



Initiative
for Relief and
Climate Action

TENDER NOTICE FOR CONSTRUCTION OF TWO SHALLOW WELLS WITH ELEVATED WATER TANK, WATER KIOSK, FENCING & ANIMAL TROUGHS CONSTRUCTION OF A NEW CIRCULAR UNDERGROUND BERKAD, AND INSTALLATION OF SOLAR WATER PUMPING SYSTEM WITH SUBMERSIBLE PUMP IN TUBOY, FARAQ AND WANNEY VILLAGES, HUDDUR DISTRICT

About IRCA

Initiative for Relief and Climate Action (IRCA) is a non-political, not-for-profit, and non-governmental organization based in Somalia. Established in 2018 by local intellectuals, IRCA aims to save lives and combat climate change-related challenges through humanitarian relief and development interventions. Focused on promoting environmental sustainability and improving livelihoods, IRCA strives to empower communities towards self-reliance and dignity. By providing sustainable, eco-friendly services and livelihood opportunities, particularly in hard-to-reach areas of Southern Somalia, IRCA seeks to enhance access to Climate Smart Livelihood, WASH, Education, healthcare, and employment while upholding human rights, peace, and good governance principles.

Operating in areas where vulnerable communities face extreme poverty and underdevelopment compounded by climate crises, IRCA employs sustainable livelihood approaches to uplift communities in Southern Somalia through holistic, community-centered approach. Aligned with international and national humanitarian and development strategies, IRCA's interventions emphasize participatory approaches, strategic planning, and community mobilization. Its programs encompass: Emergency Relief Response, Food Security, Agriculture and Livelihood Development, Health & Nutrition, Education, WASH, Protection and Climate change mitigations.

IRCA Vision Statement: To see climate resilient Somali communities with equitable Solutions to climate change with improved resilience and having sustainable means of livelihood.

IRCA Mission Statement: To engage extensively on a multi-faceted sustainable development programs and Climate Change Action-related activities that would help bridge poverty gap, mitigate Climate Change, and empower communities in collaboration with relevant stakeholders to ensure holistic sustainable development in Somalia.

Overview of the tender

Initiative for Relief and Climate Action (IRCA), in partnership with Concern Worldwide, is implementing the Advancing Adaptation through Resilient Mobility and Natural Capital (AARAN) Project in Huddur District, Bakool Region, Somalia. Under Output 6: Evidence, Learning, and Flexible Financing Enable Adaptive, Locally Led Responses to Evolving Climate, Conflict, and Access Constraints, specifically Activity 6.2 – Climate-Resilient Capital Development Facility (6.2.a), IRCA intends to undertake climate-resilient water infrastructure investments aimed at improving access to safe water, strengthening community resilience to climate shocks, and enhancing sustainable natural resource management.

The planned works include the rehabilitation and upgrading of two shallow wells in Tuboy and Faraq rural villages through the construction of elevated water storage tanks, water kiosks, perimeter fencing, animal watering troughs, and installation of solar-powered water systems. In addition, IRCA will construct an underground berkad (rainwater harvesting reservoir) in Waney Village to improve water storage capacity and increase community access to water during dry



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seasons. These interventions are designed to support vulnerable communities and pastoral households by enhancing water availability, reducing climate-related vulnerabilities, and promoting sustainable livelihoods within the AARAN project target areas of Huddur District.

Tender Details and Instructions

- The purpose of this tender is to invite qualified contractors to undertake the construction works for IRCA in accordance with the provided Bills of Quantities (BoQ) and approved designs.
- All tender documents shall be duly signed by an authorized representative of the bidding entity, bear the official company stamp, and be accompanied by all required supporting documentation.
- Bidders are strongly encouraged to ensure that their submissions are completed and delivered on or before the specified deadline.
- For any clarifications required, please the contact sourcing lead via abdiqani.awil@ircaction.org.

Requirements for this tender-Minimum documents

Essential documents (Pass/Fail)

- Company Registration-SWS preferably from the Ministry of public work
- Tax Compliance certificate
- Completed and signed Forms of Tender documents especially the RFQ, BoQ, and stamped design

Capability -60 %

- Previous experience for similar assignments -attach at least 2 contracts
- Detailed Work Plan
- Financial statement of last 3 months
- CV of the engineer

Commercial-40%

- The lowest-priced financial proposal that meets the Essential and Capability criteria shall receive the maximum Commercial Score of 40%.
- The Commercial Scores of all other bidders shall be determined using the formula set out below.

$$\left\{ \frac{100\% \times \text{Lowest bid value}}{\text{Current value bid}} \right\} \times 0.4$$

Timescales

The below table indicates the key dates for this tender process.

Activity	Date
Issue Invitation to Tender	9 th July 2026
Deadline for questions from Bidders	16 th July 2026
Deadline for Return of Bids	29 th July 2026
Tender opening-	30 th July -2 nd August 2026



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How to apply

- Interested companies can submit as a physical sealed tender file to the IRCA main office located in Horseed, Baidoa. A designated tender box for application submissions will be available at the office for this purpose.
- Or electronically through the designated sealed procurement email addresses Procurement@ircaction.org
- Use the subject line to clearly indicate the tender reference number you are applying for
- **Deadline:** All applications must be submitted by **29th July 2026, at 4:00 PM EAT**. Late submissions will not be accepted.

Disclaimer:

- Any false information or incomplete submissions will result in disqualification. Ensure all documents are signed and certified before submission.
- IRCA will not be liable for any costs incurred by applicants through participation in the call for tender process.

Initiative for Relief and Climate Action (IRCA)		 Initiative for Relief and Climate Action			
Request for Quotation (RFQ)					
Supplier Name:	PR #	651			
Contact Name:	Date RFQ sent out	9/7/2026			
Email:	Date RFQ due Back	29/7/2026			
Address:	Date Items Required	1/8/2026			
Phone Number:	Procurement Lead person	Abdiqani Awil			
Lead time:	Email	Abdiqani.awil@ircaction.org			
	Address	Baidoa, Somalia			
Factors to be considered for RFQ evaluation					
1. Essential evaluation, 2. Capability, 3. Lead time 4. Commercial evaluation					
Description of goods required	Unit	Quantity	Currency	Unit cost	Total Cost
Upgrading of 2 shallow wells and Construction of Berkad in Huddur					
Construction of water tank and piping works	LS	1	USD		
Construction of 2 Water Pointns	LS	1	USD		
Construction of Apron & Chainlink Fencing for 2 shallow wells	LS	1	USD		
Construction of Animal Troughs (4) for 2 shallow wells	LS	1	USD		
Excavation and construction of a new circular underground water reservoir (Berkad) in Waney Village, Huddur, Bakool, Somalia. An average of 15m diameter and 4m deep.	LS	1	USD		
Installation of Solar water pumping System with submersible Pump	LS	1	USD		
Sub-Total					
Sales tax (if applicable)					
Delivery cost					
Total					
Supplier Acceptance		Signature or official stamp			
Name:					
Title					
Date:					

BoQ of construction of 10 cubic meter in Tubooy and Farak villages, Hudur, Bakool-Somalia

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE (USD)	AMOUNT (USD)
A	BoQ for the Construction of 10m3 Elevated water tank				
1	Excavation				
	Excavation includes maintaining and supporting sides and keeping them free from water, mud, and fallen materials by bailing, pumping, or otherwise.				
	Prepare site by stripping top 150 mm of soil to remove all debris including sand (if any) from site and carting away spoil				
1.2	Foundation bases excavation commencing at reduced levels depth not exceeding 1.50m deep	m3	13.5		
1.3	Extra-over for excavation in rock	m3	5.4		
1.4	Remove surplus excavated material from site	m3	7.56		
1.5	Backfill around foundation while tamping for proper compaction	m3	5.94		
2	Filing				
2.1	300 mm thick approved hardcore filling spread, well rammed and compacted in 150mm layers	m3	2.7		
3	Concrete work				
	Mass Concrete class 15 (1:1.5:3) with 20mm thick maximum aggregate size in:				
3.1	50mm Thick blinding	m3	0.45		
	Vibrated Reinforced Concrete class 25 (1:1.5:3) with 20mm thick maximum aggregate size in:				
3.2	Foundation concrete (for the Isolated foundation)	m3	3.6		
	Vibrated Reinforced Concrete class 25 (1:1.5:3) with 20mm thick maximum aggregate size in:				
3.4	Ground beam	m3	0.79		
3.5	Middle Tie beam	m3	0.86		
3.6	Load Bearing Beam	m3	1.25		
3.7	Columns	m3	2.56		

	Vibrated Reinforced Concrete class 30 (1:1:2) with 20mm thick maximum aggregate size in:				
3.8	200mm thick Walls	m3	4.32		
3.9	200mm thick Base slab	m3	1.8		
3.10	150mm thick Cover slab	m3	1.35		
4 Reinforcement					
4.1	Reinforcement bars (all sizes) as shown on drawings	kg	1700		
5 Sawn formwork					
5.1	Formwork to sides of foundation girth over 225mm but not exceeding 300mm	m	15.2		
5.2	Formwork to sides of base slab girth over 75mm but not exceeding 200mm	m	13		
5.3	Formwork to sides of cover slab girth over 75mm but not exceeding 150mm	m	13		
5.4	Formwork to sides and soffits of beams	m2	67		
5.5	Formwork to soffits of base slab	m2	9		
5.6	Formwork to soffits of cover slab	m2	9		
5.7	Formwork to sides of columns	m2	19		
5.8	Formwork to sides of walls	m2	43.2		
6 Finishes					
	Cement and sand mortar (1:3) rendering in:				
6.1	25 mm Thick screed to base slab with waterproof cement	m2	9		
6.2	20mm internal plaster to cover slab with waterproof cement	m2	9		
6.3	20mm plaster to internal sides of wall with waterproof cement	m2	21.6		
6.4	12mm plaster to external sides of wall	m2	21.6		
6.5	20mm plaster to cover slab	m2	11.56		
6.6	20mm plaster to soffits of base slab	m2	9		
6.7	20mm plaster to beams	m2	68.64		
6.8	20mm plaster to columns	m2	38.4		

7	Paint work				
7.1	Apply an undercoat and two coats of painting (using Sadolin WeatherGuard, or Crown Permacote Ultra Paint). The paints must be approved by the supervising engineer before use	m2	137.64		
8	Water Supply System				
	Galvanized Mild Steel pipes class "B" medium thic kness with and including jointing, fittings and fixe as described				
8.1	50mm diameter inlet pipe 8000mm long	No	2		
8.2	50mm diameter draw off pipe Ditto	No	1		
8.3	50mm diameter overflow pipe Ditto	No	1		
8.4	75mm diameter scour pipe Ditto	No	1		
8.5	2" diameter brass pegler gate valve with wheel and head	No	1		
8.6	20mm diameter stop corks	No	1		
8.7	600x600x6mm heavy gauge steel primed metal manhole cover on slab with and including metal framing all around	No	1		
9	Ladder				
9.1	Supply and install a aluminium ladder or galvanized steel ladder, including all anchorage points (500mm wide, 9m long)	No	1		
10	Branding Services				
10.1	Branding (using Sadolin WeatherGuard , or Crown Permacote Ultra Paint). Branding to be inscribed into the wet plaster as will be directed by the supervising engineer	Ls	1		
	Subtotal A: Construction of New 10m³ Elevated water tank				
	Total for construction for two water tanks			2	
B	BoQ for Pipeline extension				
1	Prepare site by stripping top 200 mm of soil to remove all debris including sand (if any) from site and carting away spoil	m	28		

2	Excavate 300mm wide, and 600 mm deep for laying pipes	M ₃	4		
3	Supply and install 2inch PN10 HDPE pipes Complete with fittings, sockets, and adapters from the shallow well to the water tank	Lm	24		
4	Supply and install 1.5inch PN10 HDPE pipes Complete with fittings, sockets, and adapters from the water tank to the water kiosk as will be directed by the supervising engineer	Lm	200		
5	Backfill the trench with selected approved filling material	Lm	120		
6	Labour for installation of the complete solar power system for the shallow well, including mounting, wiring, testing, and commissionings	LS	1		
Sub-total B: Pipeline extension					
Grand Total for Construction of 2 water tanks and Piping works (A+B)					

S/N	CONSTRUCTION OF WATER POINT WITH SIX NOZZLES	UNIT	QTY	RATE (USD)	AMOUNT (USD)
1	Clearing and preparation of the site including cutting down and removal of top soil up to a depth of 150mm and disposed of as directed.	Sm	30.30		
1.01	Excavation of foundation trench	Cm	19.70		
1.02	Supplying and laying 300 mm approved hardcore filling spread well rammed and	Cm	5.30		
1.03	50 mm PCC (1:2:4) For RCC Work	Cm	2.50		
1.04	Stone Masonry Work in 1:4 C/M	Cm	4.00		
1.05	20 mm thick Plaster in 1:4 C/M	Sm	40.10		
1.06	3 mm th. Punning work in 1:1 C/M	Sm	6.00		
1.07	HDP Drain pipe ø 100 mm, PN 6, of 6m long	No	2.00		
1.08	Globe valve ø 50 mm	No	2.00		
1.09	Concrete Manhole for Gate Valve with steel cover and lock	No	1.00		
1.1	Brass Union ø 50 mm	No	1.00		
1.11	GI Nipple ø 50 mm	No	1.00		
1.12	GI Pipe ø 50 mm of 6m long	No	1.00		
1.13	GI Elbow ø 50 mm	No	2.00		
1.14	GI Socket ø 50 mm	No	8.00		
1.15	GI Cross ø 50 mm	No	3.00		
1.16	GI Tee ø 50 mm	No	1.00		
1.17	Brass Tap	No	8.00		
1.18	Soak pit ø 2m, depth- 3m filled with rubble	No	1.00		
1.19	50 mm Pipe -distribution pipe	M	50.00		
1.2	Construct accessible ramp with handrail for Persons Living With Disabilities (PLWD) at the water kiosk - 1 m wide, 1:12 slope	No	1.00		
Sub Total of One Water Point					
Grant-total Two Water Point				2	

A Deepening of Shallow Well					
ITEM	DESCRIPTION	UNIT	QTY	RATE (USD)	AMOUNT (USD)
1	Deepening of Shallow Well				
1.2	Remove water from the well to achieve optimal water depth.	lsm	1		
1.3	Remove all silt material to restore the well to its original depth and maximize yield capacity.	m ³	30		
Subtotal A: Deepening of Shallow Well					
B Construction of Apron (extension of shallow well apron)					
ITEM	DESCRIPTION	UNIT	QUANTITY	RATE (USD)	AMOUNT (USD)
1	Excavate 30cm deep to receive foundation for extension of Apron wall	M3	4.09		
3	Construction of an apron; construct rubble stone wall to extend the apron to 2.6x2.6m, use mortar for bedding and jointing at ratio of 1:4 cement:sand	M3	2		
4	Construct rubble stone for ramp for wheel access of 1 m wide, with a slope of 1:12	M3	2.6		
5	Construct ring beam above the rubble stone, to hold standing slab, use Y10 and ratio of 1:2:4	M3	0.6		
6	Provide 100 cm thick RCC slab over the ring beam, use concrete ratio of 1:2:4, and Y10 reinforcement bars for both longitudinal and transversal bars with spacing of 150 mm c/c	M3	0.68		
7	Plaster all surfaces with 2.5 cm thick mortar at ratio of 1:4	M2	9.8		
Subtotal B: Construction of Apron					
C BoQ for Chainlink Fencing (20 m x 20 m)					
ITEM	DESCRIPTION	UNIT	QTY	RATE (USD)	AMOUNT (USD)
1	Site preparation				
1.1	Clear site of all bushes and debris. Grub up roots and burn the arising	SM	400		
2	Excavation and concrete works				
2.1	Excavation of trenches 400 mm deep, 500 mm wide foundation as approved by the site Engineer	CM	8		
2.2	Lay at the bottom of excavated trenches 50 mm of Lean Concrete 1:3:6 mix ratio as approved by site Engineer	CM	2		

2.3	Construction of 200x400mm thick concrete on the base of the metal poles with 1:2:4 mix ratio and allow for curing of all concrete works	CM	6.4		
3 Metal poles and wires					
3.1	Provide and fix pretreated box metal poles (80mm by 60mm), to form a 45 degree angle at the top embedded with 200mm concrete foundation, 3m high, spaced at 1.5m from each, with N brace at the corners and in the middle with painting. Include the cost of welding and fixing	pcs	32		
3.2	Supply and fix 2800mm high HEAVY GAUGE 12 chain-link to the posts using 3mm galvanized wire. Allow for securing the chain-link to a 12mm reinforcement bar welded at the base between the posts.	LM	80		
4 Gate					
4.1	Supply and fix double leaf steel gate size 3600x2100mm high with small pedestrian door made from 3mm thick steel plate welded on both sides of the frame. Frame: 75x50x3mm thick RHS external members and 25mm SHS 3mm thick secondary members, fixed onto the concrete columns using heavy duty steel pin hinges; with all fastening accessories including all cutting, welding, grinding and priming with one coat of grey oxide before fixing. Gate to have peep holes not more than 25mm dia with a sliding door, and 2 locking mechanisms, top and bottom.	NO	1		
Subtotal C: Chainlink Fencing					
Total for one Shallow well (A+B+C)					
Grand total for 2 Shallow wells				2	

BOQs for Construction of Animal Troughs for 2 shallow wells

NO	DESCRIPTION	UNIT	QTY	RATE(USD)	AMOUNT (USD)
A	CAMEL TROUGHS				
1.1	Site clearance and mobilization: Remove waste and debris	lsm	1		
1.2	Excavate 0.5m deep x 1.55m wide x 8.6m long trench	m ³	6.67		
1.3	Lay 50mm thick lean concrete (1:4:8) as foundation blinding	m ³	0.54		
1.4	Supply and fill 300mm hardcore, compacted	m ³	3.3		
1.5	Construct 150mm thick RCC slab with mesh wire (1:2:4)	m ³	1.61		
1.6	Build 0.7m high rubble stone masonry wall (1:3 mortar)	m ³	2.8		
1.7	Cast 200mm x 200mm RCC beam (1:2:4) reinforced with 4Y12 bars (rate inclusive of concrete + reinforcement)	m ³	0.79		
1.8	Apply 20mm thick plaster (1:4) to walls	m ²	31.5		
1.9	Apply 2 coats of emulsion paint to walls	m ²	31.5		
1.1	Lay 1.8m slope slab for footstep	m ³	1.3		
	Sub-Total for camel trough				
B	GOAT TROUGH				
2.1	Site clearance and mobilization: Remove waste and debris	lsm	1		
2.2	Excavation: Excavate 0.5m deep x 1.25m wide x 8.6m long	m ³	5.4		
2.3	Lay 50mm thick lean concrete (1:4:8) as foundation blinding	m ³	0.54		
2.4	Supply and fill 300mm hardcore, compacted	m ³	3.3		
2.5	Construct 150mm thick RCC slab with mesh wire (1:2:4)	m ³	1.61		
2.6	Build 0.25m high rubble stone masonry wall (1:4 mortar)	m ³	0.99		
2.7	Cast 200mm x 100mm RCC beam (1:2:4) reinforced with Y12 bars	m ³	0.4		
2.8	Apply 20mm thick plaster (1:4) to walls	m ²	13.8		
2.9	Apply 2 coats of emulsion paint to walls	m ²	13.8		
2.11	Lay 1.8m slope slab for footstep around the trough	m ³	1.3		
	Sub-Total for goat Troughs				
	Total for the two animal troughs one shallow wells (A+B)				
	Grand total for two animal troughs for 2 Shallow wells			2	

BoQ of excavation and construction of a new circular underground water reservoir (Berkad) in Waney Village, Huddur, Bakool, Somalia. An average of 15m diameter and 4m deep (Increasing access to clean and safe water)

Note: A site assessment visit shall be conducted by the contractor before filling the bill of quantity to check the site conditions. The contractor shall contact IRCA Office in case of any clarifications regarding the construction work and all rates of units shall be included in the BoQ like transportation, cost of materials, installation cost, etc.

Item No	Description	UNIT	QTY	RATE(USD)	AMOUNT (USD)
A. SUBSTRUCTURES					
1	Excavation and earth work				
1.1	Excavate any remaining material to bring the existing berkad pit to exactly 15 m diameter and 4 m deep, and cart away excavated material (quantity to be determined on site).	Lms	1		
1.3	Excavate an underground silt trap 2.50 m wide, 2.50 m long and 2.9m deep and cart away excavated material	M3	18.125		
1.4	Excavate the water channels (inlet wing) 0.4m deep, 9.5 m long and 0.4 m wide and for water passage between silt trap and barked of 1.5 m long, 0.4 m deep and 0.40 m wide and 4.5 m long, 0.4 m deep and 0.4 m wide for outlet.	M3	4.96		
1.5	Excavate 9 No. pad footings of each 80 cm wide, 80 cm long and 50 cm deep.	m3	2.88		
1.6	Excavate trenches foundations for the main barked and silt trap and including trenches of two cross beams of 30cm deep, 40cm wide and 91.212m long.	m3	10.95		
Sub-total (A)					
B. SUPERSTRUCTURE					
2	Concrete work				
2.1	lay plain concrete under foundation with mixed ratio of 1:4:8 of 50mm thick 400mm wide and 59.612 m long	M3	1.1922		
2.2	Footing blinding: provide 50mm thick lean concrete under footing with mixed ratio of 1:4:8.	M3	0.288		
2.3	Cast and construct nine (9) RCC pad footings of each 70cm wide, 70 cm long and 45 cm thick with 6D12mm diameter mild deformed steel bars with 6mm diameter stirrups @15 cm c/c with mix ratio of 1:2:4 (cement:sand:aggregate)	M3	1.9845		
2.4	Cast and construct eight (8) Rcc columns of each 40 cm wide, 40 cm long and 4.8 m high with 4D14mm diameter mild deformed steel bars linked with 6 mm diameter stirrups at 20 cm spacing with concrete mix ratio of 1:2:4 (cement:sand:aggregate)	M3	6.144		
2.5	Cast and construct one (1) Rcc circular column of 40 cm dia and 4.8 m high with 6D14 mm diameter mild deformed steel bars linked with 6 mm diameter stirrups at 20 cm spacing with concrete mix ratio of 1:2:4 (cement:sand:aggregate)	M3	0.6029		

2.6	Cast and construct reinforced concrete foundation beam for the berkad including two cross beams and silt trap 40 cm wide, 91.212 m long and 20 cm deep with 4D14mm mild deformed steel bars and linked with @6 mm stirrup bars spaced 20cm c/c all over the foundation with concrete mix ratio of 1:2:4 (cement:sand:aggregate)	M3	7.2970		
2.7	Cast and construct reinforced concrete lintel beam for the berkad and silt trap at mid height 40 cm wide, 59.612 m long and 20 cm deep with 4@14mm mild deformed steel bars and linked with @6 mm stirrup bars spaced 20cm c/c all over the foundation and mix ratio of 1:2:4 (cement:sand:aggregate)	M3	4.7690		
2.8	Cast and construct reinforced concrete ring beams at the top of the main berkad and silt trap 40 cm wide, 59.612 m long and 20 cm deep with 4D12mm mild deformed steel bars and linked with @6 mm stirrup bars spaced 20cm c/c all over the foundation and mix ratio of 1:2:4 (cement:sand:aggregate)	M3	4.7690		
2.7	Cast and construct two reinforced concrete cross beams at the top of the main berkad of 15 cm thick, 20 cm wide and 15.8 m long with 4D14 mm steel bars linked with 6mm stirrup bars spaced 20 cm c/c below the slab and mix ratio of 1:2:4 (cement:sand:aggregate)	M3	0.948		
2.8	Cast and construct reinforced concrete floor slab for the main berkad for 15 m diameter and 15 cm thick with 12mm steel bars on both ways linked with binding wire spaced 15cm c/c and mix ratio of 1:2:4 (cement:sand:aggregate).	M3	26.49375		
2.9	Cast and construct reinforced concrete floor slab for silt trap 1.7 m wide and 1.7 m long and 15cm thick and water passage of 1 m wide, 1.5 m long and 15 cm thick with 10mm steel bars on both ways linked with binding wire spaced 15cm c/c and mix ratio of 1:2:4 (cement:sand:aggregate).	M3	0.6585		
Sub-total concrete work					
3	Masonry work				
3.1	Construct rubble stone masonry wall of the underground berkad 40 cm wide, 49.612m long and 4.4m deep and 0.5m above the ground level with cement/sand mortar ratio 1:4.	M3	88.5016		
3.2	Construct rubble stone masonry wall of the silt trap 40cm wide,10m long and 3.2m deep with cement/sand mortar ratio of 1:4.	M3	10.72		
3.3	Construct rubble stone masonry wall of the water channel (inlet wing walls) 0.6 m high, 9.5 m long and 0.4 m thick and for water passage between silt trap and berkad of 1.5 m long, 0.6 m high and 0.40 m thick and 4.5 m long, 0.6 m wide and 0.4 m thick for outlet with cement/sand mortar ratio of 1:4	M3	7.44		
3.4	Construct berkad masonry stairs 1.0m wide, 3.13m long and 3.2m high with cement/sand mortar mix of 1:4	M3	5.008		

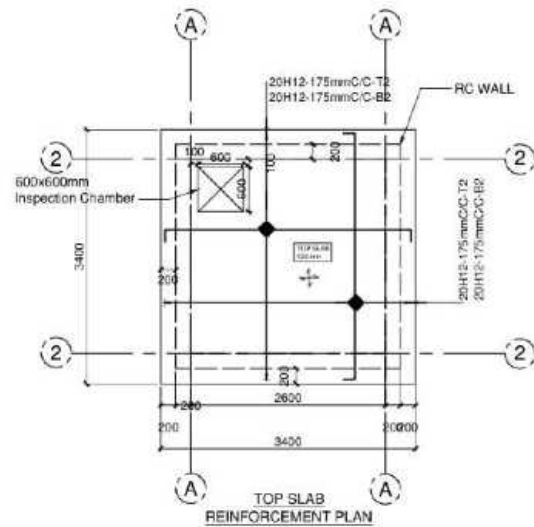
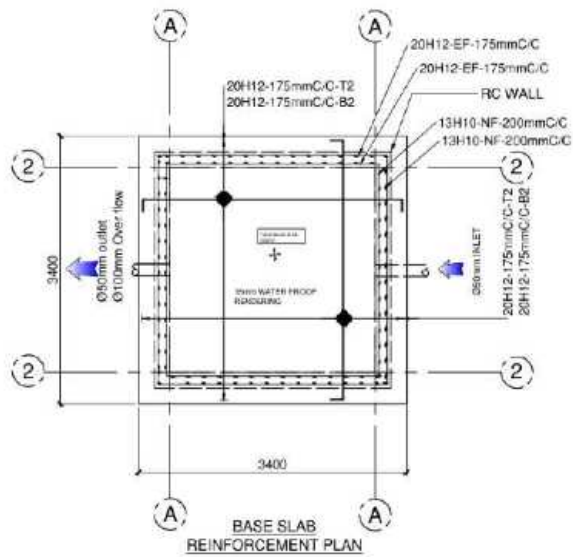
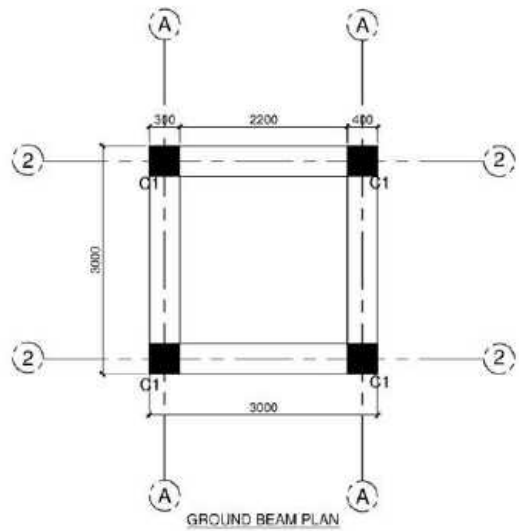
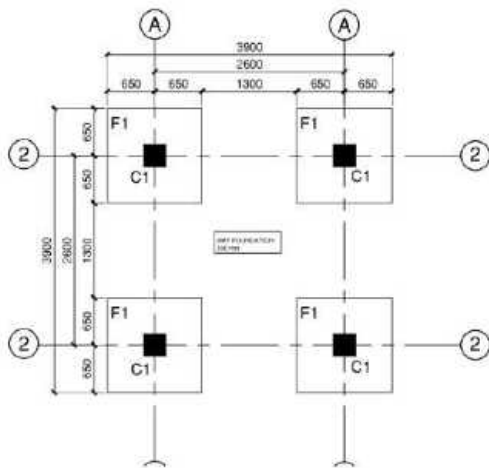
3.5	Construct silt trap masonry stairs 1.0m wide, 2.4m long and 2.4m high with cement/sand mortar mix of 1:4	M3	2.88		
3.6	Provide and fix two inlet and outlet mesh metal doors made of 14mm iron bars both ways welded with x-pin mesh with its stainless steel metal frames. Mesh spaces should not be less than 10 cm with a dimension of 1 m wide and 1m long inlet and outlet for the silt trap and inlet and outlet for the berkad.	Pcs	4		
3.7	Construct rubble stone masonry stage platform for water users of 2.5 sqm and 0.5m height and smooth with cement screed	M3	1.25		
3.8	Lay 20 cm of thick hardcore around the main barked with offset of 60cm to protect water seepage to the berkad wall.	M3	6.70704		
3.9	lay 5cm thick plain concrete over the hardcore.	M3	1.67676		
Sub-total Masonry work					
4	Plastering and water proofing				
4.2	Apply two coats of plastering 5mm thick cement and sand mortar of 1:2 ratio to all internal walls of the barked including silt trap an area of 207.82 m2	M2	207.82		
4.3	Provide 5 cm thick water proofing cement/sand floor screed of 1:2 mix ratio to all internal walls of the berkad and silt trap an area of 207.82m2.	M2	207.82		
4.4	Apply two coats of 5 cm thick cement/sand plastering to all internal and external walls of the water inlet and outlet walls	M2	37.2		
Sub-total of plastering and water proofing					
5	Floor Works				
5.1	Provide compacted stone hard-core 20cm thick including barked, silt trap and water channel of an area of 202.22 sqm	M3	40.444		
5.2	Provide plain concrete above the hardcore of 7cm thick of an area of 202.22 sqm	M3	14.1554		
5.3	Provide 5 cm thick water proofing cement/sand floor screed of 1:2 mix ratio of an area of 182.88 sqm	M2	182.875		
Sub-total floor work					
6	Roofing work				
6.1	Supply and install gauge 28 Prepainted corrugated iron sheets "C.I.Sheet" or equal and approved by WHH Engineer including all nails and fixing, with complete woodwork, such as 150mmx50mm tie beam, 75mmx50mm purlins and 100mmx50mm rafters of 2m spacing, of an area of 384 sqm. Provide and fix openable door for barked access (1 mx 1 m), made of wood and iron sheets. Provide gutter around the edges of the roof to collect water and direct to the inlet between silt trap and the berkad.	M2	371		

6.2	Supply and install metal cover for silt trap of 2.5m wide x 2.5 m long using longitudinal and transverse 16mm iron bars of spacing of 10cm welded with x-pin mesh and provide angle iron frame of 75 mm by 75 mm and 5mm thick welded together with iron bars, make a lockable door of 60 cm by 60 cm made up of the same iron bar size.	LS	1		
Sub-total of roofing work					
7	Visibility signboard showing the Project Description along with respective organisational Logos	Ls	1.00		
Sub-Total of Visibility signboard					
Total for Superstructure work (B)					
Grand Total for the berkad (A+B)					

SHALLOW WELL SOLAR WATER PUMPING SYSTEM WITH SUBMERSIBLE PUMP

NO	DESCRIPTION OF MATERIAL	UNIT	QTY	RATE(USD)	AMOUNT (USD)
1	1.5 kW submersible solar pump with controller compatibility	No	1		
2	Solar pump inverter 2.5 kW with full protection	No	1		
3	HDPE rising pipes 2 inch (6m) with fittings	No	4		
4	450 W monocrystalline solar panel	No	5		
5	Well probe sensor with plugs	No	1		
6	1.5 mm ² 2-core cable for well probes	m	30		
7	Solar mounting structure for 5×450 W panels	No	1		
8	PV DC disconnect switch 1000 V / 40 A	No	1		
9	Submersible pump cable 3-core 6 mm ² copper	m	30		
10	Water level sensor for tank	Pc	1		
11	Water level sensor cable 1.5 mm ² 2-core	roll	1		
12	Surge protector	No	1		
13	63A manual change-over switch	No	1		
14	PV cable 6 mm ²	roll	1		
15	Installation, commissioning, and supply of accessories for the solar system	No	1		
16	Training of 2 caretakers on operation of the solar system	No	1		
Total for one shallow well					
TOTAL FOR 2 SHALLOW WELLS SOLAR WATER PUMPING SYSTEM				2	

S/N	GRAND SUMMARY	CURRENCY	AMOUNT USD
1	Construction of water tank and piping works	USD	
2	Construction of 2Water Poinsts	USD	
3	Construction of Apron & Chainlink Fencing(2)	USD	
4	Construction of Animal Troughs(4) for 2 shallow wells	USD	
5	Construction of a new circular underground water reservior (Berkad) in Waney Village,Huddur,Bakool,Somalia. An average of 15m diameter and 4m deep.	USD	
6	Installation of Solar water pumping System with submersible Pump	USD	
	GRAND TOTAL	USD	
	Name of Signatory:		
	Designation:		
	Signature:		
	Date Signed & Stamp:		



Project: Advancing Adaptation Through Resilient Mobility And Natural Capital (AARAN)

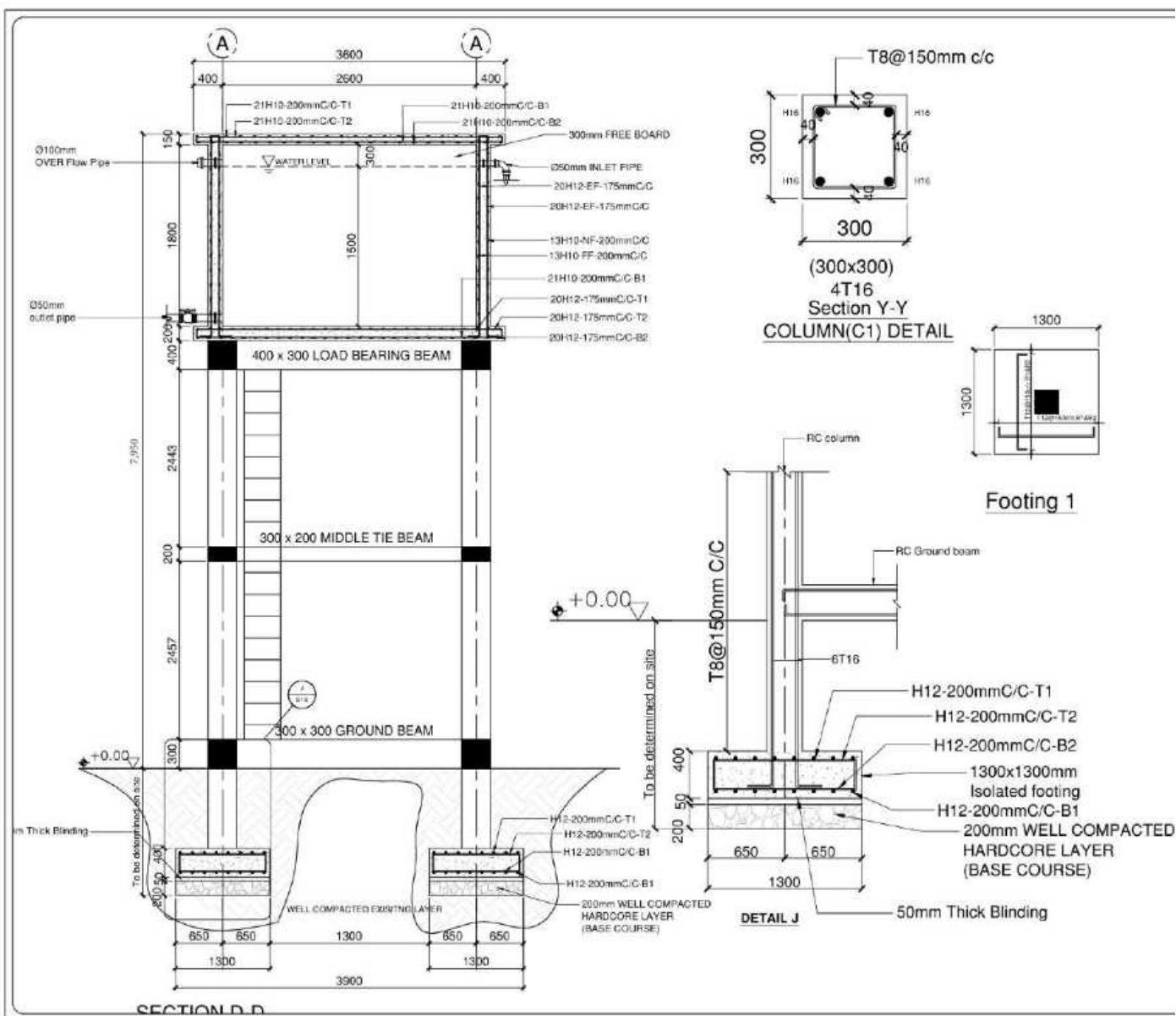
Activity Name: Construction of Water Ten cubic Elevated water tank in Hudur, Bakool, Somalia

DRAWN BY: WASH&Construction Engineer

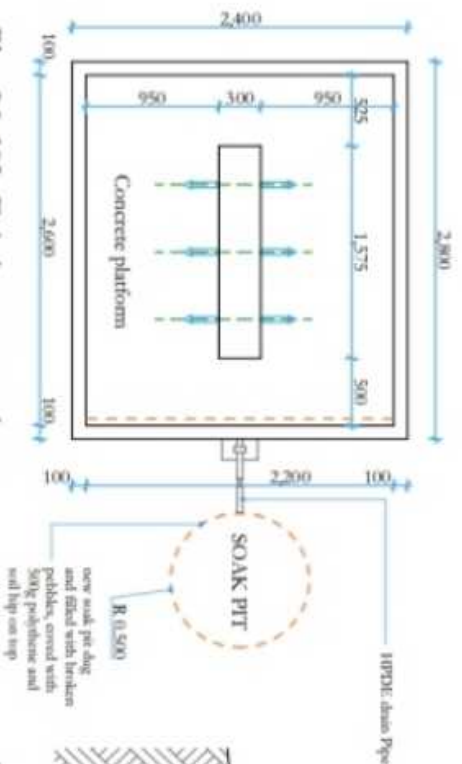
LAYOUT PLAN

DATE: 06.07.2026

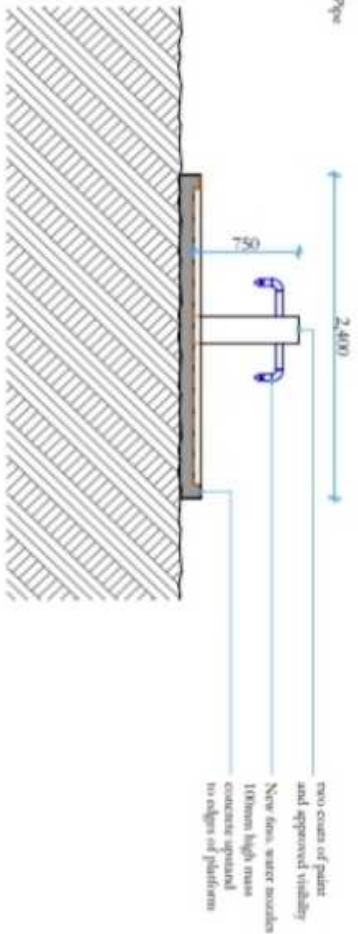
DRAWING NO: 01



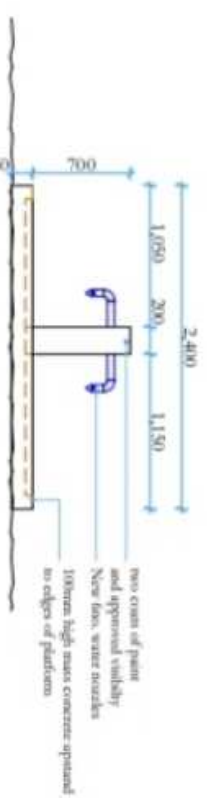
	Project: Advancing Adaptation Through Resilient Mobility And Natural Capital (AARAN) Activity Name: Construction of Water Ten cubic Elevated water tank in Hudur, Bakool, Somalia DRAWN BY: WASH&Construction Engineer	SECTION & DETAILS DATE: 06.07.2026 DRAWING NO: 02
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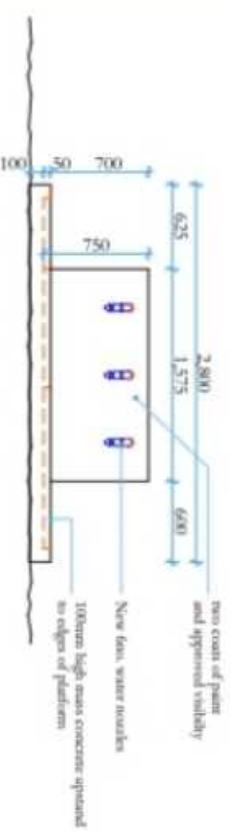
Plan L[-]03- Existing water point



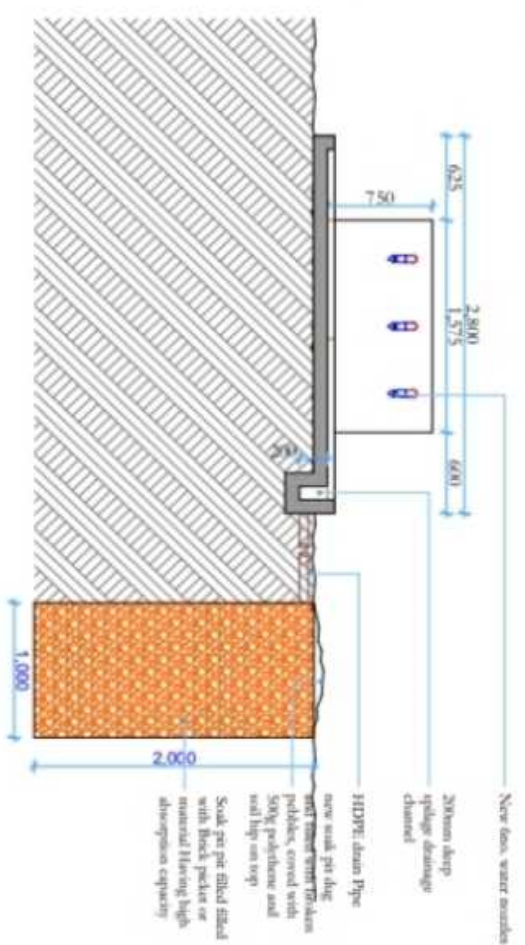
Section L[-]06 - Water point



Side Elevation L[-]04 Water point



Front Elevation L[-]05 - Water point



Section L[-]07 - Water point



Project: Advancing Adaptation Through Resilient Mobility And Natural Capital (AARAN)
Activity Name: Construction of Water Kiosk in Hudur, Bakool, Somalia

DRAWN BY: WASHCoConstruction Engineer

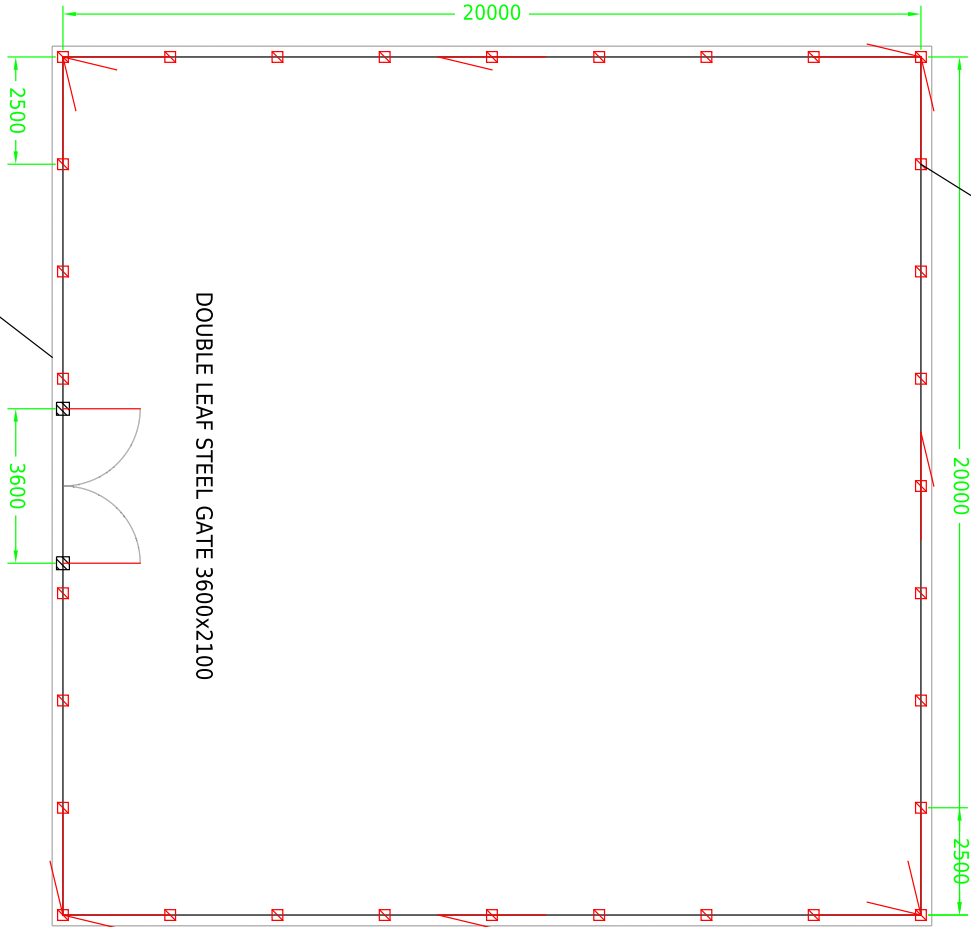
LAYOUT PLAN

DATE: 06.07.2026

DRAWING NO: 01

CHAIN LINK FENCE LAYOUT PLAN (20m x 20m)

Poles 80x60mm RHS @ 2500mm c/c (32 No.)



DOUBLE LEAF STEEL GATE 3600X2100

200x400 concrete foundation beam under fence line

(pole symbols enlarged for clarity)



Project: Advancing Adaptation Through Resilient Mobility And Natural Capital (AARAN)

Activity Name: Construction of Animal Trough in Hudur,

Bakool, Somalia

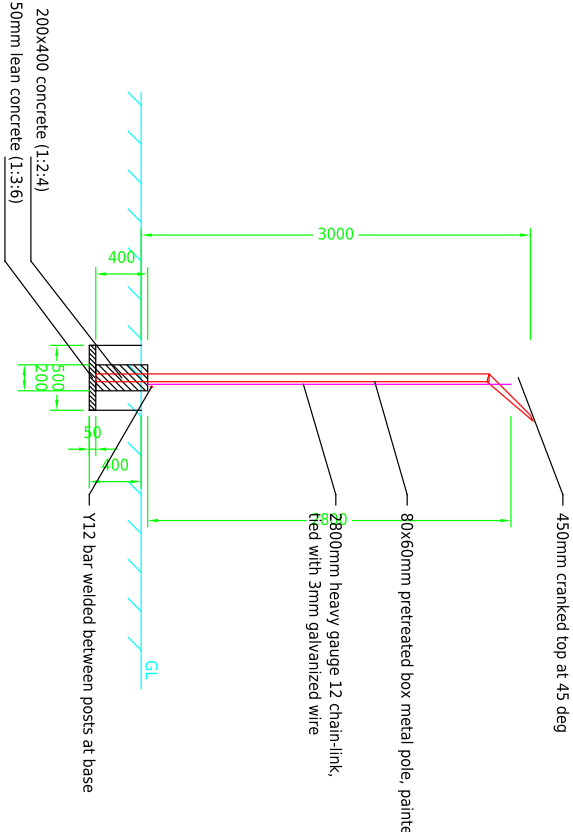
DRAWN BY: WASHCoConstruction Engineer

FENCE LAYOUT PLAN

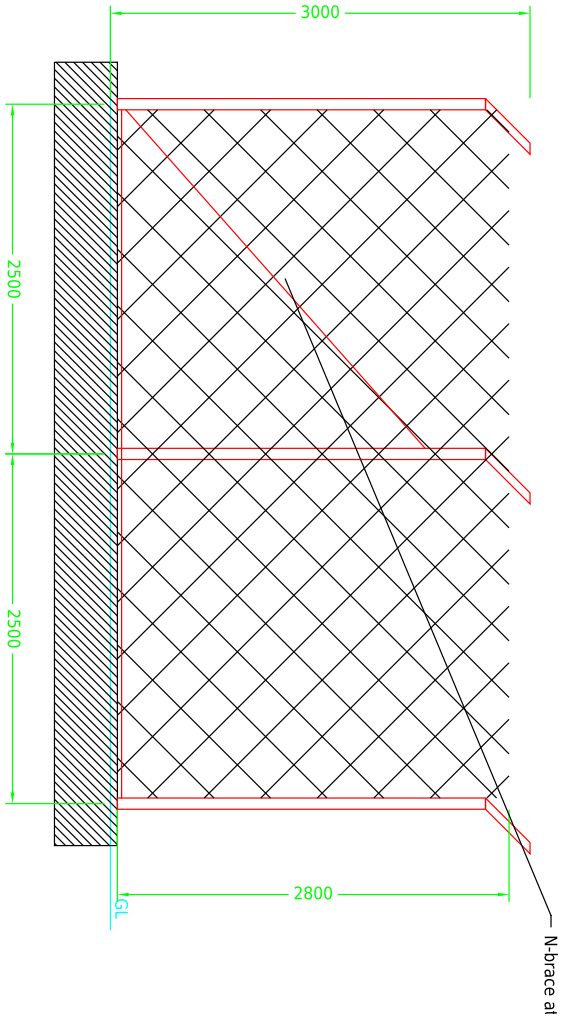
DATE: 06.07.2026

DRAWING NO: 04

TYPICAL FOUNDATION SECTION



TYPICAL FENCE ELEVATION



Project: Advancing Adaptation Through Resilient Mobility And

Natural Capital (AARAN)

Activity Name: Construction of Animal Trough in Hudur,

Bakool, Somalia

DRAWN BY: WASHCoConstruction Engineer

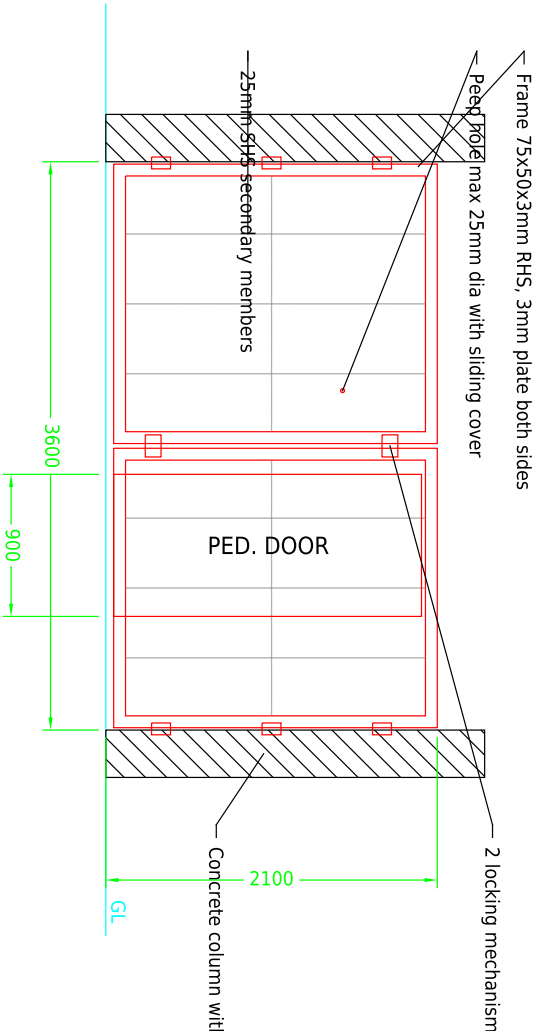
FENCE SECTION & ELEVATION

DATE: 06.07.2026

DRAWING NO: 05



GATE ELEVATION (3600 x 2100, double leaf)



NOTES

1. All dimensions are in mm unless otherwise stated.
2. Clear site of bushes and debris; grub up roots (20m x 20m).
3. Foundation: trench 500 wide x 400 deep; 50mm lean concrete blinding (1:3:6); 200x400mm concrete beam (1:2:4) along the full fence line, encasing pole bases. Cure all concrete.
4. Poles: 80x60mm pretreated box metal, 3000mm above GL with 450mm top cranked at 45 deg; spaced 2500mm c/c (32 No.); N-braces at corners and mid-sides; welded and painted.
5. Chain-link: 2800mm high, HEAVY GAUGE 12, tied to poles with 3mm galvanized wire; bottom secured to Y12 reinforcement bar welded at the base between posts.
6. Gate: double leaf 3600x2100mm with pedestrian door; 3mm plate both sides; frame 75x50x3 RHS + 25mm SHS secondary; heavy duty steel pin hinges on concrete columns; peep holes max 25mm dia with sliding cover; 2 locks (top and bottom); prime with one coat grey oxide before fixing.

		Project: Advancing Adaptation Through Resilient Mobility And Natural Capital (AARAN) Activity Name: Construction of Animal Trough in Hudur, Bakool, Somalia	
DRAWN BY: WASHCoConstruction Engineer		GATE DETAIL & NOTES DATE: 06.07.2026 DRAWING NO: 06	

Technical drawing of a sloped AFRON slab. The drawing shows a rectangular slab with a sloped top surface. The dimensions are as follows:

- Overall width: 1800
- Overall length: 8600
- Internal width (excluding side walls): 1550
- Internal length (excluding end walls): 8200
- Side wall thickness: 1150
- End wall thickness: 150
- Top surface slope: 1:25 (fall 1:25 away from trough)
- 50mm clearance pipe with plug (indicated by a blue triangle at the top right corner)

The drawing is labeled with 'A' and 'B' at the corners and 'E' at the bottom center. The text 'SLOPED AFRON SLAB 1800mm (fall 1:25 away from trough)' is written vertically inside the slab.

The diagram illustrates a sloped apron slab with the following specifications:

- SLOPED APRON SLAB 1800mm (fall 1:2.5 away from trough)**
- Dimensions:**
 - Total width: 1800 mm
 - Clear width of the central opening: 1250 mm
 - Width of the side concrete walls: 260 mm each
 - Overall length: 8600 mm
 - Length of the central opening: 8200 mm
 - Bottom width of the central opening: 850 mm
- Components:**
 - A cross-hatched border representing the concrete wall surrounding the opening.
 - A red line at the top right corner indicating a slope or fall.
 - Blue arrows labeled "C" pointing towards the centerline of the slab.
- Note:** A dimension of 50mm is indicated for the washout pipe with plug at the top right corner.

Diagram illustrating the cross-section of a retaining wall. The wall is composed of a 200x200 RCC BEAM (far side, elevation) and Rubble stone masonry wall (far side, elevation). The total height is 8600 mm, and the total width is 1400 mm. The wall is shown with a 500 mm base and a 500 mm top. The diagram also indicates the ground level (GL) and the wall's position relative to the ground.

Diagram illustrating the cross-section of a retaining wall structure with the following components and dimensions:

- Dimensions:**
 - Overall height: 1800
 - Overall width: 1550
 - Top width: 700
 - Top thickness: 200
 - Base width: 1150
 - Base thickness: 200
 - Apron slab width: 500
 - Apron slab height: 1800
- Structural Components:**
 - 200x200 RCC beam (1:2:4), 4Y12 + R6@200 links
 - 200mm rubble stone masonry wall
 - 20mm plaster (1:4) + 2 coats emulsion
 - 150mm RCC slab (1:2:4) with mesh wire
 - 300mm hardcore, compacted
 - 50mm lean concrete blinding (1:4:8)
 - Apron slab 100-70mm thick
 - Soil fill 1:2.5

2500

200

850

1800

1750

500

250

50

200mm plaster (1:3) + 2 coats of emulsion

200x100 RCC beam (1:2:4), 2Y12 + R6@200 links

Apron slab 100-70mm thk, fall 1:25

200mm RCC slab (1:2:4) with mesh wire

50mm lean concrete blinding (1:4:8)

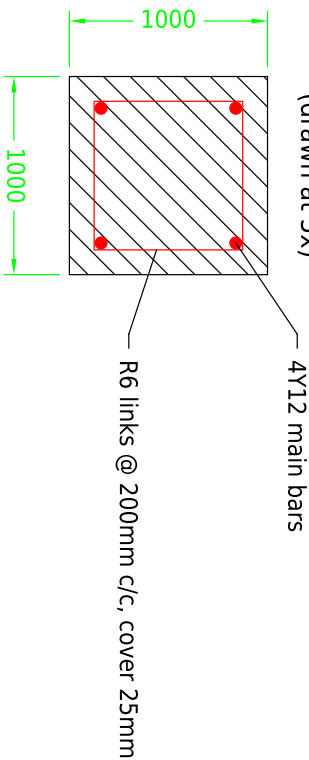
150mm RCC slab (1:2:4) with mesh wire

300mm hardcore, compacted

	Project: Advancing Adaptation Through Resilient Mobility And Natural Capital (AARAN)	
	Activity Name: Construction of Animal Trough in Hudur, Bakool, Somalia	
	DRAWN BY: WASH&Construction Engineer	
	SECTIONS	
	DATE: 06.07.2026	
	DRAWING NO: 02	

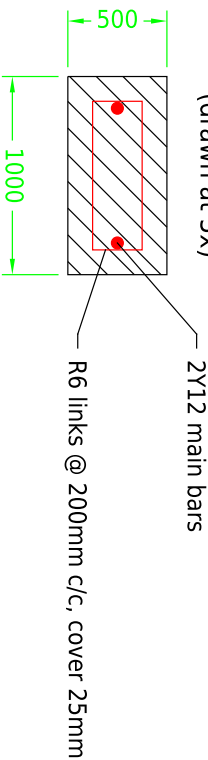
L BEAM DETAIL 200x200

(drawn at 5x)



T BEAM DETAIL 200x100

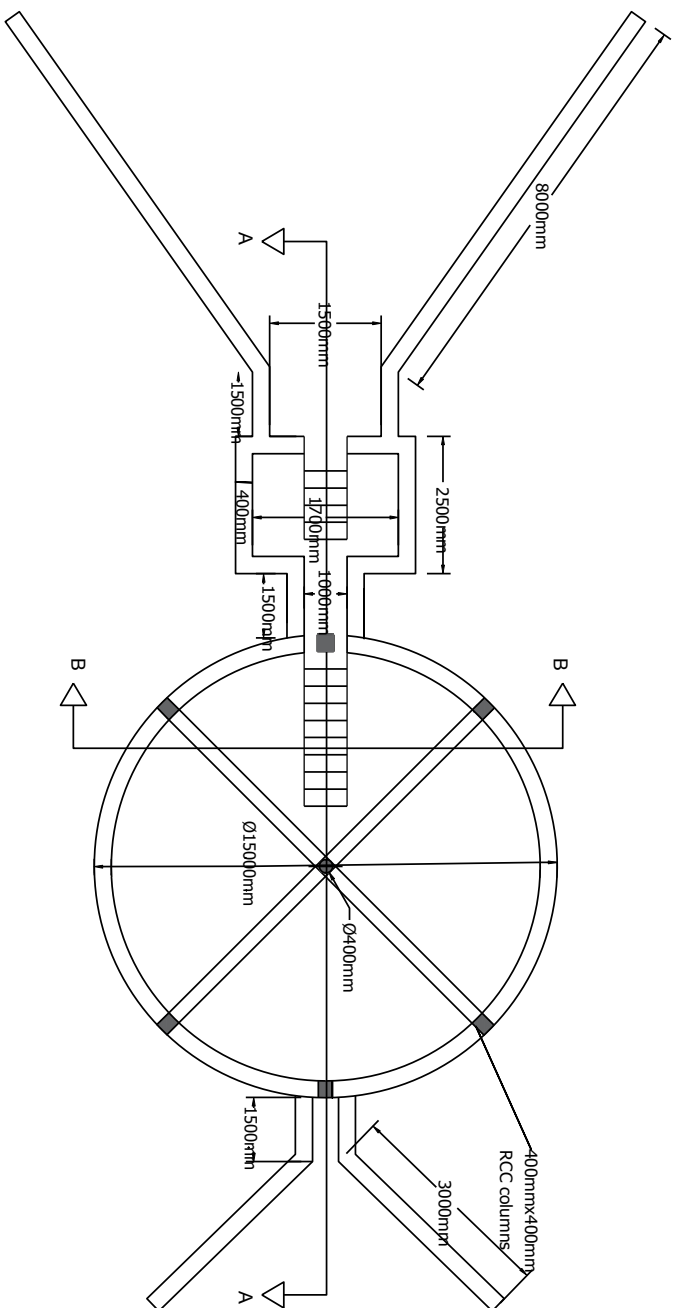
(drawn at 5x)



NOTES

1. All dimensions are in mm unless otherwise stated.
2. Concrete: RCC 1:2:4; lean blinding 1:4:8.
3. Floor slabs 150mm thick, reinforced with mesh wire (A142 or equal), laid on 300mm compacted hardcore over 50mm blinding. Slab top flush with ground level.
4. Walls: 200mm rubble stone masonry.
Camel trough: 700mm high, 1:3 mortar.
Shoat trough: 250mm high, 1:4 mortar.
5. Capping beams (1:2:4): camel 200x200 with 4Y12; shoat 200x100 with 2Y12; R6 links @ 200mm c/c.
6. Plaster 20mm (1:4) to internal faces, floor and beam faces; finish with 2 coats emulsion paint.
7. Apron slab 1800mm wide, 100-70mm thick, fall 1:25, along drinking side (camel) / around trough (shoat).
8. Provide 50mm GI washout pipe with plug at floor level.
9. Cure all concrete min. 7 days before filling.
10. Capacities: camel approx 6.6 m3; shoat approx 2.4 m3

 Project: Advancing Adaptation Through Resilient Mobility And Natural Capital (AARAN)		DETAILS & NOTES	
Activity Name: Construction of Animal Trough in Hudur, Bakool, Somalia		DATE: 06.07.2026	
DRAWN BY: WASHCoConstruction Engineer		DRAWING NO: 03	



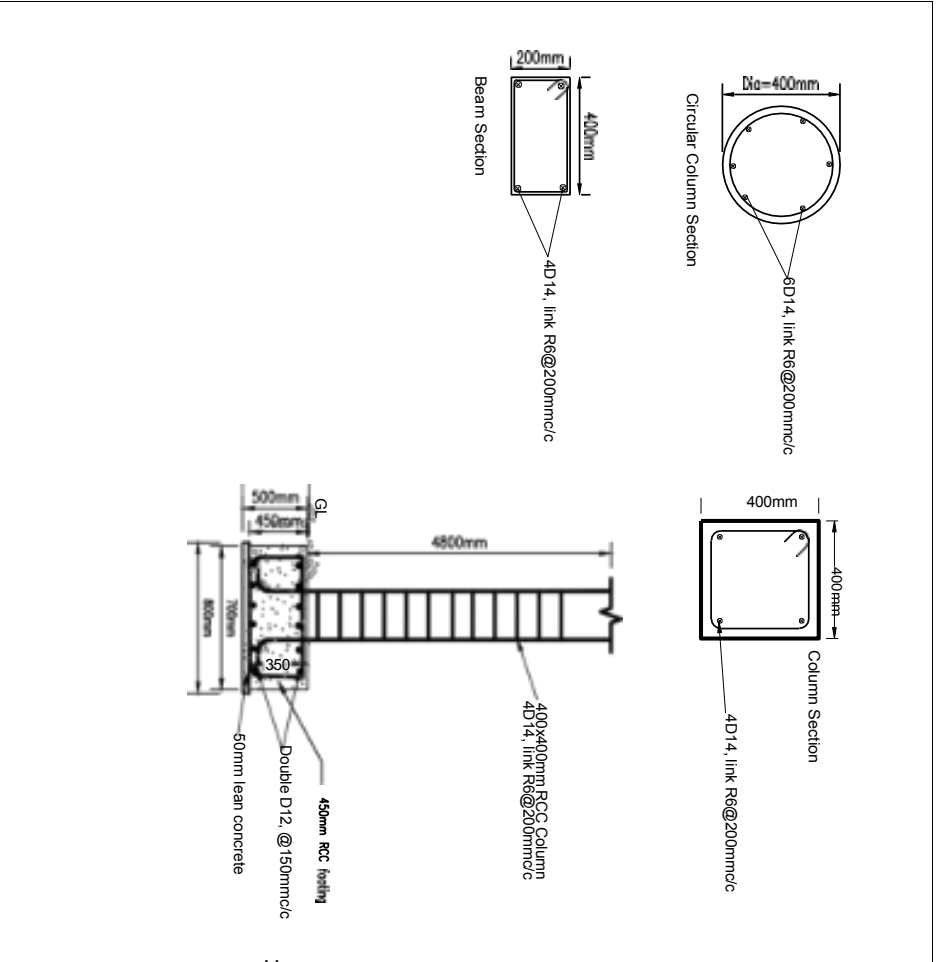
Project: Advancing Adaptation Through Resilient Mobility And Natural Capital (AARAN)
Activity: Name: Construction of Berkad in Hudur ,Bakool,Somalia

DRAWN BY : WASH&Construction Engineer

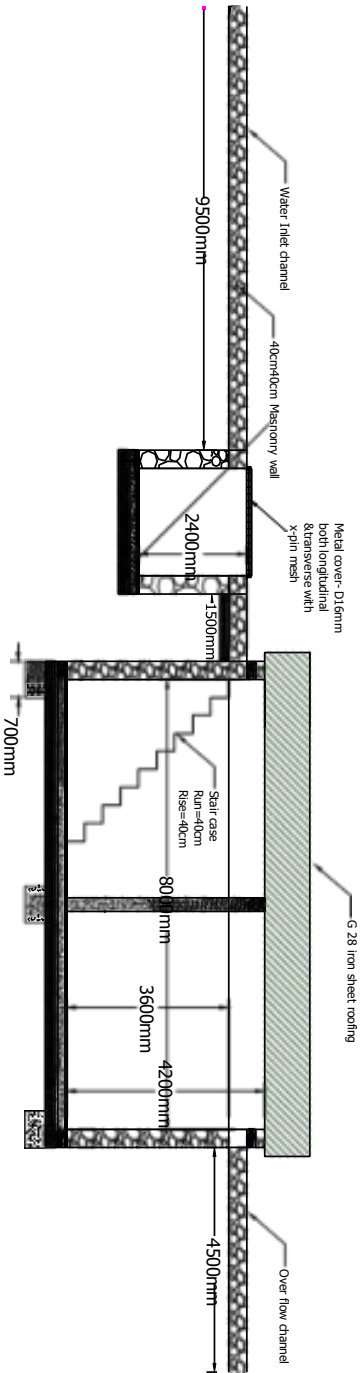
LAYOUT PLAN

DATE: 06.07.2026

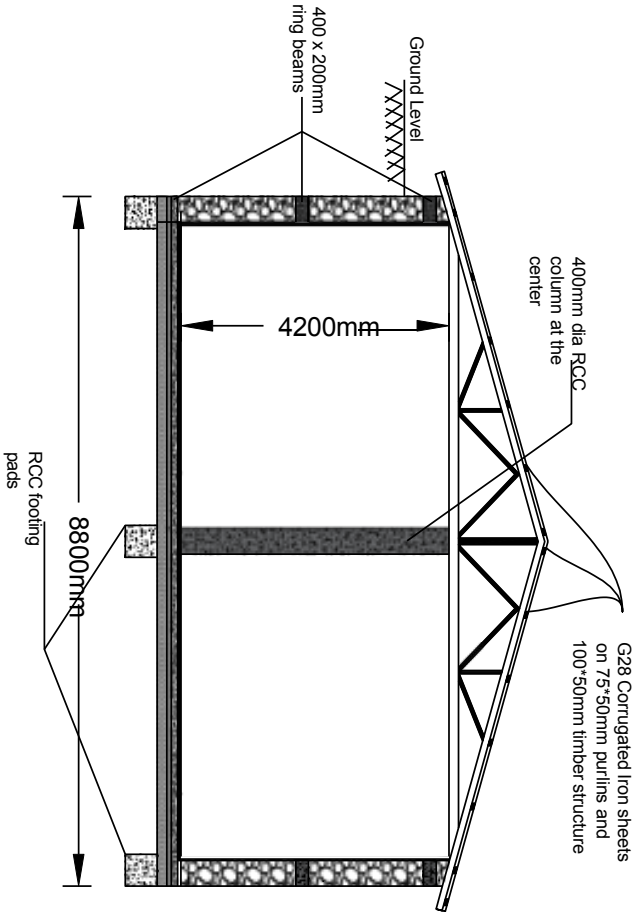
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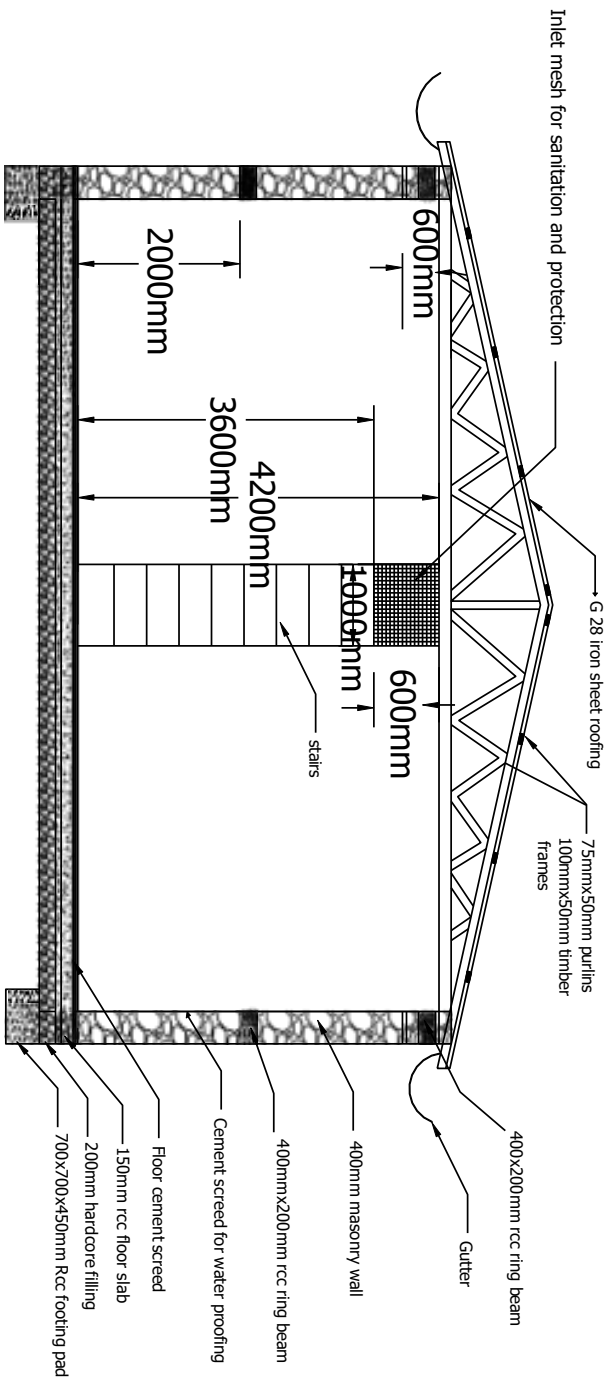
Project: Advancing Adaptation Through Resilient Mobility And Natural Capital (AARAN)
Activity/Name: Construction of Berked in Hudur , Bakool, Somalia



		Project: Advancing Adaptation Through Resilient Mobility And Natural Capital (AARAN) Activity/Name: Construction of Berkad in Hudur ,Bakod, Somalia		Drawing Title: Underground water storage (Berkad)	
DRAWN BY: WASH &Construction Engineer				SECTION VIEW	
		DATE: 06.07.2025			
		DRAWING NO:			



Project: Advancing Adaptation Through Resilient Mobility And Natural Capital (AARAN) Activity:Name: Construction of Berkad in Hudur ,Bakool,Somalia	Drawing Title: Underground water storage (Berkad)	SECTION VIEW
DRAWN BY: WASH &Construction Engineer		
	DATE: 06.07.2025	
	DRAWING NO:	



	Project: Advancing Adaptation Through Resilient Mobility And Natural Capital (AARAN) Activity/Name: Construction of Berkad in Hudur Bakool, Somalia DRAWN BY: WASH &Construction Engineer		
	Drawing Title: Underground water storage (Berkad)		
	SECTION B-B		
	DATE: 06.07.2026		
	DRAWING NO:		