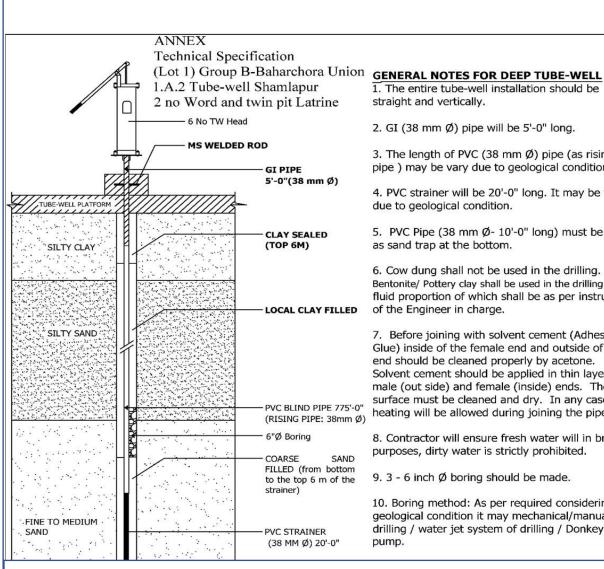


Detail of Steel Door Shutter With 18 BWG MS Sheet

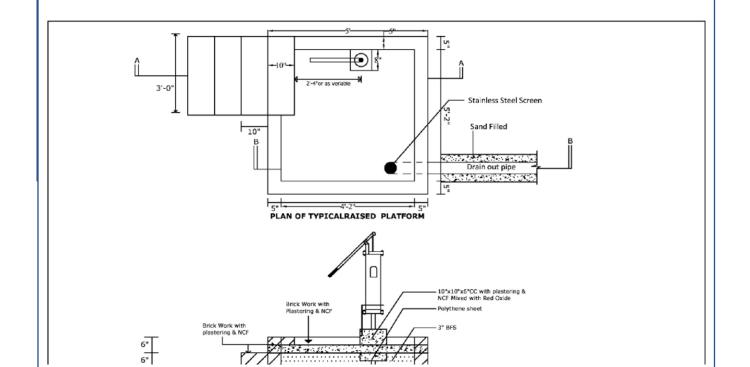
Titel: Toilet & Septic Tank

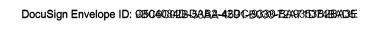
Desinge by: Engr Mahbubur Rahman Sardar United National Development Programme (UNDP). Peaceful District Project Cox's Bazar.

Ref: Annex-4: Design Layout, Plan ,Section, 02-02

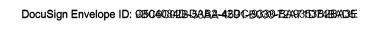


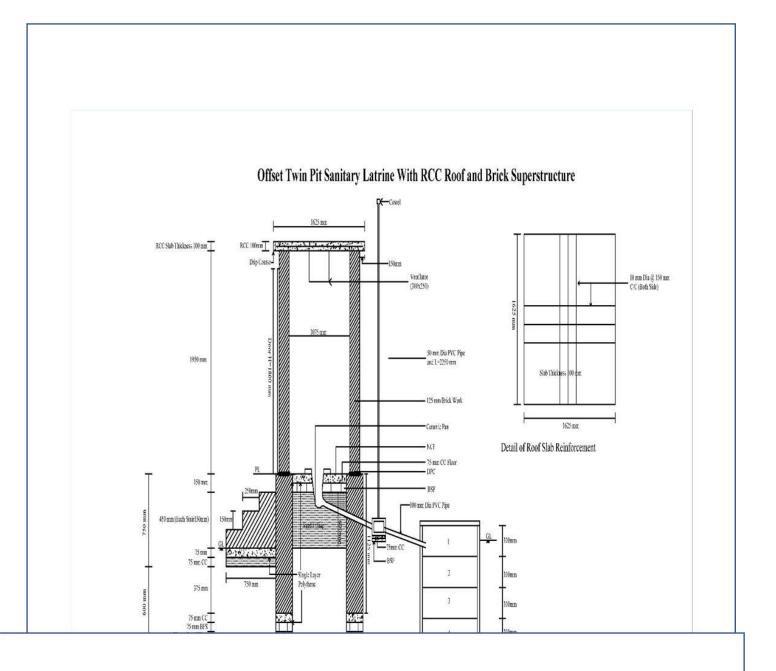
- 1. The entire tube-well installation should be straight and vertically.
- 2. GI (38 mm Ø) pipe will be 5'-0" long.
- 3. The length of PVC (38 mm Ø) pipe (as rising pipe) may be vary due to geological condition.
- 4. PVC strainer will be 20'-0" long. It may be very due to geological condition.
- 5. PVC Pipe (38 mm Ø- 10'-0" long) must be used as sand trap at the bottom.
- 6. Cow dung shall not be used in the drilling. Bentonite/ Pottery clay shall be used in the drilling. The fluid proportion of which shall be as per instruction of the Engineer in charge.
- 7. Before joining with solvent cement (Adhesive Glue) inside of the female end and outside of male end should be cleaned properly by acetone. Solvent cement should be applied in thin layer to male (out side) and female (inside) ends. The surface must be cleaned and dry. In any case no heating will be allowed during joining the pipes.
- 8. Contractor will ensure fresh water will in bring purposes, dirty water is strictly prohibited.
- 9. 3 6 inch Ø boring should be made.
- 10. Boring method: As per required considering geological condition it may mechanical/manual drilling / water jet system of drilling / Donkey pump.

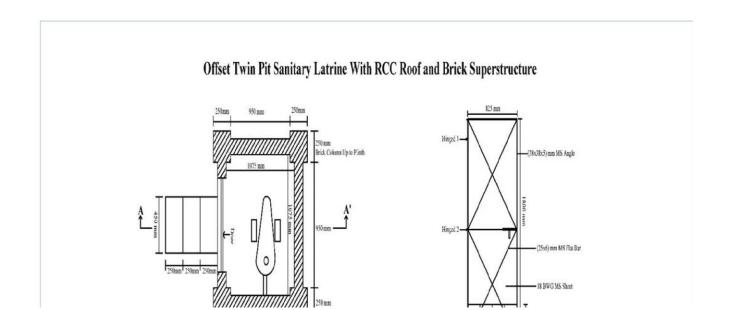


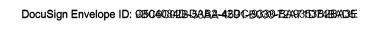


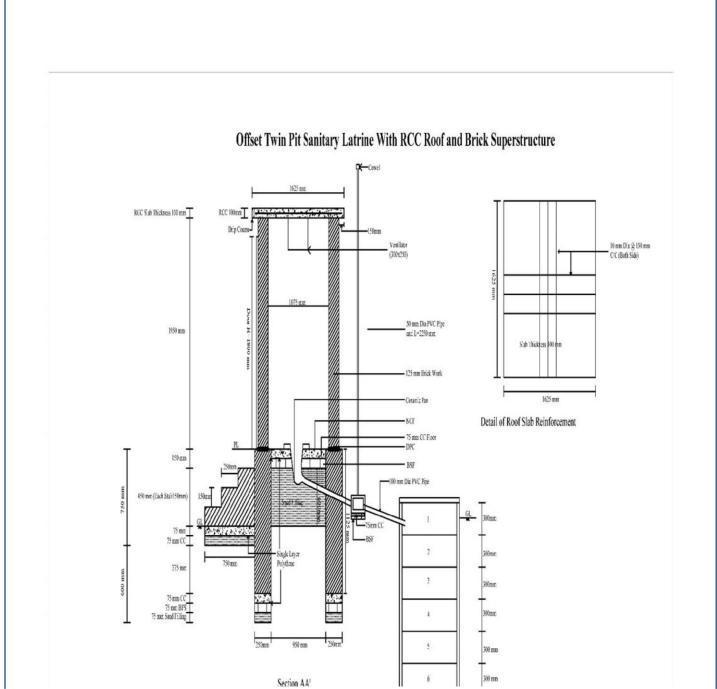
Offset Twin Pit Sanitary Latrine With RCC Roof and Brick Superstructure (38x28x5) mm MS Angle Hinged 2-- (25x6) om MS F.nt Bar - 18 BWG VS Sheet Detail of Steel Door Shutter With 18 BWG MS Sheet – 40 mm Thick RCC Pro-Cast Ring & Height 300 mm 8 mm Dia @ 125 mm C/C (Both Side) 1000 mm Ower Dia Pro-Cast Ring 1080mm D'a and 75mm StabThickness



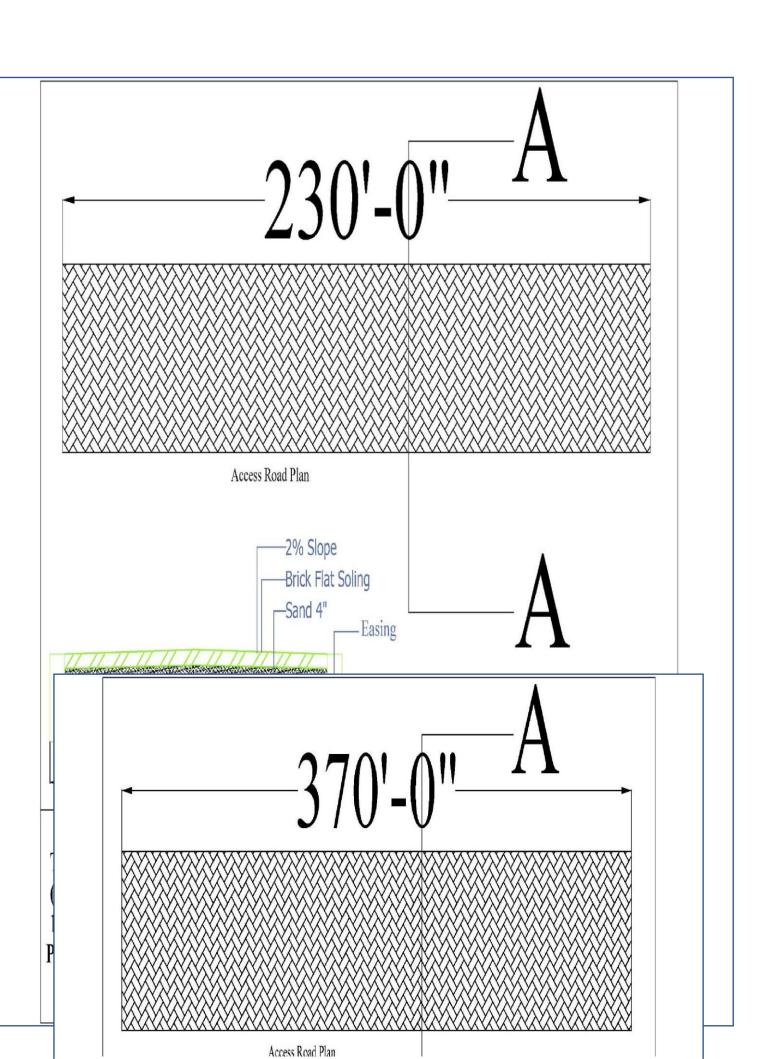




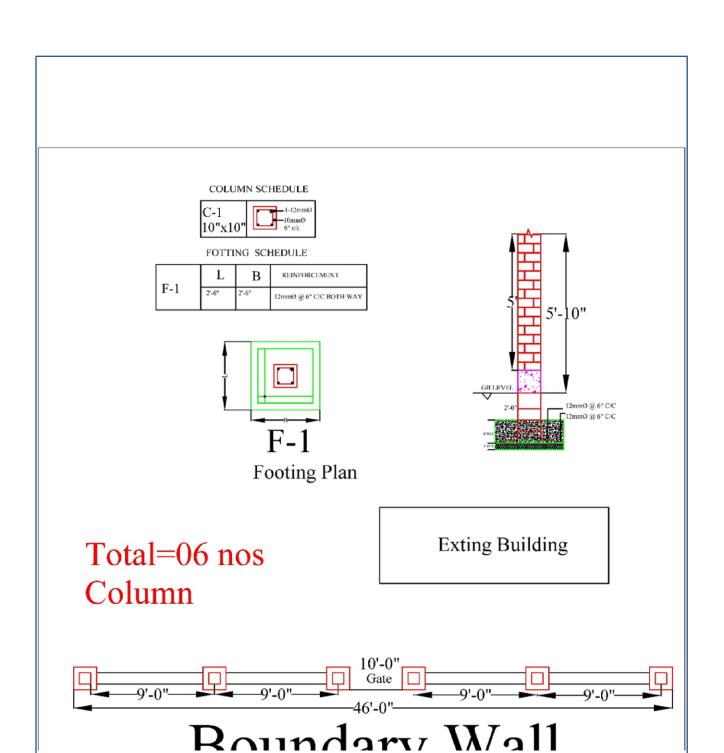


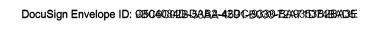


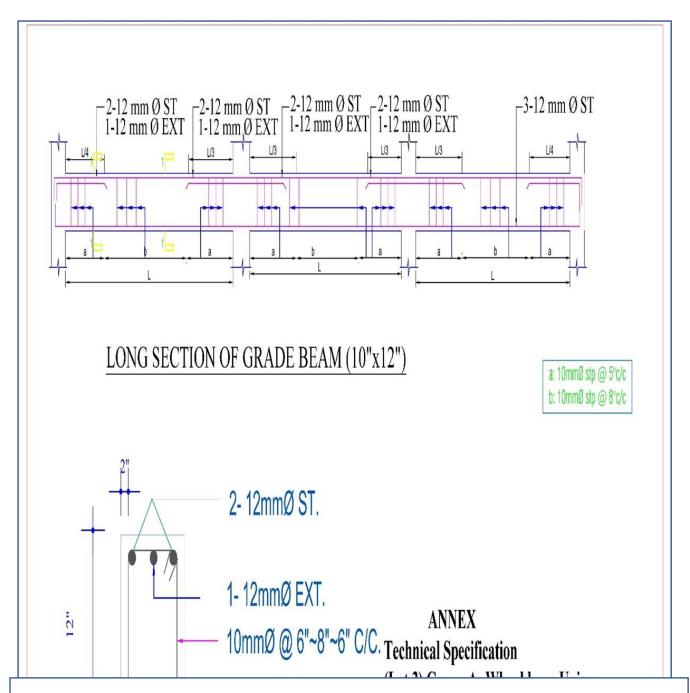
Ref: Annex-4: Design Layout, Plan ,Section, 04-04

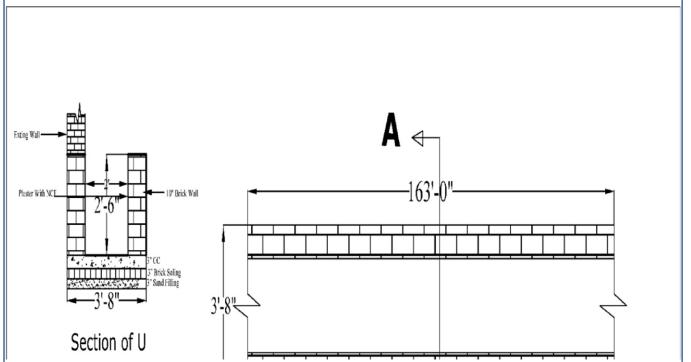


DocuSign Envelope ID: 950408478-53882-4390-8038-82493638-82493638-82493638-82493638-82493638-82493638-82493638-82493638-8249368				
Ref: Annex-4: Design Layout, Plan ,Section, 06-06				



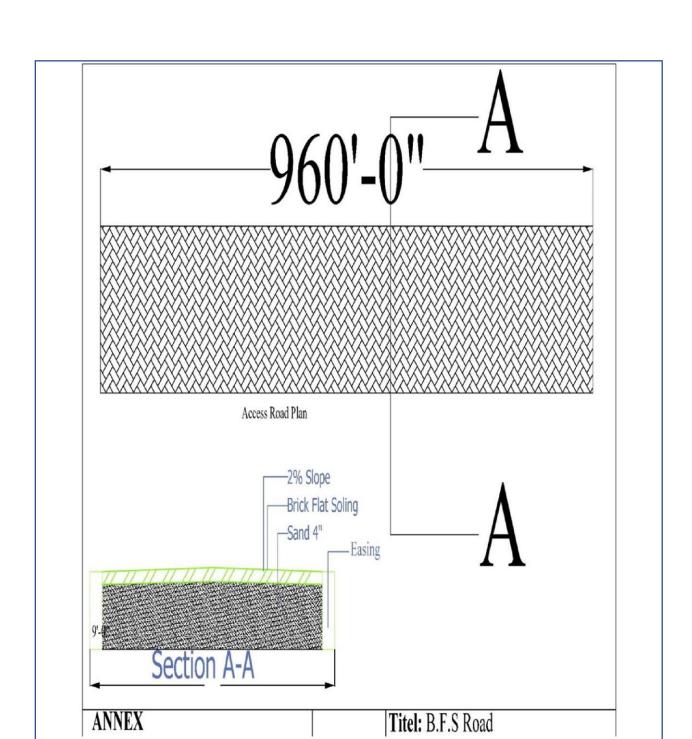




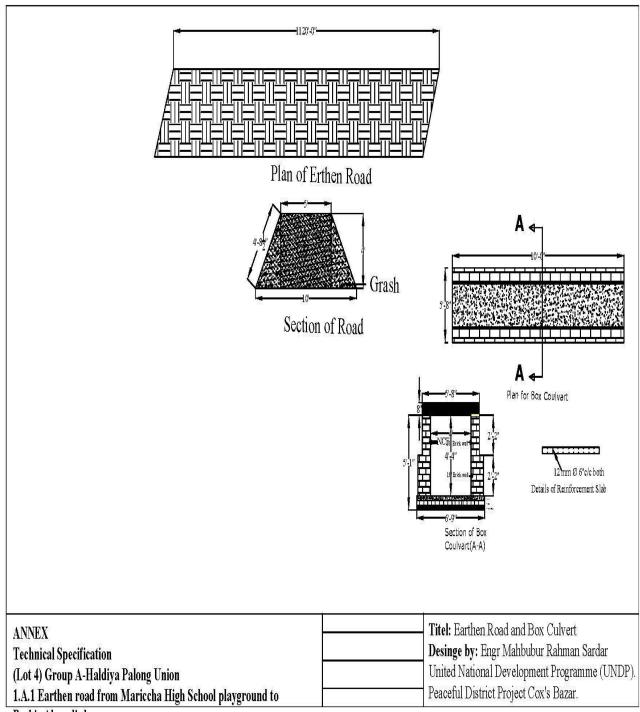


DocuSign Envelope ID): 9 506 0842B-54B2-439C-8638- <i>52</i>	49731531842BAA1345
- ·		

Ref: Annex-4: Design Layout, Plan ,Section, 08-08

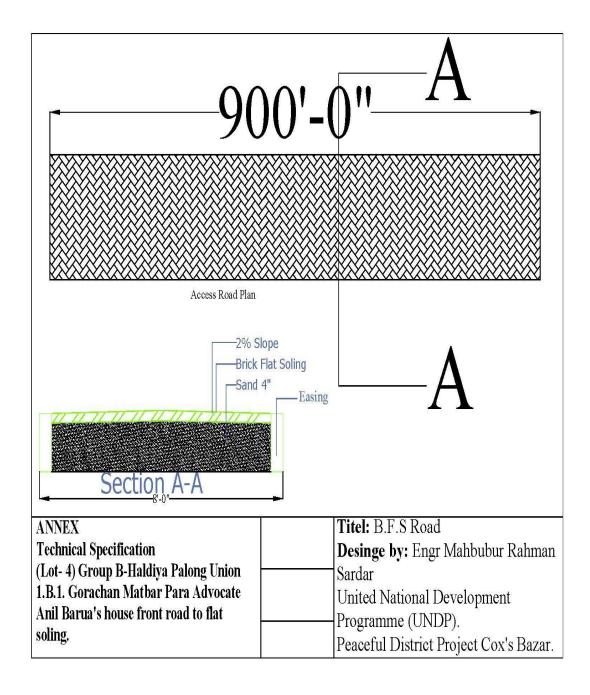


Ref: Annex-4: Design Layout, Plan ,Section, 09-09

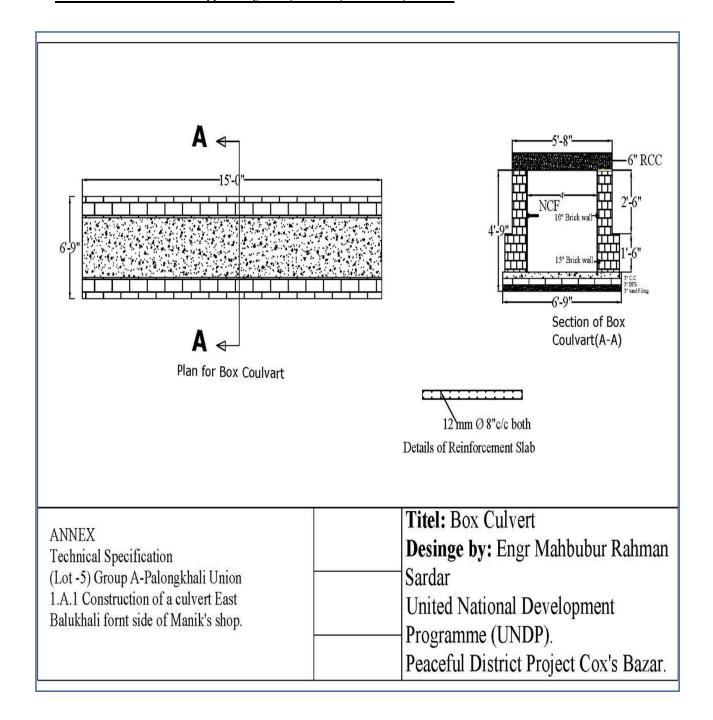


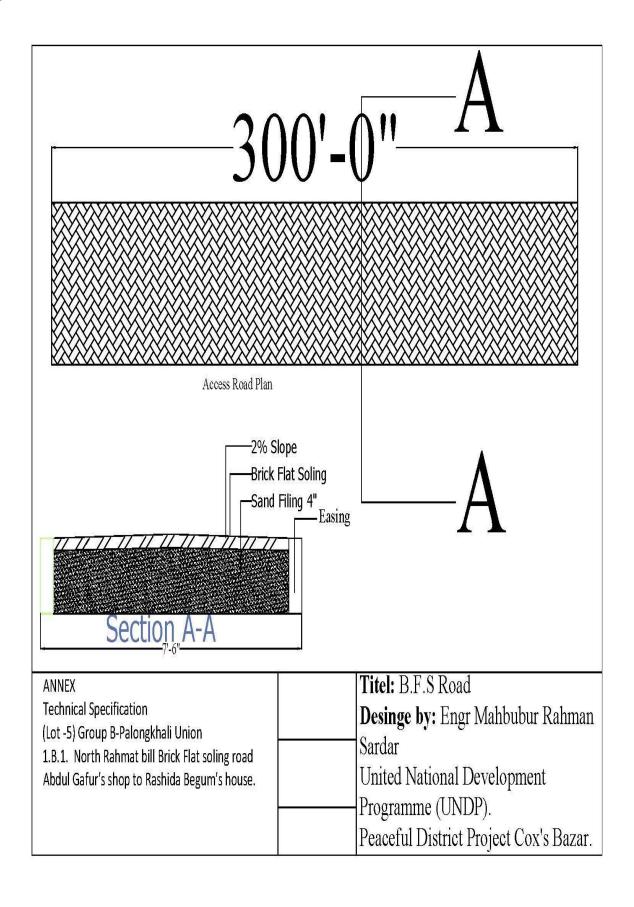
Bashir Ahmed's house.

Ref: Annex-4: Design Layout, Plan , Section, 10-10

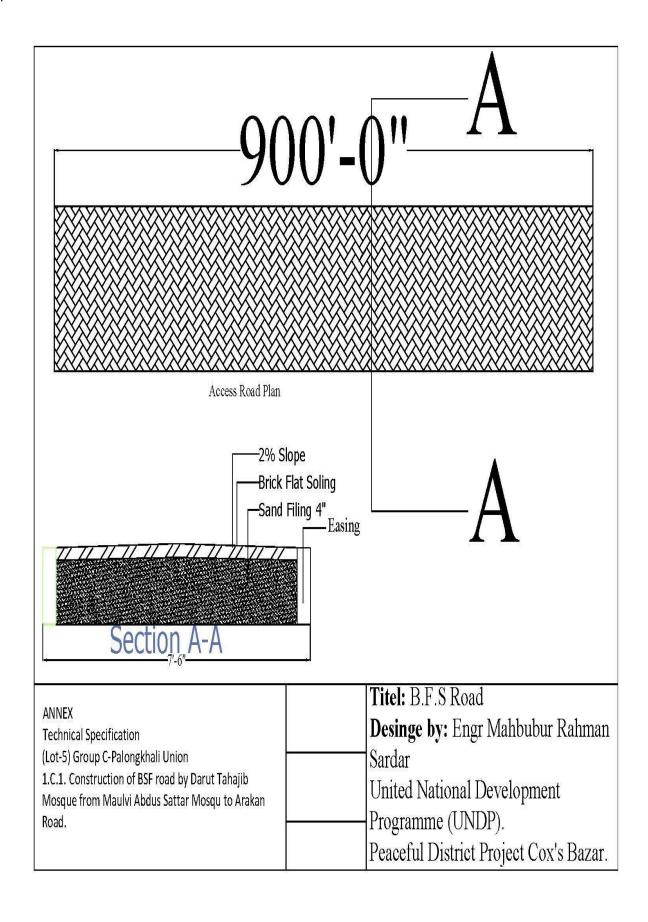


Ref: Annex-4: Design Layout, Plan ,Section, 11-11

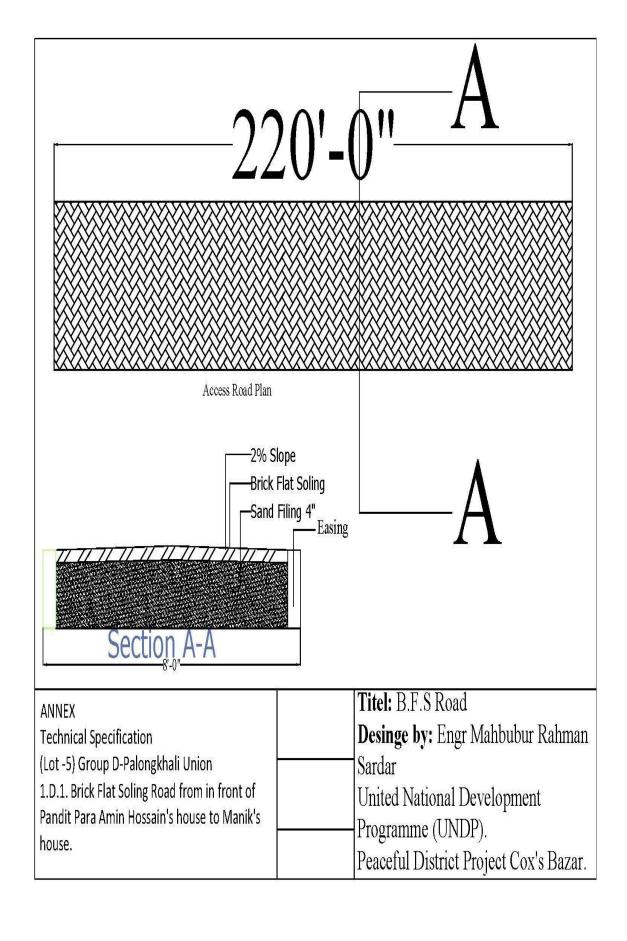




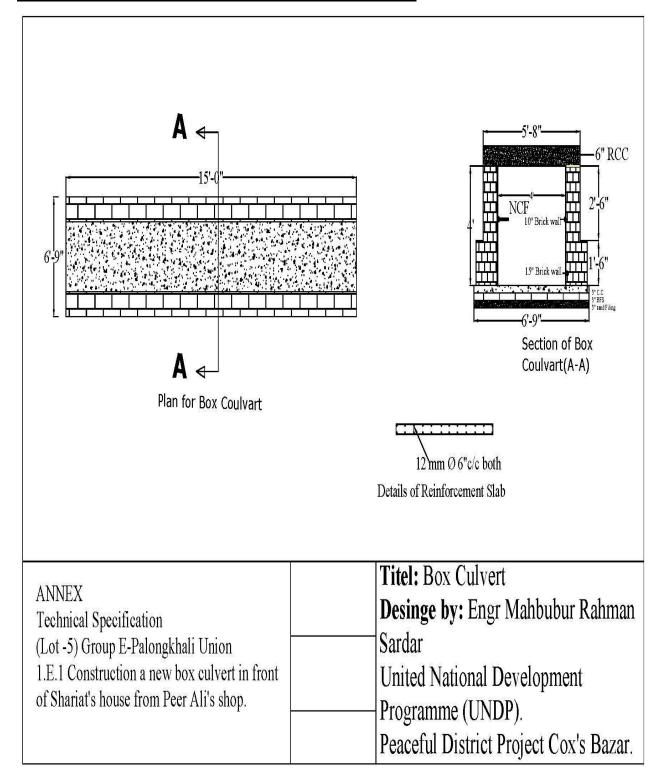
Ref: Annex-4: Design Layout, Plan ,Section, 13-13



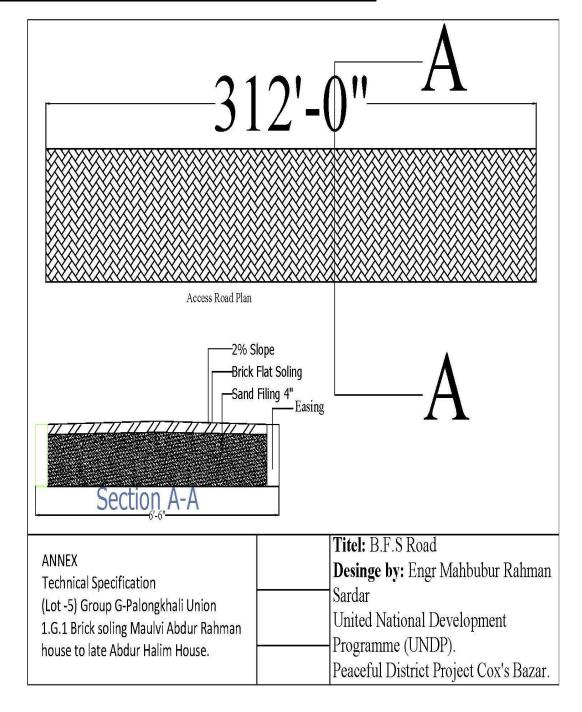
Ref: Annex-4: Design Layout, Plan , Section, 14-14

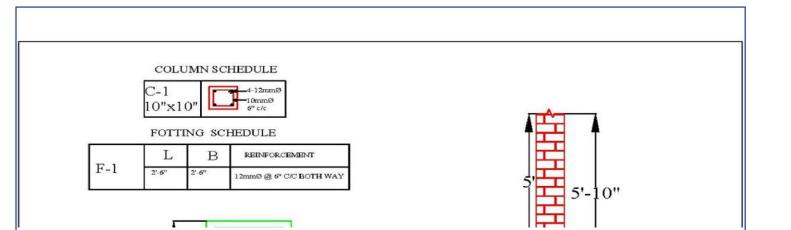


Ref: Annex-4: Design Layout, Plan ,Section, 15-15

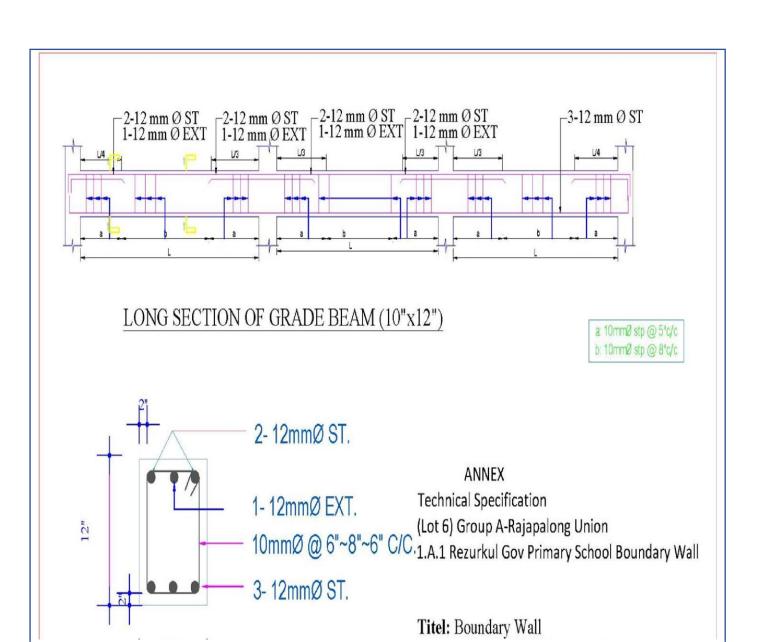


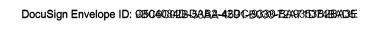
Ref: Annex-4: Design Layout, Plan , Section, 16-16



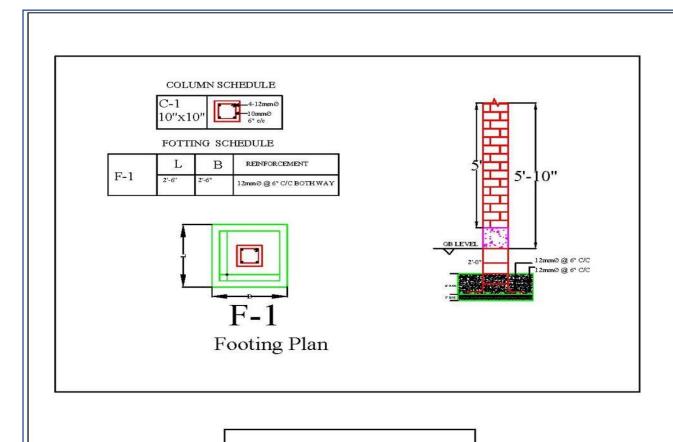


Ref: Annex-4: Design Layout, Plan ,Section, 17-17





Ref: Annex-4: Design Layout, Plan , Section, 18-18



Exting Building

Total=10
nos
Column

112'-0"

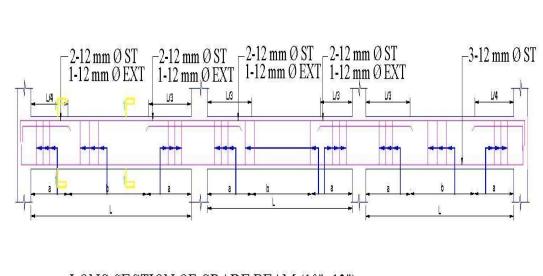
Gate

Boundary Wall

Titel: Boundary Wall

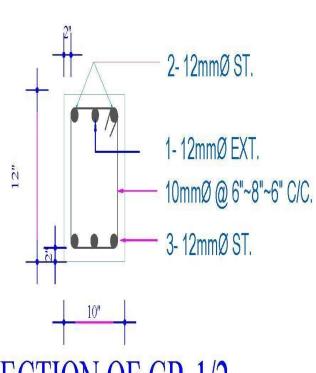
Desinge by: Engr Mahbubur Rahman Sardar United National Development Programme (UNDP).

Peaceful District Project Cox's Bazar.



LONG SECTION OF GRADE BEAM (10"x12")

a: 10mmØ stp @ 5"c/c b: 10mmØ stp @ 8"c/c



ANNEX

Technical Specification (Lot -6) Group C-Rajapalong Union

1.C.1 Doil Para Gov Primary School Boundary Wall

SECTION OF GB-1/2

Mixture Ratio 1:1.5:3

Titel: Boundary Wall

Desinge by: Engr Mahbubur Rahman

Sardar

United National Development

Programme (UNDP).

Peaceful District Project Cox's Bazar.

Annex-5: UNDP General Terms & Conditions:

1. DEFINITIONS

For the purpose of the Contract Documents the words and expressions below shall have the following meanings:

a)	"Employer" means the United Nations Development Programme (UNDP).
b)	"Contractor" means the person whose tender has been accepted and with whom the Contract has been entered into.
c)	"Engineer" means the person whose services have been engaged by UNDP to administer the Contract as provided therein, as will be notified in writing to the Contractor.
d)	"Contract" means the written agreement between the Employer and the Contractor, to which these General Conditions are annexed.
e)	"The Works" means the works to be executed and completed under the Contract.
f)	"Temporary Works" shall include items to be constructed which are not intended to be permanent and form part of the Works.
g)	"Drawings" and "Specifications" mean the Drawings and Specifications referred to in the Contract and any modification thereof or addition thereto furnished by the Engineer or submitted by the Contractor and approved in writing by the Engineer in accordance with the Contract.
h)	"Bill of Quantities" is the document in which the Contractor indicates the cost of the Works, on the basis of the foreseen quantities of items of work and the fixed unit prices applicable to them.
i)	"Contract Price" means the sum agreed in the Contract as payable to the Contractor for the execution and completion of the Works and for remedying of any defects therein in accordance with the Contract.
j)	"Site" means the land and other places on, under, in or through which the Works or Temporary Works are to be constructed.
	2. SINGULAR AND PLURAL

2. SINGULAR AND PLURAL

Words importing persons or parties shall include firms or companies and words importing the singular only shall also include the plural and vice versa where the context requires.

3. HEADINGS OR NOTES

The headings or notes in the Contract Documents shall not be deemed to be part thereof or be taken into consideration in their interpretation.

4. LEGAL RELATIONSHIPS

The Contractor and the sub-contractor(s), if any, shall have the status of an independent contractor vis-à-vis the Employer. The Contract Documents shall not be construed to create any contractual relationship of any kind between the Engineer and the Contractor, but the Engineer shall, in the exercise of his duties and powers under the Contract, be entitled to performance by the Contractor of its obligations, and to enforcement thereof. Nothing contained in the Contract Documents shall create any contractual relationship between the Employer or the Engineer and any subcontractor(s) of the Contractor.

5. GENERAL DUTIES/POWERS OF ENGINEER

a)	The Engineer shall provide administration of Contract as provided in the Contract Documents. In particular, he shall perform the
	functions hereinafter described.

b)	The Engineer shall be the Employer's representative vis-à-vis the Contractor during construction and until final payment is due.
	The Engineer shall advise and consult with the Employer. The Employer's instructions to the Contractor shall be forwarded
	through the Engineer. The Engineer shall have authority to act on behalf of the Employer only to the extent provided in the

Contract Documents as they may be amended in writing in accordance with the Contract. The duties, responsibilities and limitations of authority of the Engineer as the Employer's representative during construction as set forth in the Contract shall not be modified or extended without the written consent of the Employer, the Contractor and the Engineer.

- C) The Engineer shall visit the Site at intervals appropriate to the stage of construction to familiarize himself generally with the progress and quality of the Works and to determine in general if the Works are proceeding in accordance with the Contract Documents. On the basis of his on-site observations as an Engineer, he shall keep the Employer informed of the progress of the Works.
- d) The Engineer shall not be responsible for and will not have control or charge of construction means, methods, techniques, sequences or procedures, or for safety precautions and programs in connection with the Works or the Temporary Works. The Engineer shall not be responsible for or have control or charge over the acts or omissions of the Contractor (including the Contractor's failure to carry out the Works in accordance with the Contract) and of Sub-contractors or any of their agents or employees, or any other persons performing services for the Works, except if such acts or omissions are caused by the Engineer's failure to perform his functions in accordance with the contract between the Employer and the Engineer.
- e) The Engineer shall at all times have access to the Works wherever and whether in preparation or progress. The Contractor shall provide facilities for such access so that the Engineer may perform his functions under the Contract.
- f) Based on the Engineer's observations and an evaluation of the documentation submitted by the Contractor together with the invoices, the Engineer shall determine the amounts owed to the Contractor and shall issue Certificates for Payment as appropriate.
- g) The Engineer shall review and approve or take other appropriate action upon the Contractor's submittals such as Shop Drawings, Product Data and Samples, but only for conformity with the design concept of the Works and with the provisions of the Contract Documents. Such action shall be taken with reasonable promptness so as to cause no delay. The Engineer's approval of a specific item shall not indicate approval of an assembly of which the item is a component.

- h) The Engineer shall interpret the requirements of the Contract Documents and judge the performance thereunder by the Contractor. All interpretations and orders of the Engineer shall be consistent with the intent of and reasonably inferable from the Contract Documents and shall be in writing or in the form of drawings. Either party may make a written request to the Engineer for such interpretation. The Engineer shall render the interpretation necessary for the proper execution of the Works with reasonable promptness and in accordance with any time limit agreed upon. Any claim or dispute arising from the interpretation of the Contract Documents by the Engineer or relating to the execution or progress of the Works shall be settled as provided in Clause 71 of these General Conditions.
- Except as otherwise provided in the Contract, the Engineer shall have no authority to relieve the Contractor of any of his
 obligations under the Contract nor to order any work involving delay in completion of the Works or any extra payment to the
 Contractor by the Employer, or to make any variations to the Works.
- j) In the event of termination of the employment of the Engineer, the Employer shall appoint another suitable professional to perform the Engineer's duties.
- k) The Engineer shall have authority to reject work which does not conform to the Contract Documents. Whenever, in his opinion, he considers it necessary or advisable for the implementation of the intent of the Contract Documents, he will have authority to require special inspection or testing of the work whether or not such work be then fabricated, installed or completed. However, neither the Engineer's authority to act nor any reasonable decision made by him in good faith either to exercise or not to exercise such authority shall give rise to any duty or responsibility of the Engineer to the Contractor, any subcontractor, any of their agents or employees, or any other person performing services for the Works.
- The Engineer shall conduct inspections to determine the dates of Substantial Completion and Final Completion, shall receive and
 forward to the Employer for the Employer's review written warranties and related documents required by the Contract and
 assembled by the

Contractor, and shall issue a final Certificate for Payment upon compliance with the requirements of Clause 47 hereof and in accordance with the Contract.

m) If the Employer and Engineer so agree, the Engineer shall provide one or more Engineer's Representative(s) to assist the Engineer in carrying out his responsibilities at the site. The Engineer shall notify in writing to the Contractor and the Employer the duties, responsibilities and limitations of authority of any such Engineer's Representative(s).

6. CONTRACTOR'S GENERAL OBLIGATIONS/RESPONSIBILITIES 6.1.Obligation to Perform in Accordance with Contract

The Contractor shall execute and complete the Works and remedy any defects therein in strict accordance with the Contract, with due care and diligence and to the satisfaction of the Engineer, and shall provide all labor, including the supervision thereof, materials, Constructional Plant and all other things, whether of a temporary or permanent nature, required in and for such execution, completion and remedying of defects, as far as the necessity for providing the same is specified in or is reasonably to be inferred from the Contract. The Contractor shall comply with and adhere strictly to the Engineer's instructions and directions on any matter, touching or concerning the Works.

6.2 Responsibility for Site Operations

The Contractor shall take full responsibility for the adequacy, stability and safety of all site operations and methods of construction, provided that the Contractor shall not be responsible, except as may be expressly provided in the Contract, for the design or specification of the Permanent Works or of any Temporary Works prepared by the Engineer.

6.3 Responsibility for Employees

The Contractor shall be responsible for the professional and technical competence of his employees and will select for work under this Contract, reliable individuals who will perform effectively in the implementation of the Contract, respect local customs and conform to a high standard of moral and ethical conduct.

6.4 Source of Instructions

The Contractor shall neither seek nor accept instructions from any authority external to the Employer, the Engineer or their authorized representatives in connection with the performance of his services under this Contract. The Contractor shall refrain from any action which may adversely affect the Employer and shall fulfill his commitments with fullest regard for the interest of the Employer.

6.5 Officials Not to Benefit

The Contractor warrants that no official of the Employer has been or shall be admitted by the Contractor to any direct or indirect benefit arising from this Contract or the award thereof.

The Contractor agrees that breach of this provision is a breach of an essential term of the Contract.

6.6 Use of Name, Emblem or Official Seal of UNDP or the United Nations

The Contractor shall not advertise or otherwise make public the fact that he is performing, or has performed services for the Employer or use the name, emblem or official seal of the Employer or the United Nations or any abbreviation of the name of the Employer or the United Nations for advertising purposes or any other purposes.

6.7 Confidential Nature of Documents

All maps, drawings, photographs, mosaics, plans, reports, recommendations, estimates, documents and all other data compiled by or received by the Contractor under the Contract shall be the property of the Employer, shall be treated as confidential and shall be delivered only to the duly authorized representative of the Employer on completion of the Works; their contents shall not be made known by the Contractor to any person other than the personnel of the Contractor performing services under this Contract without the prior written consent of the Employer.

7. ASSIGNMENT AND SUBCONTRACTING 7.1. Assignment of

Contract

The Contractor shall not, except after obtaining the prior written approval of the Employer, assign, transfer, pledge or make other disposition of the Contract or any part thereof or of any of the Contractor's rights, claims or obligations under the Contract.

7.2 Subcontracting

In the event the Contractor requires the services of subcontractors, the Contractor shall obtain the prior written approval of the Employer for all such subcontractors. The approval of the Employer shall not relieve the Contractor of any of his obligations under the Contract, and the terms of any subcontract shall be subject to and be in conformity with the provisions of the Contract.

7.3 Assignment of Subcontractor's Obligations

In the event of a subcontractor having undertaken towards the Contractor in respect of the work executed or the goods, materials, Plant or services supplied by such subcontractor for the Works, any continuing obligation extending for a period exceeding that of the Defects Liability Period under the Contract, the Contractor shall at any time after the expiration of such Period, assign to the Employer, at the Employer's request and cost, the benefit of such obligation for the unexpired duration thereof.

8. DRAWINGS 8.1.Custody of drawings

The drawings shall remain in the sole custody of the Employer but two (2) copies thereof shall be furnished to the Contractor free of cost. The Contractor shall provide and make at his own expense any further copies required by him. At the completion of the Works, the Contractor shall return to the Employer all drawings provided under the Contract.

8.2 One copy of Drawings to be kept on Site

One copy of the Drawings furnished to the Contractor as aforesaid shall be kept by the Contractor on the Site and the same shall at all reasonable times be available for inspection and use by the Engineer and by any other person authorized in writing by the Engineer.

8.3 Disruption of Progress

The Contractor shall give written notice to the Engineer whenever planning or progress of the Works is likely to be delayed or disrupted unless any further drawing or order, including a direction, instruction or approval, is issued by the Engineer within a

reasonable time. The notice shall include details of drawing or order required and of why and by when it is required and of any delay or disruption likely to be suffered if it is late.

9. WORK BOOK

The Contractor shall maintain a Work Book at the Site with numbered pages, in one original and two copies. The Engineer shall have full authority to issue new orders, drawings and instructions to the Contractor, from time to time and as required for the correct execution of the Works. The Contractor shall be bound to follow such orders, drawings and instructions.

Every order shall be dated and signed by the Engineer and the Contractor, in order to account for its receipt.

Should the Contractor want to refuse an order in the Work Book, he shall so inform the Employer, through the Engineer, by means of an annotation in the Work Book made within three (3) days from the date of the order that the Contractor intends to refuse. Failure by the Contractor to adhere to this procedure shall result in the order being deemed accepted with no further possibility of refusal.

The original of the Work Book shall be delivered to the Employer at the time of Final Acceptance of the Works. A copy shall be kept by the Engineer and another copy by the Contractor.

10. PERFORMANCE SECURITY

- a) As guarantee for his proper and efficient performance of the Contract, the Contractor shall on signature of the Contract furnish the Employer with a Performance Security issued for the benefit of the Employer. The amount and character of such security (bond or guarantee) shall be as indicated in the Contract.
- b) The Performance Bond or Bank Guarantee must be issued by an acceptable insurance company or accredited bank, in the format included in Appendix I to these General Conditions, and must be valid up to twenty-eight days after issuance by the Engineer of the Certificate of Final Completion. The Performance Bond or Bank Guarantee shall be returned to the Contractor within twentyeight days after the issuance by the Engineer of the Certificate of Final Completion, provided that the Contractor shall have paid all money owed to the Employer under the Contract.
- C) If the surety of the Performance Bond or Bank Guarantee is declared bankrupt or becomes insolvent or its right to do business in the country of execution of the Works is terminated, the Contractor shall within five (5) days thereafter substitute another bond or guarantee and surety, both of which must be acceptable to the Employer.

11. INSPECTION OF SITE

The Contractor shall be deemed to have inspected and examined the site and its surroundings and to have satisfied himself before submitting his Tender and signing the Contract as to all matters relative to the nature of the land and subsoil, the form and nature of the Site, details and levels of existing pipe lines, conduits, sewers, drains, cables or other existing services, the quantities and nature of the work and materials necessary for the completion of the Works, the means of access to the Site, and the accommodation he may require, and in general to have himself obtained all necessary information as to risk contingencies, climatic, hydrological and natural conditions and other circumstances which may influence or affect his Tender, and no claims will be entertained in this connection against the Employer.

12. SUFFICIENCY OF TENDER

The Contractor shall be deemed to have satisfied himself before tendering as to the correctness and sufficiency of his Tender for the construction of the Works and of the rates and prices, which rates and prices shall, except in so far as it is otherwise provided in the Contract, cover all his obligations under the Contract and all matters and things necessary for the proper execution and completion of the Works.

13. PROGRAMME OF WORK TO BE FURNISHED

Within the time limit specified in the Contract, the Contractor shall submit to the Engineer for his consent a detailed Programme of Work showing the order of procedure and the method in which he proposes to carry out the Works. In preparing his Programme of Work the Contractor shall pay due regard to the priority required by certain works. Should the Engineer, during the progress of work, require further modifications to the Programme of Work, the Contractor shall review the said program. The Contractor shall also whenever required by the Engineer submit particulars in writing of the Contractor's arrangements for carrying out the Works and of the Constructional Plant and Temporary Works which the Contractor intends to supply, use or construct as the case may be. The submission of such program, or any modifications thereto, or the particulars required by the Engineer, shall not relieve the

Contractor of any of his duties or obligations under the Contract nor shall the incorporation of any modification to the Programme of Work either at the commencement of the contract or during its course entitle the Contractor to any additional payments in consequence thereof.

14. WEEKLY SITE MEETING

A weekly site meeting shall be held between the UNDP Project Coordinator or engineer, if any, the representative of the Contractor and the Engineer or the Engineer's Representative, in order to verify that the Works are progressing normally and are executed in accordance with the Contract.

15. CHANGE ORDERS

- a) The Engineer may instruct the Contractor, with the approval of the Employer and by means of Change Orders, all variations in quantity or quality of the Works, in whole or in part, that are deemed necessary by the Engineer.
- b) Processing of change orders shall be governed by clause 48 of these General Conditions.

16. CONTRACTOR'S SUPERINTENDENCE

The Contractor shall provide all necessary superintendence during the execution of the Works and as long thereafter as the Engineer may consider necessary for the proper fulfillment of the Contractor's obligations under the Contract. The Contractor or a competent and authorized agent or representative of the Contractor approved in writing by the Engineer, which approval may at any time be withdrawn, shall be constantly on the site and shall devote his entire time to the superintendence of the Works. Such authorized agent or representative shall receive on behalf of the Contractor directions and instructions from the Engineer. If the approval of such agent or representative shall be withdrawn by the Engineer, as provided in Clause 17(2) hereinafter, or if the removal of such agent or representative shall be requested by the Employer under Clause 17(3) hereinafter, the Contractor shall as soon as it is practicable after receiving notice of such withdrawal remove the agent or representative from the Site, and replace him by another agent or representative approved by the Engineer. Notwithstanding the provision of Clause 17(2) hereinafter, the Contractor shall not thereafter employ, in any capacity whatsoever, a removed agent or representative again on the Site.

17. CONTRACTOR'S EMPLOYEES

- a) The Contractor shall provide and employ on the Site in connection with the execution and completion of the Works and the remedying of any defects therein:
- 1. Only such technical assistants as are skilled and experienced in their respective callings and such sub-agent foremen and leading hands as are competent to give proper supervision to the work they are required to supervise, and
- ii. Such skilled, semi-skilled, and unskilled labour as is necessary for the proper and timely execution and completion of the Works.

- b) The Engineer shall be at liberty to object to and require the Contractor to remove forthwith from the Works any person employed by the Contractor in or about the execution or completion of the Works, who in the opinion of the Engineer is misconducting himself, or is incompetent or negligent in the proper performance of his duties, or whose employment is otherwise considered reasonably by the Engineer to be undesirable, and such person shall not be again employed on the Site without the written permission of the Engineer. Any person so removed from the Works shall be replaced as soon as reasonably possible by a competent substitute approved by the Engineer.
- C) Upon written request by the Employer, the Contractor shall withdraw or replace from the Site any agent, representative or other personnel who does not conform to the standards set forth in paragraph (1) of this Clause. Such request for withdrawal or replacement shall not be considered as termination in part or in whole of this Contract. All costs and additional expenses resulting from any withdrawal or replacement for whatever reason of any of the Contractor's personnel shall be at the Contractor's expense.

18. SETTING-OUT

The Contractor shall be responsible for the true and proper setting out of the Works in relation to original points, lines and levels of reference given by the Engineer in writing and for the correctness of the position, levels, dimensions and alignment of all parts of the Works and for the provision of all necessary instruments, appliances and labor in connection therewith. If, at any time during the progress of the Works, any error shall appear or arise in the position, levels, dimensions or alignment of any part of the Works, the Contractor, on being required so to do by the Engineer, shall, at his own cost, rectify such error to the satisfaction of the Engineer.

19. WATCHING AND LIGHTING

The Contractor shall in connection with the Works provide and maintain at his own cost all lights, guards, fencing and watching when and where necessary or required by the Engineer or by any duly constituted authority for the protection of the Works and the materials and equipment utilized therefor or for the safety and convenience of the public or others.

20. CARE OF WORKS

- a) From the commencement date of the Works to the date of substantial completion as stated in the Certificate of Substantial Completion, the Contractor shall take full responsibility for the care thereof and of all Temporary Works. In the event that any damage or loss should happen to the Works or to any part thereof or to any Temporary Works from any cause whatsoever (save and except as shall be due to
 - to the Works or to any part thereof or to any Temporary Works from any cause whatsoever (save and except as shall be due to <u>Force Majeure</u> as defined in Clause 66 of these General Conditions), the Contractor shall at his own cost repair and make good the same so that, at completion, the Works shall be in good order and condition and in conformity in every respect with the requirements of the Contract and the Engineer's instructions. The Contractor shall also be liable for any damage to the Works occasioned by him in the course of any operations carried out by him for the purpose of complying with his obligations Clause 47 hereof.
- b) The Contractor shall be fully responsible for the review of the Engineering design and details of the Works and shall inform the Employer of any mistakes or incorrectness in such design and details which would affect the Works.

21. INSURANCE OF WORKS, ETC.

Without limiting his obligations and responsibilities under Clause 20 hereof, the Contractor shall insure immediately following signature of this Contract, in the joint names of the Employer and the Contractor (a) for the period stipulated in Clause 20(1) hereof, against all loss or damage from whatever cause arising, other than cause of Force majeure as defined in clause 66 of these General Conditions, and (b) against loss or damage for which the Contractor is responsible, in such manner that the Employer and the Contractor are covered for the period stipulated in Clause 20 (1) hereof and are also covered during the Defects Liability Period for loss or damage arising from a cause occurring prior to the commencement of the Defects Liability Period and for any loss or damage occasioned by the Contractor in the course of any operations carried out by him for the purpose of complying with his obligations under Clause 47 hereof:

a)	The Works, together with the materials and Plant for incorporation therein, to their full replacement cost, plus an additional sum of
	ten (10) per cent of such replacement cost, to cover any additional costs of and incidental to the rectification of loss or damage
	including professional fees and the cost of demolishing and removing any part of the Works and of removing debris of whatsoever
	nature:

- The Contractor's equipment and other things brought on to the Site by the Contractor to the replacement value of such equipment and other things;
- C) An insurance to cover the liabilities and warranties of Section 52(4);

Such insurance shall be effected with an insurer and in terms approved by the Employer, which approval shall not be unreasonably withheld, and the Contractor shall, whenever required, produce to the Engineer the policy or policies of insurance and the receipts for payment of the current premiums.

22. DAMAGE TO PERSONS AND PROPERTY

The Contractor shall (except if and so far as the Contract provides otherwise) indemnify, hold and save harmless and defend at his own expense the Employer, its officers, agents, employees and servants from and against all suits, claims, demands, proceedings, and liability of any nature or kind, including costs and expenses, for injuries or damages to any person or any property whatsoever which may arise out of or in consequence of acts or omissions of the Contractor or its agents, employees, servants or subcontractors in the execution of the Contract. The provision of this Clause shall extend to suits, claims, demands, proceedings and liability in the nature of workmen's compensation claims and arising out of the use of patented inventions and devices. Provided always that nothing herein contained shall be deemed to render the Contractor liable for or in respect of or with respect to:

- a) The permanent use or occupation of land by the Works or any part thereof;
- b) The right of the Employer to construct the Works or any part thereof on, over, under, or through any land.
- C) Interference whether temporary or permanent with any right of light, airway or water or other easement or quasi-easement which is the unavoidable result of the construction of the Works in accordance with the Contract.
- d) Death, injuries or damage to persons or property resulting from any act or neglect of the Employer, his agents, servants or other contractors, done or committed during the validity of the Contract.

23. LIABILITY INSURANCE

23.1. Obligation to take out Liability Insurance

Before commencing the execution of the Works, but without limiting his obligations and responsibility under Clause 20 hereof, the Contractor shall insure against his liability for any death, material or physical damage, loss or injury which may occur to any property, including that of the Employer or to any person, including any employee of the Employer by or arising out of the execution of the Works or in the carrying out of the Contract, other than due to the matters referred to in the proviso to Clause 22 hereof. **23.2.** Minimum Amount of Liability Insurance

Such insurance shall be effected with an insurer and in terms approved by the Employer, which approval shall not be unreasonably withheld, and for at least the amount specified in the contract. The Contractor shall, whenever required by the

Employer or the Engineer, produce to the Engineer the policy or policies of insurance and the receipts for payment of the current premiums.

23.3. Provision to Indemnify Employer

The insurance policy shall include a provision whereby, in the event of any claim in respect of which the Contractor would be entitled to receive indemnity under the policy, being brought or made against the Employer, the insurer shall indemnify the Employer against such claims and any costs, charges and expenses in respect thereof.

24. ACCIDENT OR INJURY TO WORKMEN

a) The Employer shall not be liable for or in respect of any damages or compensation payable at law in respect or in consequence of any accident or injury to any workman or other person in the employment of the Contractor or any sub-Contractor, save and except an accident or injury resulting from any act or default of the Employer, his agents or servants. The Contractor shall indemnify, hold and save harmless the Employer against all such damages and compensation, save and except as aforesaid, and against all claims, proceedings, costs, charges and expenses whatsoever in respect thereof or in relation thereto.

b) Insurance Against Accident, etc., to Workmen

The Contractor shall insure against such liability with an insurer approved by the Employer, which approval shall not be unreasonably withheld, and shall continue such insurance during the whole of the time that any persons are employed by him for the Works and shall, when required, produce to the Engineer such policy of insurance and the receipt for payment of the current premium. Provided always that, in respect of any persons employed by any subcontractor, the Contractor's obligation to insure as aforesaid under this sub-clause shall be satisfied if the subcontractor shall have insured against the liability in respect of such persons in such manner that the Employer is indemnified under the policy but the Contractor shall require such subcontractor to produce to the Engineer when required such policy of insurance and the receipt for the current premium, and obtain the insertion of a provision to that effect in its contract with the subcontractor.

25. REMEDY ON CONTRACTOR'S FAILURE TO INSURE

If the Contractor shall fail to effect and keep in force any of the insurances referred to in Clauses 21, 23 and 24 hereof, or any other insurance which he may be required to effect under the terms of the Contract, the Employer may in any such case effect and keep in force any such insurance and pay such premium as may be necessary for that purpose and from time to time deduct the amount so paid by the Employer as aforesaid from any monies due or which may become due to the Contractor, or recover the same as a debt due from the Contractor.

26. COMPLIANCE WITH STATUTES, REGULATIONS, ETC.

- a) The Contractor shall give all notices and pay all fees and charges required to be given or paid by any national or State Statutes, Ordinances, Laws, Regulations or By-laws, or any local or other duly constituted authority in relation to the execution of the Works or of any Temporary Works and by the Rules and Regulations of all public bodies and companies whose property or rights are affected or may be affected in any way by the Works or any Temporary Works.
- b) The Contractor shall conform in all respects with any such Statutes, Ordinances, Laws, Regulations, By-laws or requirements of any such local or other authority which may be applicable to the Works and shall keep the Employer indemnified against all penalties and liabilities of every kind for breach of any such Statutes, Ordinances, Laws, Regulations, By-laws or requirements.

27. FOSSILS, ETC.

All fossils, coins, articles of value or antiquity and structures and other remains or things of geological or archaeological interest discovered on the Site of the Works shall as between the Employer and the Contractor be deemed to be the absolute property of the Employer and the Contractor shall take reasonable precautions to prevent his workmen or any other persons from removing or damaging any such article or thing and shall immediately upon discovery thereof and before removal acquaint the Employer of such discovery and carry out at the expense of the Employer the Engineer's orders as to the disposal of the same.

28. COPYRIGHT, PATENT AND OTHER PROPRIETARY RIGHTS, AND ROYALTIES

- a) The Contractor shall hold harmless and fully indemnify the Employer from and against all claims and proceedings for or on account of infringement of any patent rights, design trademark or name or other protected rights in respect of any Plant, equipment, machine, work or material used for or in connection with the Works or Temporary Works and from and against all claims, demands proceedings, damages, costs, charges and expenses whatsoever in respect thereof or in relation thereto, except where such infringement results from compliance with the design or Specification provided by the Engineer.
- b) Except where otherwise specified, the Contractor shall pay all tonnage and other royalties, rent and other payments or compensation, if any, for getting stone, sand, gravel, clay or other materials required for the Works or Temporary Works.

29. INTERFERENCE WITH TRAFFIC AND ADJOINING PROPERTIES

All operations necessary for the execution of the Works and for the Construction of any Temporary Works shall, so far as compliance with the requirements of the Contract permits, be carried on so as not to interfere unnecessarily or improperly with the public convenience, or the access to, use and occupation of, public or private roads and footpaths to or of properties whether in the possession of the Employer or of any other person. The Contractor shall hold harmless and indemnify the Employer in respect of all claims, demands, proceedings, damages, costs, charges and expenses whatsoever arising out of or in relation to any such matters in so far as the Contractor is responsible therefor.

30. EXTRAORDINARY TRAFFIC AND SPECIAL LOADS

- a) The Contractor shall use every reasonable means to prevent any of the roads or bridges communicating with or on the routes to the Site from being damaged by any traffic of the Contractor or any of his sub-contractors and, in particular, shall select routes, choose and use vehicles and restrict and distribute loads so that any such extraordinary traffic as will inevitably arise from the moving of plant and material from and to the Site shall be limited as far as reasonably possible and so that no unnecessary damage may be occasioned to such roads and bridges.
- b) Should it be found necessary for the Contractor to move any load of Constructional Plant, machinery, preconstructed units or parts of units of work, or other thing, over part of a road or bridge, the moving whereof is likely to damage any such road or bridge unless special protection or strengthening is carried out, then the Contractor shall before moving the load on to such road or bridge, save insofar as the Contract otherwise provide, be responsible for and shall pay for the cost of strengthening any such bridge or altering or improving any such road to avoid such damage, and the Contractor shall indemnify and keep the Employer indemnified against all claims for damage to any such road or bridge caused by such movement, including such claim as may be made directly against the Employer, and shall negotiate and pay all claims arising solely out of such damage.

31. OPPORTUNITIES FOR OTHER CONTRACTORS

The Contractor shall in accordance with the requirements of the Engineer afford all reasonable opportunities for carrying out their work to any other contractors employed by the Employer and their workmen and to the workmen of the Employer and of any other duly constituted authorities who may be employed in the execution on or near the Site of any work not included in the Contract or of any contract which the Employer may enter into in connection with or ancillary to the Works. If work by other contractors of the Employer as above-mentioned involves the Contractor in any direct expenses as a result of using his Site facilities, the Employer shall consider payment to the Contractor of such sum or sums as may be recommended by the Engineer.

32. CONTRACTOR TO KEEP SITE CLEAN

During the progress of the Works, the Contractor shall keep the Site reasonably free from all unnecessary obstruction and shall store or dispose of any Constructional Plant and surplus materials and clear away and remove from the Site any wreckage, rubbish or Temporary Works no longer required.

33. CLEARANCE OF SITE ON SUBSTANTIAL COMPLETION

On the substantial completion of the Works, the Contractor shall clear away and remove from the Site all Constructional Plant surplus materials, rubbish and Temporary Works of every kind and leave the whole of the Site and Works clean and in a workmanlike condition to the satisfaction of the Engineer.

34. LABOUR

34.1 Engagement of Labour

The Contractor shall make his own arrangements for the engagement of all labour local or otherwise.

34.2 Supply of Water

The Contractor shall provide on the Site to the satisfaction of the Engineer an adequate supply of drinking and other water for the use of the Contractor's staff and work people.

34.3 Alcoholic Drinks or Drugs

The Contractor shall comply with Government laws and regulations and orders in force as regards the import, sale, barter or disposal of alcoholic drinks or narcotics and he shall not allow or facilitate such importation, sale, gift, barter or disposal by his sub-contractors, agents or employees.

34.4 Arms and Ammunition

The restrictions specified in clause 34.3 above shall include all kinds of arms and ammunition.

34.5 Holiday and Religious Customs

The Contractor shall in all dealings with labour in his employ have due regard to all holiday, recognized festivals and religious or other customs.

34.6 Epidemics

In the event of any outbreak of illness of an epidemic nature the Contractor shall comply with and carry out such regulations, orders, and requirements as may be made by the Government or the local medical or sanitary authorities for the purpose of dealing with and overcoming the same.

34.7 Disorderly Conduct, etc.

The Contractor shall at all times take all reasonable precautions to prevent any unlawful riotous or disorderly conduct by or amongst his employees and for the preservation of peace and the protection of persons and property in the neighborhood of the Works against the same.

34.8 Observance by Sub-Contractors

The Contractor shall be considered responsible for the observance of the above provisions by his Sub-Contractors.

34.9 Legislation applicable to Labour

The Contractor shall abide by all applicable legislation and regulation with regard to labour.

35 RETURNS OF LABOUR, PLANT, ETC.

The Contractor shall, if required by the Engineer, deliver to the Engineer at his office, a return in detail in the form and at such intervals as the Engineer may prescribe showing the supervisory staff and the numbers of the several classes of labour from time to time employed by the Contractor on the Site and such information respecting Constructional plant as the Engineer may require.

36 MATERIALS, WORKMANSHIP AND TESTING

36.1 Materials and Workmanship

- a) All materials and workmanship shall be of the respective kinds described in the Contract and in accordance with the Engineer's instructions and shall be subjected from time to time to such tests as the Engineer may direct at the place of manufacture or fabrication, or on the Site or at all or any of such places. The Contractor shall provide such assistance, instruments, machines, labour and materials as are normally required for examining, measuring and testing any work and the quality, weight or quantity of any materials used and shall supply samples of materials before incorporation in the Works for testing as may be selected and required by the Engineer. All testing equipment and instruments provided by the Contractor shall be used only by the Engineer or by the Contractor in accordance with the instructions of the Engineer.
- b) No material not conforming with the Specifications in the Contract may be used for the Works without prior written approval of the Employer and instruction of the Engineer, provided always that if the use of such material results or may result in increasing the Contract Price, the procedure in Clause 48 shall apply.

36.2 Cost of Samples

All samples shall be supplied by the Contractor at his own cost unless the supply thereof is clearly intended in the Specifications or Bill of Quantities to be at the cost of the Employer. Payment will not be made for samples which do not comply with the Specifications.

36.3 Cost of Tests

The Contractor shall bear the costs of any of the following tests:

- a) Those clearly intended by or provided for in the Contract Documents.
- b) Those involving load testing or tests to ensure that the design of the whole of the Works or any part of the Works is appropriate for the purpose which it was intended to fulfill.

37 ACCESS TO SITE

The Employer and the Engineer and any persons authorized by either of them shall, at all times, have access to the Works and to the Site and to all workshops and places where work is being prepared or whence materials, manufactured articles or machinery are being obtained for the Works and the Contractor shall afford every facility for and every assistance in or in obtaining the right to such access.

No work shall be covered up or put out of view without the approval of the Engineer and the Contractor shall afford full opportunity for the Engineer to examine and measure any work which is about to be covered up or put out of view and to examine foundations before permanent work is placed thereon. The Contractor shall give due notice to the Engineer whenever any such work or foundations is or are ready or about to be ready for examination and the Engineer shall without unreasonable delay unless he considers it unnecessary and advises the Contractor accordingly attend for the purpose of examining and measuring such work or of examining such foundations.

39 REMOVAL OF IMPROPER WORK AND MATERIALS

39.1 Engineer's power to order removal

The Engineer shall during the progress of the Works have power to order in writing from time to time, and the Contractor shall execute at his cost and expense, the following operations:

- a) The removal from the Site within such time or times as may be specified in the order of any materials which in the opinion of the Engineer are not in accordance with the Contract;
- b) The substitution of proper and suitable materials; and
- C) The removal and proper re-execution (notwithstanding any previous test thereof or interim payment therefore) of any work which in respect of materials or workmanship is not in the opinion of the Engineer in accordance with the Contract.

39.2 Default of Contractor in carrying out Engineer's Instructions

In case of default on the part of the Contractor in carrying out an instruction of the Engineer, the Employer shall be entitled to employ and pay other persons to carry out the same and all expenses consequent thereon or incidental thereto shall be borne by the Contractor and shall be recoverable from him by the Employer and may be deducted by the Employer from any monies due or which may become due to the Contractor.

40 SUSPENSION OF WORK

The Contractor shall on the written order of the Engineer suspend the progress of the Works or any part thereof for such time or times and in such manner as the Engineer may consider necessary and shall, during such suspension, properly protect and secure the Works so far as it is necessary in the opinion of the Engineer. The Employer should be notified and his written approval should be sought for any suspension of work in excess of three (3) days.

41 Possession of site

41.1 Access to Site

The Employer shall with the Engineer's written order to commence the Works, give to the Contractor possession of so much of the Site as may be required to enable the Contractor to commence and proceed with the construction of the Works in accordance with the Programme referred to in Clause 13 hereof and otherwise in accordance with such reasonable proposals of the Contractor as he shall make to the Engineer by notice in writing, and shall from time to time as the Works proceed give to the Contractor possession of such further portions of the Site as may be required to enable the Contractor to proceed with the construction of the Works with due dispatch in accordance with the said Programme or proposals, as the case may be.

41.2 Wayleaves, etc.

The Contractor shall bear all expenses and charges for special temporary wayleaves required by him in connection with access to the Site. The Contractor shall also provide at his own cost any additional accommodation outside the Site required by him for the purpose of the Works.

41.3 Limits of the Site

Except as defined below, the limits of the Site shall be as defined in the Contract. Should the Contractor require land beyond the Site, he shall provide it entirely at his own expense and before taking possession shall supply the Engineer with a copy of the necessary permits.

Access to the Site is available where the Site adjoins a public road but it is not provided unless shown on the Drawings. When necessary for the safety and convenience of workmen, public or livestock or for the protection of the Works, the Contractor shall, at his own expense, provide adequate temporary fencing to the whole or part of the Site. The Contractor shall not disturb, damage or pull down any hedge, tree or building within the Site without the written consent of the Engineer.

42 TIME FOR COMPLETION

- a) Subject to any requirement in the Contract as to completion of any section of the Works before completion of the whole, the whole of the Works shall be completed, in accordance with the provisions of Clause 46 and 47 hereof, within the time stated in the Contract.
- b) The completion time includes weekly rest days, official holidays, and days of inclement weather.

43 EXTENSION OF TIME FOR COMPLETION

If, subject to the provisions of the Contract, the Engineer orders alterations or additions in the Works in accordance with Clause 48 hereof, or if circumstances constituting force majeure as defined in the Contract have occurred, the Contractor shall be entitled to apply for an extension of the time for completion of the Works specified in the Contract. The Employer shall, upon such application, determine the period of any such extension of time; provided that in the case of alterations or additions in the Works, the application for such an extension must be made before the alterations or additions in the Works are undertaken by the Contractor.

44 RATE OF PROGRESS

The whole of the materials, plant and labour to be provided by the Contractor and the mode, manner and speed of execution and completion of the Works are to be of a kind and conducted in a manner to the satisfaction of the Engineer. Should the rate of progress of the Works or any part thereof be at any time in the opinion of the

Engineer too slow to ensure the completion of the Works by the prescribed time or extended time for completion, the Engineer shall so notify the Contractor in writing and the Contractor shall thereupon take such steps as the Contractor may think necessary and the Engineer may approve to expedite progress so as to complete the Works by the prescribed time or extended time for completion. If the work is not being carried on by day and by night and the Contractor shall request permission to work by night as well as by day, then, if the Engineer shall grant such permission, the Contractor shall not be entitled to any additional payment.

All work at night shall be carried out without unreasonable noise and disturbance. The contractor shall indemnify the Employer from and against any claims or liability for damages on account of noise or other disturbance created while or in carrying out the work and from and against all claims, demands, proceedings, costs and expenses whatsoever in regard or in relation to such noise or other disturbance. The Contractor shall submit in triplicate to the Engineer at the end of each month signed copies of explanatory Drawings or any other material showing the progress of the Works.

45 LIQUIDATED DAMAGES FOR DELAY

a) If the Contractor shall fail to complete the Works within the time for completion prescribed in the Contract, or any extended time for completion in accordance with the Contract, then the Contractor shall pay to the Employer the sum specified in the Contract as liquidated damages, for the delay between the time prescribed in the Contract or the extended time for completion, as the case may be, and the date of substantial completion of the Works as stated in the Certificate of Substantial Completion, subject to the applicable limit stated in the Contract. The said sum shall be payable by the sole fact of the delay without the need for any previous notice or any legal proceedings, or proof of damage, which shall in all cases be considered as ascertained. The Employer may, without prejudice to any other method of recovery, deduct the amount of such liquidated damages from any monies in its hands due or which may become due to the Contractor. The payment or deduction of such damages shall not relieve the Contractor from his obligation to complete the Works or from any other of his obligations and liabilities under the Contract.

b) If, before the time for completion of the whole of the Works or of a Section of the Works, a Certificate of Substantial Completion has been issued for any part or Section of the Works, the liquidated damages for delay in completion of the remainder of the Works or of that Section may, for any period of delay after the date stated in such Certificate of Substantial Completion, and in the absence of alternative provisions in the Contract, be reduced in the proportion which the value of the part or Section so certified bears to the total value of the whole of the Works or Section, as applicable. The provisions of this Sub-Clause shall only apply to the rate of liquidated damages and shall not affect the limit thereof.

46 CERTIFICATE OF SUBSTANTIAL COMPLETION

46.1 Substantial Completion of the Works

When the whole of the Works have been substantially completed and have satisfactorily passed any test on completion prescribed by the Contract, the Contractor may give a notice to that effect to the Engineer accompanied by an undertaking to finish any outstanding work during the Defects Liability Period. Such notice and undertaking shall be in writing and shall be deemed to be a request by the Contractor, for the Engineer to issue a Certificate of Substantial Completion in respect of the Works. The Engineer shall, within twenty-one (21) days of the date of delivery of such notice either issue to the Contractor, with a copy to the Employer, a Certificate of Substantial Completion stating the date on which, in his opinion, the Works were substantially completed in accordance with the Contract or give instructions in writing to the Contractor specifying all the work which, in the Engineer's opinion, requires to be done by the Contractor before the issuance of such Certificate. The Engineer shall also notify the Contractor of any defects in the Works affecting substantial completion that may appear after such instructions and before completion of the work specified therein. The Contractor shall be entitled to receive such Certificate of Substantial Completion within twenty-one (21) days of completion, to the satisfaction of the Engineer, of the work so specified and making good any defect so notified. Upon issuance of the Certificate of Substantial Completion of the Works, the Contractor shall be deemed to have undertaken to complete with due expedition any outstanding work during the Defects Liability Period.

46.2 Substantial Completion of Sections or Parts of the Works

In accordance with the procedure in Sub-Clause (1) of this Clause and on the same conditions as provided therein, the Contractor may request the Engineer to issue, and the Engineer may issue, a Certificate of Substantial Completion in respect of any Section or part of the Works which has been substantially completed and has satisfactorily passed any tests on completion prescribed by the Contract. if:

- a) a separate time for completion is provided in the Contract in respect of such Section or part of the Works;
- b) such Section or part of the Works has been completed to the satisfaction of the Engineer and is required by the Employer for his occupation or use. Upon the issuance of such Certificate, the Contractor shall be deemed to have undertaken to complete any outstanding work during the Defects Liability Period.

47 DEFECTS LIABILITY

47.1 Defects Liability Period

The expression "Defects Liability Period" shall mean the period of twelve (12) months, calculated from the date of completion of the Works stated in the Certificate of Substantial Completion issued by the Engineer or, in respect of any Section or part of the Works for which a separate Certificate of Substantial Completion has been issued, from the date of completion of that Section or part as stated in the relevant Certificate. The expression "the Works" shall, in respect of the Defects Liability Period, be construed accordingly. **47.2** Completion of Outstanding Work and Remedying of Defects

During the Defects Liability Period, the Contractor shall finish the work, if any, outstanding at the date of the Certificate of Substantial Completion, and shall execute all such work of repair, amendment, reconstruction, rectification and making good defects, imperfections, shrinkages or other faults as may be required of the Contractor in writing by the Engineer during the Defects Liability Period and within fourteen (14) days after its expiration, as a result of an inspection made by or on behalf of the Engineer prior to expiration of the Defects Liability Period. **47.3** Cost of Execution of Work of Repair, etc.

All such outstanding work shall be carried out by the Contractor at his own expense if the necessity thereof shall, in the opinion of the Engineer, be due to the use of material or workmanship not in accordance with the Contract, or to neglect or failure on the part of the Contractor to comply with any obligation expressed or implied, on the Contractor's part under the Contract.

47.4 Remedy on Contractor's Failure to Carry Out Work Required

If the Contractor shall fail to do any such work outstanding on the Works, the Employer shall be entitled to employ and pay other persons to carry out the same, and all expenses consequent thereon or incidental thereto shall be recoverable from the Contractor by the Employer, and may be deducted by the Employer from any monies due or which may become due to the Contractor.

47.5 Certificate of Final Completion

Upon satisfactory completion of the work outstanding on the Works, the Engineer shall within twenty eight (28) days of the expiration of the Defects Liability period issue a Certificate of Final Completion to the Contractor. The Contract shall be deemed to be completed upon issuance of such Certificate, provided that the provisions of the Contract which remain unperformed and the Settlement of Disputes provision in the Contract shall remain in force for as long as is necessary to dispose of any outstanding matters or issues between the Parties.

48 ALTERATIONS, ADDITIONS AND OMISSIONS

1 Variations

The Engineer may within his powers introduce any variations to the form, type or quality of the Works or any part thereof which he considers necessary and for that purpose or if for any other reasons it shall, in his opinion be desirable, he shall have power to order the Contractor to do and the Contractor shall do any of the following:

- (a) increase or decrease the quantity of any work under the Contract;
- (b) omit any such work;
- (C) change the character or quality or kind of any such work;
- (d) change the levels, lines, positions and dimensions of any part of the Works;
- (e) execute additional work of any kind necessary for the completion of the Works, and no such variation shall in any way vitiate or invalidate the Contract.
- Variations Increasing Cost of Contract or altering the Works.
 The Engineer shall, however, obtain the written approval of the Employer before giving any order for any variations which may result in an increase of the Contract Price or in an essential alteration of the quantity, quality or character of the Works.
- **3** Orders for Variations to be in Writing

No variations shall be made by the Contractor without an order in writing from the Engineer. Variations requiring the written approval of the Employer under paragraph (2) of this Clause shall be made by the Contractor only upon written order from the Engineer accompanied by a copy of the Employer's approval. Provided that, subject to the provisions of the Contract, no order in writing shall be required for any increase or decrease in the quantity of any work where such increase or decrease is not the result of an order given under this Clause but is the result of the quantities exceeding or being less than those stated in the Bill of Quantities.

4 Valuation of Variations

The Engineer shall estimate to the Employer the amount to be added or deducted from the Contract Price in respect of any variation, addition or omission. In the case of any variation, addition or omission which may result in an increase of the Contract Price, the Engineer shall communicate such estimate to the Employer together with his request for the Employer's written approval of such variation, addition or omission. The value of any variation, addition or omission shall be calculated on the basis of the unit prices contained in the Bill of Quantities.

49. PLANT, TEMPORARY WORKS AND MATERIALS

1 Plant, etc., Exclusive Use for the Works

All Constructional Plant, Temporary Works and Materials provided by the Contractor shall, when brought on the Site, be deemed to be exclusively intended for the construction and completion of the Works and the Contractor shall not remove the same or any part thereof (save for the purpose of moving it from one part of the Site to another) without the consent in writing of the Engineer which shall not be unreasonably withheld. **2** Removal of Plant, etc.

Upon completion of the Works the Contractor shall remove from the Site all the said Constructional Plant and Temporary Works remaining thereon and any unused materials provided by the Contractor.

- 3 Employer not liable for Damage to Plant
 - The Employer shall not be at any time liable for the loss of any of the said Constructional plant, Temporary Works or Materials save if such loss results from the act or neglect of the Employer, its employees or agents.
- 4 Ownership of paid material and work

All material and work covered by payments made by the Employer to the Contractor shall thereupon become the sole property of the Employer, but this provision shall not be construed as relieving the Contractor from the sole responsibility for all material and work upon which payments have been made or the restoration of any damaged work or as waiving the right of the Employer to require the fulfillment of all of the terms of the Contract.

5 Equipment and supplies furnished by Employer

Title to any equipment and supplies which may be furnished by the Employer shall rest with the Employer and any such equipment and supplies shall be returned to the Employer at the conclusion of the Contract or when no longer needed by the Contractor. Such equipment when returned to the Employer, shall be in the same condition as when delivered to the Contractor, subject to normal wear and tear.

50 APPROVAL OF MATERIALS ETC., NOT IMPLIED

The operation of Clause 49 hereof shall not be deemed to imply any approval by the Engineer of the materials or other matters referred to therein nor shall it prevent the rejection of any such materials at any time by the Engineer.

51 MEASUREMENT OF WORKS

The Engineer shall, when he requires any part or parts of the Works to be measured, give notice to the Contractor or the Contractor's authorized agent or representative who shall forthwith attend or send a qualified agent to assist the Engineer in making such measurement and shall furnish all particulars required by either of them. Should the Contractor not attend or neglect or omit to send such agent, then the measurement made by the Engineer or approved by him shall be taken to be the correct measurement of the work. The purpose of measuring is to ascertain the volume of work executed by the Contractor and therefore determine the amount of the monthly payments.

52 LIABILITY OF THE PARTIES

- 1 The Works shall not be considered as completed until a Certificate of Final Completion shall have been signed by the Engineer and delivered to the Employer stating that the Works have been completed and that the Contractor has fulfilled all his obligations under Clause 47 to his satisfaction.
- The Employer shall not be liable to the Contractor for any matter arising out of or in connection with the Contract or the execution of the Works unless the Contractor shall have made a claim in writing in respect thereof before the giving of the Certificate of Final Completion and in accordance with the Contract.
- **3** Unfulfilled Obligations

Notwithstanding the issue of the Certificate of Final Completion, the Contractor shall remain liable for the fulfillment of any obligation incurred under the provisions of the Contract prior to the issuance of the Certificate of Final Completion and which

remains unperformed at the time such Certificate is issued. For the purpose of determining the nature and extent of any such obligation the Contract shall be deemed to remain in force between the parties hereto.

4 Contractor Responsible

Notwithstanding any other provisions in the Contract documents, the Contractor shall be totally responsible for and shall bear any and all risks of loss or damage to or failure of the Works or any part thereof for a period of ten years after issuance of the Certificate of Final Completion, provided always that such risks, damage or failure result from acts, defaults and negligence of the Contractor, his agents, employees or workmen and such contractors.

	UTHORITIES The Employer shall have the right to enter upon the Site and expel the Contractor therefrom without thereby voiding the Contract or releasing the Contractor from any of his obligations or liabilities under the Contract or affecting the rights and powers conferred on the Employer and the Engineer by the Contract in any of the following cases:
(a)	If the Contractor is declared bankrupt or claims bankruptcy or court protection against his creditors or if the Contractor is a company or member of a company which was dissolved by legal action;
(b)	If the Contractor makes arrangements with his creditors or agrees to carry out the Contract under an inspection committee of his creditors;
(c)	If the Contractor withdraws from the Works or assigns the Contract to others in whole or in part without the Employer's prior written approval;
(d)	If the Contractor fails to commence the Works or shows insufficient progress to the extent which in the opinion of the Engineer will not enable him to meet the target completion date of the Works;
(e)	If the Contractor suspends the progress of the Works without due cause for fifteen (15) days after receiving from the Engineer written notice to proceed;
(f)	If the Contractor fails to comply with any of the Contract conditions or fails to fulfill his obligations and does not remedy the cause of his failure within fifteen (15) days after being notified to do so in writing;
(g)	If the Contractor is not executing the work in accordance with standards of workmanship specified in the Contract;
(h)	If the Contractor gives or promises to give a present or loan or reward to any employee of the Employer or of the Engineer.

Then the Employer may himself complete the Works or may employ any other contractor to complete the Works and the Employer or such other contractor may use for such completion so much of Constructional Plant, Temporary Works and Materials, which have been deemed to be reserved exclusively for the construction and completion of the Works under the provision of the Contract as he or they may think proper and the Employer may at any time sell any of the said Constructional Plant, Temporary Works and unused materials and apply the proceeds of sale in or towards the satisfaction of any sums due or which may become due to him from the Contractor under the Contract.

The Engineer shall as soon as may be practicable after any such entry and expulsion by the Employer notify the Contractor to attend the necessary evaluation of the Works. In the event that for any reason the Contractor does not attend such evaluation the Engineer shall undertake the said evaluation in the absence of the Contractor and shall issue a certificate stating the sum, if any, due to the Contractor for work done in accordance with the Contract up to the time of entry and expulsion by the Employer which has been reasonably accumulated to the Contractor in respect of the Works he has executed in such case in accordance with the Contract. The Engineer shall indicate the value of the materials whether unused or partially used and the value of construction equipment and any part of the Temporary Works.

3 Payment After Re-entry

If the Employer shall enter and expel the Contractor under this Clause he shall not be liable to pay the Contractor any money on account of the Contract until the expiration of the Defects Liability Period, and thereafter until the costs of completion and making good any defects of the Works, damages for delay in completion (if any), and all other expenses incurred by the Employer have been ascertained and their amount certified by the Engineer. The Contractor shall then be entitled to receive only such sum or sums (if any) as the Engineer may certify would have been due to him upon due completion by him after deducting the said amount. But if such amount shall exceed the sum which would have been payable to the Contractor on due completion by him, then the Contractor shall upon demand pay to the Employer the amount of such excess. The Employer in such case may recover this amount from any money due to the Contractor from the Employer without the need to resort to legal procedures.

54 URGENT REPAIRS

If by reason of any accident or failure or other event occurring to, in or in connection with the Works or any part thereof either during the execution of the Works or during the Defects Liability Period any remedial or other work or repair shall in the opinion of the Engineer be urgently necessary for security and the Contractor is unable or unwilling at once to do such work or repair, the Employer may by his own or other workmen do such work or repair as the Engineer may consider necessary. If the work or repair so done by the Employer is work which in the opinion of the Engineer the Contractor was liable to do at his own expense under the Contract, all costs and charges properly incurred by the Employer in so doing shall on demand be paid by the Contractor to the Employer or may be deducted by the Employer from any monies due or which may become due to the Contractor provided always that the Engineer shall as soon after the

occurrence of any such emergency as may be reasonably practicable notify the Contractor thereof in writing.

55 INCREASE AND DECREASE OF COSTS

Except if otherwise provided by the Contract, no adjustment of the Contract Price shall be made in respect of fluctuations of market, prices of labour, materials, plant or equipment, neither due to fluctuation in interest rates nor devaluation or any other matters affecting the Works.

56 TAXATION

The Contractor shall be responsible for the payment of all charges and taxes in respect of income including value added tax, all in accordance with and subject to the provisions of the income tax laws and regulations in force and all amendments thereto. It is the Contractor's responsibility to make all the necessary inquiries in this respect and he shall be deemed to have satisfied himself regarding the application of all relevant tax laws.

57 BLASTING

The Contractor shall not use any explosives without the written permission of the Engineer who shall require that the Contractor has complied in full with the regulations in force regarding the use of explosives. However, the Contractor, before applying to obtain these explosives, has to provide well arranged storage facilities. The Engineer's approval or refusal to permit the use of explosives shall not constitute ground for claims by the Contractor.

58 MACHINERY

The Contractor shall be responsible for coordinating the manufacture, delivery, erection and commissioning of plant machinery and equipment which are to form a part of the Works. He shall place all necessary orders as soon as possible after the signing of the Contract. These orders and their acceptance shall be produced to the Engineer on request. The Contractor shall also be responsible for ensuring that all sub-contractors adhere to such programs as are agreed and are needed to ensure completion of the Works within the period for completion.

Should any sub-contracted works be delayed, the Contractor shall initiate the necessary action to speed up such completion. This shall not prejudice the Employer's right to exercise his remedies for delay in accordance with the Contract.

59 TEMPORARY WORKS AND REINSTATEMENT

The Contractor shall provide and maintain all temporary roads and tracks necessary for movement of plant and materials and clear same away at completion and make good all works damaged or disturbed. The Contractor shall submit drawings and full particulars of all Temporary Works to the Engineer before commencing same. The Engineer may require modifications to be made if he considers them to be insufficient and the Contractor shall give effect to such modifications but shall not be relieved of his responsibilities. The Contractor shall provide and maintain weather-proof sheds for storage of material pertinent to the Works both for his own use and for the use of the Employer and clear same away at the completion of the Works. The Contractor shall divert as required, at his own cost and subject to the approval of the Engineer, all public utilities encountered during the progress of the Works, except those specially indicated on the drawings as being included in the Contract. Where diversions of services are not required in connection with the Works, the Contractor shall uphold, maintain and keep the same in working order in existing locations. The Contractor shall make good, at his own expense, all damage to telephone, telegraph and electric cable or wires, sewers, water or other pipes and other services, except where the Public Authority or Private Party owning or responsible for the same elects to make good the damage. The costs incurred in so doing shall be paid by the Contractor to the Public Authority or Private Party on demand.

60 PHOTOGRAPHS AND ADVERTISING

The Contractor shall not publish any photographs of the Works or allow the Works to be used in any form of advertising whatsoever without the prior approval in writing from the Employer.

61 PREVENTION OF CORRUPTION

The Employer shall be entitled to cancel the Contract and to recover from the Contractor the amount of any loss resulting from such cancellation, if the Contractor has offered or given any person any gift or consideration of any kind as an inducement or reward for doing or intending to do any action in relation to the obtaining or the execution of the Contract or any other contract with the Employer or for showing or intending to show favour or disfavour to any person in relation to the Contract or any other contract with the Employer, if the like acts shall have been done by any persons employed by him or acting on his behalf whether with or without the knowledge of the Contractor in relation to this or any other Contract with the Employer.

62 DATE FALLING ON HOLIDAY

Where under the terms of the Contract any act is to be done or any period is to expire upon a certain day and that day or that period fall on a day of rest or recognized holiday, the Contract shall have effect as if the act were to be done or the period to expire upon the working day following such day.

63 NOTICES

1 Unless otherwise expressly specified, any notice, consent, approval, certificate or determination by any person for which provision is made in the Contract Documents shall be in writing. Any such notice, consent, approval, certificate or determination to be given or made by the Employer, the Contractor or the Engineer shall not be 2 unreasonably withheld or delayed.

- 3 Any notice, certificate or instruction to be given to the Contractor by the Engineer or the Employer under the terms of the Contract shall be sent by post, cable, telex or facsimile at the Contractor's principal place of business specified in the Contract or such other address as the Contractor shall nominate in writing for that purpose, or by
- 4 delivering the same at the said address against an authorized signature certifying the receipt.
- Any notice to be given to the Employer under the terms of the Contract shall be sent by post, cable, telex or facsimile at the Employer's address specified in the Contract, or by delivering the same at the said address against an authorized signature certifying the receipt.
- Any notice to be given to the Engineer under the terms of this Contract shall be sent by post, cable, telex or facsimile at the Engineer's address specified in the Contract, or by delivering the same at the said address against an authorized signature certifying the receipt.

64 LANGUAGE, WEIGHTS AND MEASURES

Except as may be otherwise specified in the Contract, English shall be used by the Contractor in all written communications to the Employer or the Engineer with respect to the services to be rendered and with respect to all documents procured or prepared by the Contractor pertaining to the Works. The metric system of weights and measures shall be used in all instances.

65 RECORDS, ACCOUNTS, INFORMATION AND AUDIT

The Contractor shall maintain accurate and systematic records and accounts in respect of the work performed under this Contract.

The Contractor shall furnish, compile or make available at all times to the UNDP any records or information, oral or written, which the UNDP may reasonably request in respect of the Works or the Contractor's performance thereof.

The Contractor shall allow the UNDP or its authorized agents to inspect and audit such records or information upon reasonable notice.

66 FORCE MAJEURE

Force majeure as used herein means Acts of God, war (whether declared or not), invasion, revolution, insurrection or other acts or events of a similar nature or force.

In the event of and as soon as possible after the occurrence of any cause constituting force majeure, the Contractor shall give notice and full particulars in writing to the UNDP and to the Engineer of such force majeure if the Contractor is thereby rendered unable, wholly or in part, to perform its obligations and meet its responsibilities under this Contract. Subject to acceptance by the UNDP of the existence of such force majeure, which acceptance shall not be unreasonably withheld, the following provisions shall apply: (a) The obligations and responsibilities of the Contractor under this Contract shall be suspended to the extent of his inability to perform them and for as long as such inability continues. During such suspension and in respect of work suspended, the Contractor shall be reimbursed by the UNDP substantiated costs of maintenance of the Contractor's equipment and of per diem of the Contractor's permanent personnel rendered idle by such suspension;

- (b) The Contractor shall within fifteen (15) days of the notice to the UNDP of the occurrence of the force majeure submit a statement to the UNDP of estimated costs referred to in sub- paragraph (a) above during the period of suspension followed by a complete statement of actual expenditures within thirty (30) days after the end of the (C) suspension;
- (d) The term of this Contract shall be extended for a period equal to the period of suspension taking however into account any special condition which may cause the additional time for completion of the Works to be different from the period of suspension;
- (e) If the Contractor is rendered permanently unable, wholly or in part, by reason of force majeure, to perform his obligations and meet his responsibilities under the Contract, the UNDP shall have the right to terminate the Contract on the same terms and conditions as provided for in Clause 68 of these General Conditions, except that the period of notice shall be seven (7) days instead of fourteen (14) days, and
- (f) For the purpose of the preceding sub-paragraph, the UNDP may consider the Contractor permanently unable to perform in case of any suspension period of more than ninety (90) days.

67 SUSPENSION BY THE UNDP

The UNDP may by written notice to the Contractor suspend for a specified period, in whole or in part, payments to the Contractor and/or the Contractor's obligation to continue to perform the Works under this Contract, if in the UNDP' sole discretion:

(a) any conditions arise which interfere, or threaten to interfere with the successful execution of the Works or the accomplishment of the purpose thereof, or (b) the Contractor shall have failed, in whole or in part, to perform any of the terms and conditions of this Contract.

After suspension under sub-paragraph (a) above, the Contractor shall be entitled to reimbursement by the UNDP of such costs as shall have been duly incurred in accordance with this Contract prior to the commencement of the period of such suspension.

The term of this Contract may be extended by the UNDP for a period equal to any period of suspension, taking into account any special conditions which may cause the additional time for completion of the Works to be different from the period of suspension.

68 TERMINATION BY THE UNDP

The UNDP may, notwithstanding any suspension under Clause 67 above, terminate this Contract for cause or convenience in the interest of the UNDP upon not less than fourteen

(14) days written notice to the Contractor.

Upon termination of this Contract:

- (a) The Contractor shall take immediate steps to terminate his performance of the Contract in a prompt and orderly manner and to reduce losses and to keep further expenditures to a minimum, and
- (b) The Contractor shall be entitled (unless such termination has been occasioned by the Contractor's breach of this Contract), to be paid for the part of the Works satisfactorily completed and for the materials and equipment properly delivered to the Site as of the date of termination for incorporation to the Works, plus substantiated costs resulting from commitments entered into prior to the date of termination as well as any reasonable substantiated direct costs incurred by the Contractor as a result of the termination, but shall not be entitled to receive any other or further payment or damages.

69 TERMINATION BY THE CONTRACTOR

In the case of any alleged breach by the UNDP of the Contract or in any other situation which the Contractor reasonably considers to entitle him to terminate his performance of the Contract, the Contractor shall promptly give written notice to the UNDP detailing the nature and the circumstances of the breach or other situation. Upon acknowledgement in writing by the UNDP of the existence of such breach and the UNDP inability to remedy it, or upon failure of the UNDP to respond to such notice within twenty (20) days of receipt thereof, the Contractor shall be entitled to terminate this Contract by giving 30 days written notice thereof. In the event of disagreement between the Parties as to the existence of such breach or other situation referred to above, the matter shall be resolved in accordance with Clause 71 of these General Conditions.

Upon termination of this Contract under this Clause the provisions of sub-paragraph (b) of Clause 68 hereof shall apply.

70 RIGHTS AND REMEDIES OF THE UNDP

Nothing in or relating to this Contract shall be deemed to prejudice or constitute a waiver of any other rights or remedies of the UNDP.

The UNDP shall not be liable for any consequences of, or claim based upon, any act or omission on the part of the Government.

71 SETTLEMENT OF DISPUTES

In the case of any claim, controversy or dispute arising out of, or in connection with this Contract or any breach thereof, the following procedure for resolution of such claim, controversy or dispute shall apply.

1 Notification

The aggrieved party shall immediately notify the other party in writing of the nature of the alleged claim, controversy or dispute, not later than seven (7) days from awareness of the existence thereof.

2 Consultation

On receipt of the notification provided above, the representatives of the Parties shall start consultations with a view to reaching an amicable resolution of the claim, controversy or dispute without causing interruption of the Works.

3 Conciliation

Where the representatives of the Parties are unable to reach such an amicable settlement, either party may request the submission of the matter to conciliation in accordance with the UNCITRAL Rules of Conciliation then obtaining.

4 Arbitration

Any claim, controversy or dispute which is not settled as provided under clauses 71.1 through 3 above shall be referred to arbitration in accordance with the UNCITRAL Arbitration Rules then obtaining. The Parties shall be bound by the arbitration award rendered in accordance with such arbitration as the final adjudication of any such controversy or claim.

72 PRIVILEGES AND IMMUNITIES

Nothing in or relating to this Contract shall be deemed a waiver of any of the privileges and immunities of the United Nations of which the UNDP is an integral part.

73 SECURITY

The Contractor shall:

- (a) put in place an appropriate security plan and maintain the security plan, taking into account the security situation in the country where the services are being provided;
- (b) assume all risks and liabilities related to the Contractor's security, and the full implementation of the security plan.

UNDP reserves the right to verify whether such a plan is in place, and to suggest modifications to the plan when necessary. Failure to maintain and implement an appropriate security plan as required hereunder shall be deemed a breach of this contract. Notwithstanding the foregoing, the Contractor shall remain solely responsible for the security of its personnel and for UNDP's property in its custody as set forth in paragraph 4.1 above.

74 AUDIT AND INVESTIGATIONS

Each invoice paid by UNDP shall be subject to a post-payment audit by auditors, whether internal or external, of UNDP or the authorized agents of the UNDP at any time during the term of the Contract and for a period of three (3) years following the expiration or prior termination of the Contract. The UNDP shall be entitled to a refund from the Contractor for any amounts shown by such audits to have been paid by the UNDP other than in accordance with the terms and conditions of the Contract. Should the audit determine that any funds paid by UNDP have not been used as per contract clauses, the company shall reimburse such funds forthwith. Where the company fails to reimburse such funds, UNDP reserves the right to seek recovery and/or to take any other action as it deems necessary.

The Contractor acknowledges and agrees that, at anytime, UNDP may conduct investigations relating to any aspect of the Contract, the obligations performed under the Contract, and the operations of the Contractor generally. The right of UNDP to conduct an investigation and the Contractor's obligation to comply with such an investigation shall not lapse upon expiration or prior termination of the Contract. The Contractor shall provide its full and timely cooperation with any such inspections, postpayment audits or investigations. Such cooperation shall include, but shall not be limited to, the Contractor's obligation to make available its personnel and any documentation for such purposes and to grant to UNDP access to the Contractor's premises. The Contractor shall require its agents, including, but not limited to, the Contractor's attorneys, accountants or other advisers, to reasonably cooperate with any inspections, post-payment audits or investigations carried out by UNDP hereunder.

75 ANTI-TERRORISM

The Contractor agrees to undertake all reasonable efforts to ensure that none of the UNDP funds received under this Contract are used to provide support to individuals or entities associated with terrorism and that the recipients of any amounts provided by UNDP hereunder do not appear on the list maintained by the Security Council Committee established pursuant to resolution 1267 (1999). The list can be accessed via http://www.un.org/Docs/sc/committees/1267/1267ListEng.htm. This provision must be included in all sub-contracts or sub-agreements entered into under this Contract

APPENDIX I: FORMATS OF PERFORMANCE SECURITY

Δn	nex-f	S. Se	lf₋ D	ecl	aration

Declaration

Date:
United Nations Development Programme
UNDP Registry, IDB Bhaban, Agargaon
Sher-E-Bangla Nagar, Dhaka, Bangladesh
Assignment Reference: RFQ-BD-2021-005(Revised)
Dear Sir,
I declare that is not in the UN Security Council 1267/1989 List, UN Procurement Division List or Other UN Ineligibility List.
Yours Sincerely,
Name : Organization: