

UNDP-Jaffna.

Scope of work (Construction of Multipurpose Centre for Myliddy at Tellipalai DS Division in Jaffna)

Project Title:

Resettlement in Newly Released Areas - II (RNRA - II)

• Background information of the project

Further to the situation analysis provided in the Addendum of Northern Livelihood Development Project III (NLDP III) proposal, latter part the year 2015 shows a significant change in the context of the Jaffna District with the resettlement of internally displaced persons, identified as vulnerable communities, in need of immediate recovery support. Accordingly, as of now a land extend of 1,870 acres belonging to 19 Grama Niladhari Divisions¹ (GNDs) were released and out of which 1 GND (Palai Veemankamam South) was fully released and 18 other GNDs (KKS West, KKS Centre, Kurumbasiddy, Thaiyiddy East, Thaiyiddy North, Palaly North, KKS South, Palai Veemankamam North, Kadduvan, Thenmailai, Varuththalaivillan, Vasavillan East, Vasavillan West, Myliddy North, Thaiyiddy South, Palaly South, Palaly East, Naguleswaram) have been partly released. As a result, since March 2015 a total of 3,629 families have expressed their intention to return to their own land.

Under the supervision of the Government Agent Jaffna District and the direct interventions of respective Divisional Secretariats and the contribution of UN and civil society organizations, immediate assistance relating to food, sanitation, housing and livelihood for returnees were made available. Nevertheless, the recovery needs of these resettled communities continue to be significant, particularly because the released areas of land have turned in to forests, has detrimentally affected the suitability of the living conditions and does not provide the space for socio-economic and cultural activities for the resettled. Further reawakening of basic infrastructure and livelihood has become highest priority of the returnees and as well as relevant authorities.

Establish or strengthen an existing community services centre in each pilot site that would serve as an information centre; facilitate referrals to relevant services and support outreach services in areas of return. Under this context the Multipurpose Center in Myliddy at Tellipalai DS Division is vital in this context to meet the project objectives.

¹ Source: Resettlement Unit, District Secretariat, Jaffna District

The key activities:

Provide support to Community interaction and Government and non-government Community level service delivery officers.

Mobilize targeted communities to reactivate community based organizations and engage in delivery of service.

Objective of this project/ intervention:

People displaced by the conflict (IDPs, IDP returnees and refugee returnees) have a core grievance addressed through access to land and rebuilding of their lives. UN catalytic engagement with resettlement and durable solutions has supported wider political transition, peace-building and reconciliation efforts in Sri Lanka.

• Involved parties (Govt. CSOs. Etc.)

Divisional Secretary-Tellipalai , Department of Cooperative Development, Predeshiya Saba, Grama Seva Officer, Samurdhi Development Officer and Economic Development Officer and other GS divisions and village based government officers, CSOs, CBOs & Consultant Engineer.

• Targeted beneficiaries:

400-450 return families as direct beneficiaries from Myliddythurai North, Myliddythurai South, Myliddy North and adjoining GN Divisions

• Expected results/achievements

Construction of Multipurpose Centre for Community reintegration and service delivery

•Location

Thaiyiddy South in Tellipalai DS Division

• Selection process of the contractors (Competitive)

CWC (National Ad) for Construction of Multipurpose Centre

• Technical details of the work

Technical Detail for Construction of Multi-Purpose Centre for Myliddy at Tellipalai DS Division in Jaffna.

- 1) 01 Room for Myliddy FCS, working space for Government and non-government Community level service delivery officers and a community meeting hall with 1.5 m wide open verandah.
- 2) Foundation with RR Masonry for cement concrete block wall
- 3) RCC footing for RCC columns
- 4) Doors & windows are made out of Approved quality timber
- 5) Iron safety grills / bars provided for windows.
- 6) Continuous lintels for block wall and column provided
- 7) Calicut tile hip roofing with necessary timber framework and ridging with red cement mortar.
- 8) Under ceiling for Rooms & Meeting hall
- 9) Male & Female cum disable toilet with zinc Al roof
- 10) Cemented colour flooring with floor concrete
- 11) Electrical wiring and Painting work
- 12) Toilets with tile flooring, wall tiling for 1.5m and hand rail for disable.
- 13) Disable access provided for disable toilet and main building
- 14) Overhead steel Water tank and pump room with electrical motor and basic water supply provided. (Tube well available)
- 15) Septic tank cum soakage pit (3 compartment) to be provided
- 16) 10 G Chain link fencing with and steel gate with pillars.
- 17) Land leveling & Landscaping work as per the site condition and requirement.

General Topography of the locality and other information:

This building site which is located at Myliddythurai North in Thellipalai DS division

The soil type is lime rocky.

Majority of the people are Tamils practicing Christian and Hindu faith. Main livelihoods are Fishing and farming.

Electricity is national grid with main supply. External wiring completed and connection will be made available soon. Access roads are being renovated and the Divisional Secretary has agreed to do the needful to complete the access road work at earliest convenience.

Consultant Engineer is responsible for preparing of drawing and BOQ as per guidelines provided by scope of work and UNDP TOR for award of specific service.

BID-SUMMARY SHEET

PROJECT TITLE	CONSTRUCTION OF MULTI-PURPOSE CENTRE FOR MYLIDDY AT TELLIPALAI DS DIVISION IN JAFFNA
PROJECT NO	JAF/RNRA/101335/001/1B/ 02
PROJECT LOCATION	MYLIDDY AT TELLIPALAI DS DIVISION
DISTRICT	JAFFNA

BILL NO.	DESCRIPTION	SUB TOTAL (SLRS)
1	PRELIMINARIES	
2	CONSTRUCTION OF BUILDING	
3	CONSTRUCTION OF TOILET	
4	EXTERNAL SERVICE	
Sub Total 1 (Total of Bill no. 1 to 4)		
Ddt - Discount% (if any) for Sub Total 1		
Sub Total 2 (Sub Total 1-Discount)		
10% of Physical Contingencies of Sub Total 2		
Bid Amount (excluding VAT)		

Bid Amount in Words (excluding VAT) : SLRs.

.....

VAT Registration No (if available)

* Note: The services produced by UNDP are exempted of all taxes. As such the quoted price is to be exclusive of VAT

Signature and seal :.....

Name of Bidder :.....

Address :.....

Date :.....

**CONSTRUCTION OF MULTI-PURPOSE CENTRE FOR MYLIDDY AT TELLIPALAI DS DIVISION IN
JAFFNA**

**BILLS OF QUANTITIES
BILL NO. 01- PRELIMINARIES**

ITEM NO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
A	<u>PRELIMINARIES</u>				
	The attention of the bidder is drawn to the use of Bill of Quantities, Drawings, Conditions of Contract, Specifications and any other particulars related to this of the bid. It is the bidder's responsibility to see that his price includes for complying with all the requirements of the conditions of contract and other documents whether specifically.	Note			
	The bidder is advised to visit the site of the proposed work, as it is his responsibility to ascertain the Conditions, governing access to the site, the external working space, storage area, etc.,	Note			
	Exsisting roads & culverts cannot take the passage of heavy vehicle or such in adquate areas to be strenghten by the successful bidder, before make use of such areas, roads and approches.	Note			
	Any existing services, roads, culverts and approches damaged during the construction to be reinstated without any charge to the employer.	Note			
	All temporary works shall be dismantled and cleared away from the site on completion of the work.	Note			
	Any other preliminary items not listed below but deemed to be included in the bid rates, as no extras would be made.	Note			
	No work in any trade shall be carried out in such a manner as to cause any nuisance to adjacent owners or the public.	Note			
	Mechanical plant and equipment which emits obnoxious liquids, gases etc., will not be allowed to be used on the site, without the prior approval from the Employer and the Engineer.	Note			
	The Engineer has the final decision as and when he deems it necessary for the Contractor to take precautions, maintain or repair such plant and equipment or order their removal from the site.	Note			
	The contractor shall be responsible for any loss or damage to the works, existing structures, adjoining structures and unfixed materials.	Note			
	The Contractor shall be responsible for necessary lighting, watchman and other suitable measures during construction until handing over	Note			
	Contractor shall be responsible for erection, shifting and maintaining of necessary protective netting, fencing, hording, screens at site and other precautions to the required standard and satisfaction of the Engineer.	Note			

ITEM NO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
A.01	Provisional Sum for providing a Performance Security		Pro. Sum		5,000.00
A.02	Provisional Sum for Insurance of Works, Machinery & Equipment, Plant and Matrerials at site as per contract.		Pro. Sum		4,000.00
A.03	Provisional Sum for Insurance against accidents and injury to third party persons & property and Employer's personnel & property, Contractor's personnel at site as per the contract.		Pro. Sum		3,000.00
A.04	Allow lump sum for provision of office and water-supply and sanitation-facilities for use of the engineer, as directed.		Item		
A.05	Allow lump sum for providing and maintaining a first aid box and regular supply of medicine, linen etc.		Item		
A.06	Allow lump sum for setting out of Works in accordance with drawings and other written information given by the		Item		
A.07	Allow lump sum for all cost in connection with preparing samples for testing, making arrangemnts for testing of mataerials, goods etc., as stipulated in the specification, obtaining test reports and submitting the same to the		Pro. Sum		3,000.00
A.08	Allow for lump sum for provision of 03 sets of (hard copies and soft copies) As-Built drawings of all services for Enginner's approval		Item		
A.09	Allow lump sum for providing all necessary safety measures to workmen at aite conforming to the ltest industrial safety regulations and as derected by the Engineer.(*PPE System & Safety Nets)		Item		
A.10	Allow lump sum to providing and maintaining of Name Board 1.2m x 0.9 m, as directed and approved by the engineer. Rate shall include for erection and fixing to the earth firmly on to the concrete base.		Item		
	SUB TOTAL FOR PRELIMINARIES CARRIED TO GRAND SUMMARY			SLRs.	

CONSTRUCTION OF MULTI-PURPOSE CENTRE FOR MYLIDDY AT TELLIPALAI DS DIVISION IN JAFFNA

BILLS OF QUANTITIES
BILL NO. 02- CONSTRUCTION OF BUILDING
SUMMARY

ITEM NO	DESCRIPTION	AMOUNT (SLRs.)
B	EXCAVATION & EARTH WORK	
C	CONCRETE WORK	
D	MASONRY WORK	
E	WATER PROOFING	
F	METAL WORKS	
G	TIMBER WORK	
H	CEILING WORK	
J	ROOFER AND ROOF PLUMBING	
K	FLOOR, WALL & CEILING FINISHES	
L	PAINTER & DECORATOR	
M	PLUMBING AND SANITARY INSTALLATION	
N	ELECTRICAL INSTALLATION	
SUB TOTAL FOR CONSTRUCTION OF BUILDING CARRIED TO GRAND SUMMARY		

CONSTRUCTION OF MULTI-PURPOSE CENTRE FOR MYLIDY AT TELLIPALAI DS DIVISION IN JAFFNA

BILLS OF QUANTITIES
BILL NO. 02- CONSTRUCTION OF BUILDING

ITEM NO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
B	<p><u>EXCAVATION & EARTH WORK</u></p> <p>The Bidders are requested to refer the General Notes, Pricing Preambles, Drawings, Specifications, Conditions of Contract, Special Conditions of Contract and all other relevant documents prior to pricing of the following items.</p> <p>Rates shall include for any working space as required by the contractor.</p> <p>Dewatering has not been measured separately. (Rate shall include for cost of dewatering if necessary)</p> <p>The bidder shall submit the following information together with their quote.</p> <p>(a) Method of excavation.</p> <p>(b) Equipment with details of capacities proposed for excavation and removal of earth.</p> <p>(c) Method of dewatering</p> <p>(d) Details of temporary work</p> <p>(e) Method of earth work support.</p> <p>The bidder is requested to check ground water level and soil investigation report, limitation of transport, limitation of site, conditions of the existing road for possibility of transportation of heavy equipment etc., prior to pricing this section of work.</p> <p>The contractor shall arrange and obtain necessary permission from authorities for disposal and dumping of earth.</p> <p>Rates shall include for removal and disposal of any obstructions, such as artificial structure and rock boulders etc., during excavation if encountered.</p> <p>Earthwork Support</p> <p>Rate to include the cost of Earth work supporting system to be carried out only on the instruction of the engineer depending on the nature of the soil.</p> <p>The contractor shall design and carry out the most suitable earthwork support system capable of achieving the specified technical requirement and in consideration of ground water level, soil condition, other buildings and structures situated close to the site. The Tenderer shall submit his proposal in detail with necessary calculations, method, type of equipment/plant, propose to use and shop drawings etc., along with the bid for the approval of the Engineer.</p> <p>Rates for excavation shall include for :</p> <p>All necessary shoring, strutting, etc. and removal after completion of work.</p> <p>Stabilisation of excavated surfaces, if required.</p> <p>All working space required, including for planking, strutting, formwork etc.</p> <p>Bulking after excavation and disposal of excavated material as directed.</p> <p>Backfilling with approved material to required levels and surfaces, consolidating and ramming by an approved method for over excavation.</p>	<p>Note</p> <p>Note</p> <p>Note</p> <p>Note</p> <p>Note</p> <p>Note</p> <p>Note</p> <p>Note</p> <p>Note</p> <p>Note</p> <p>Note</p>			

ITEM NO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	Dewatering, if required. Measurement for payment for excavation shall be for the net contact volumes upto the concrete surface.				
B.01	Site Preparation Clearing site vegetation including compacting and disposal of all surplus excavated material away from the site as directed. (contractor shall visit the site & assert the actual work involve)	Item	Allow		
B.02	Excavating to reduce level average depth of 150mm	m ²	161.50		
B.03	Excavation for Wall and Column foundations in any material except rock requiring blasting, depth not exceeding 1500mm from the existing Ground level.	m ³	13.18		
B.04	Excavation for Wall and Column foundations in Hard rock requiring blasting, depth not exceeding 1500mm from the existing Ground level.	m ³	5.00		
B.05	Approved imported hard earth (Gravel) filling including levelling, watering and compacting in 150mm layers between foundation of walls upto DPC level with 98% compaction. (Measured compacted volume)	m ³	50.50		
B.06	Approved imported hard earth (Gravel) filling including levelling, watering and compacting in 150mm layers around the building with 98% compaction. (Measured compacted volume)	m ³	25.00		
B.07	Approved available hard earth filling including levelling, watering and compacting in 150mm layers between foundation of walls upto DPC level with 98% compaction. (Measured compacted volume)	m ³	10.00		
B.08	Anti - termite treatment which shall cover excavated trenches, pits, etc. and the ground covered by floor slabs, foundation & walls and 2m beyond the building perimeter. Work shall be carried out by a reputed Pest control Company approved by the Engineer. Particulars of chemicals used and their concentration shall be forwarded to the Engineer for approval. The Contractor shall furnish a joint guarantee binding Specialist Sub-contractor and the Contractor as to the effectiveness of the Anti-termite treatment for a minimum period of 10 years after completion and cost shall include for precautionary measures against chemicals being infiltrated into outside area. Area Measured shall be Plinth area of the Building.	m ²	166.75		
	Disposal All excavated earth shall be a property of the Client and Contractor has to dispose within 2.0 km from the site as directed by Client.	Note			
	SUB TOTAL FOR EXCAVATION AND EARTH WORK CARRIED TO SUMMARY				
C	CONCRETE WORK The bidders are requested to refer General Notes, Pricing Preambles, Drawings, Specifications, Conditions of Contract, Special Conditions of Contract and all other relevant documents prior to pricing of the following items. All Concrete Works shall comply to the specifications, filled into formwork and well packed around reinforcement. All concrete works shall be 1:2:4 (19mm) concrete unless otherwise specified and as per drawings and specifications. Metal to be used shall be granite comply to the specification	Note Note Note			

ITEM NO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	Contractor shall not cause any damage direct or consequential to the new structure during carrying out the work detailed in "Concrete Work" Section and he shall at his own expense, make good any damage caused to them, arising directly and/or indirectly out of his fault and/or negligence and/or failure to take precautionary measures to avoid such damage.	Note			
	Rate for concreting columns, walls shall include for kickers and cover blocks.	Note			
	Measurement of Slabs & Walls				
	Slab concrete include that part of beam to a depth of largest adjacent slab thickness.	Note			
	Concrete work related to Ramps has been measured separately and slopes have not been indicated. Slopes shall be as shown in the drawings.	Note			
	Contractor shall ensure that all contacting surfaces including reinforcement dowels left out for bonding purposes is free from any organic or artificial material which can be a hindrance to achieve specified properties in the Drawings and Specifications.	Note			
	Rates for lean concrete shall include for preparation of bottom of excavation prior to pouring of lean concrete.	Note			
	Contractor shall ensure that the top of the lean concrete layer shall be finished semi rough for waterproofing layer. Rate for lean concrete shall include for waterproofing layer unless measured separately.	Note			
	Rates for formwork shall include for control joints, isolation joints wherever specified and required according to the drawings and specifications.	Note			
	Rate for concrete shall include for construction- .-joint , isolation joint, expansion joint, with dowel bars, end cap and compressible filler with sealant on top as per drawing.	Note			
	Rates for concrete shall include all necessary tests by an Authority acceptable to the Engineer.	Note			
	Rates for concrete shall include all necessary equipments which are required for concreting.	Note			
	Unless otherwise stated all concrete shall be of grade as per Specifications	Note			
	Rates for concrete shall include for construction joints, expansion joints or contraction joints as necessary.	Note			
	Concrete shall be measured as the net area/volume, as shown on the drawings.	Note			
	Rate for concrete shall include for :	Note			
	1. Supply, handling at site, depositing, compacting, vibrating, curing and making good after removal of formwork.				
	2. Preparation of surfaces, roughening/chipping to the approval of the Engineer.				
	3. Providing water stops at temporary construction joints, if necessary.				
	4. Reinforcement and Formwork paid separately unless specified in the Item.				
	Rate for formwork shall include for all necessary boarding, supports, erecting, framing, cutting angles, cleaning, apply approved foam oil, wetting before placing concrete, removal etc.	Note			
	Formwork is measured as the net contact surface measurement between formwork and concrete.	Note			
	All reinforcement shall be as per relevant British Standards having minimum characteristic strength of 460 N/mm ² for ribbed tor steel and 250 N/mm ² for mild steel.	Note			

ITEM NO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	Rate for reinforcement shall include for supplying, cleaning, cutting, bending, fabricating, binding, placing in position, binding wires, ties, supporting bars, spaces, chairs, wastage etc.	Note			
C.01	1 :3 :6 (25mm) Volumed Batched Concrete 75mm thick Screed concrete under Wall & Column foundation.	m ²	45.00		
C.02	1 :2 1/2 :5 (25mm) Volumed Batched Concrete 75mm thick, mass concrete in floors and Steps in Building and Ramp	m ²	170.00		
C.03	1 :2 :4 (20mm) Volumed Batched Concrete Reinforced concrete in Columns Foundation	m ³	1.95		
C.04	Reinforced concrete in Columns	m ³	6.80		
C.05	- do - Plinth Level Beams	m ³	2.30		
C.06	- do - Roof Level Beams	m ³	2.85		
	FORM WORK Formwork centering and moulds for concrete construction shall be of approved system to suit with the nature of this project and shall be erected true in line, levels and vertically for walls and columns and to the shapes and sizes required by the work, and shall be of suitable design and substantial and rigid construction so as to prevent deformation due to the placing and compacting of concrete and any incidental loading. All formwork and centering shall be so constructed that no grout shall leak out during concreting.	Note			
	Formwork and centering shall be provided with adequate struts, braces, walling, ties and clamps so as to maintain the dimensions lines and levels shown on the drawings during the entire operation of placing and compacting the concrete and to prevent any sagging exceeding 3mm under the weight of wet concrete with any other super imposed loads which they would be subjected to during construction.	Note			
	Formwork to column heads has been measured with slab and not enumerated separately.	Note			
	The contractor shall provide sufficient formwork and moulds to ensure adequate progress of work and the Engineer may direct the contractor to provide at contractor's expense such additional formwork and moulds as they may deem necessary if in his opinion the proper progress of the work is retarded by their absence.	Note			
	Rates shall include for all necessary boarding, supports, erecting, framing, cutting angles, striking or removal, cleaning, wetting etc.,	Note			
	Rates shall include for forming projections and chamfers.	Note			
	Formwork has been measured as the net contact surface measurement between concrete and formwork.	Note			
	Type of formwork shall be ply wood or steel with steel supporting system on concrete surfaces on removal of shuttering unless otherwise specified elsewhere. Rates for formwork shall include for all necessary measures to provide fine finish to the satisfaction of the Engineer.	Note			
	The bidder shall submit the detail of his proposal for formwork system along with the bid.	Note			
C.07	Sides of Columns Footings	m ²	11.00		
C.08	Sides of Columns	m ²	60.00		

ITEM NO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
C.09	Sides of Plinth Level Beams	m ²	15.75		
C.10	Sides of Roof Level Beams	m ²	62.00		
C.11	Soffit of Roof Level Beams	m ²	30.50		
	REINFORCEMENTS				
	The size of reinforcement bars comply BS 4449 described in the drawing or elsewhere shall be the minimum size and the rolling margin and any other tolerance shall be wholly above this size. Hooks and laps have been measured and included with the quantities for reinforcements.	Note			
	All reinforcement shall be free from mill scale, dirt, oil, paint, grease or loose rust before fixing in position and shall be brushed with a stiff wire brush if so directed by the Engineer.	Note			
	Reinforcement shall be bent cold by applying a slow even pressure on an approved type of bending apparatus.	Note			
	Re-bending of incorrectly bends bars shall not be attempted.	Note			
	Rates shall include for cutting, bending, fabricating, placing in position, holding and supporting including temporary fixing supports, hangers, binding wire spacers and waste.	Note			
	Rates shall include for working in difficult conditions.	Note			
	The bidder is advised to refer the diameters of reinforcement steel to be used for this project and to be aware of the availability of relevant diameters and to price the item in the trade accordingly.	Note			
	The actual weight of steel used at site will be calculated on the average weight of steel indicated in the mill certificate the same.	Note			
	High yield Steel and Mild Steel bar comply BS 4449 reinforcement in the following;				
C.12	In Column Footing	kg	44.70		
C.13	In Columns	kg	488.50		
C.14	In Plinth Level Beams	kg	186.75		
C.15	In Roof Level Beams	kg	465.60		
C.16	Construction of reinforced concrete (20 N/mm ² -20mm) lintel of size 125 mm x 150 mm. Rate to including for form work & reinforcement (2 Y12 bars & Stirrups) in Building.	Lm	61.50		
C.17	Construction of reinforced concrete (20 N/mm ² -20mm) sill of size 125 mm x 150mm. Rate to including for form work & reinforcement (2 Y10 bars & Stirrups) in Building.	Lm	26.50		
	SUB TOTAL FOR CONCRETE WORK CARRIED TO SUMMARY				

[illegible]

ITEM NO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
F	<u>METAL WORKS</u>				
	Rate for handrail / guardrail shall include for necessary welding, cutting, embedding, anchoring etc., as per detail .	Note			
F.01	Hand Rail Supply and fix Guard rail comprising of 50mm diameter GI top rail, 900mm high 25mm diameter GI vertical members at 450mm intervals for uprights (balusters) fixed on Ramp Floor and 25mm diameter horizontal members at 300 mm spacing fixed to balusters .Rate shall include 2 coats of anticorrosive paint and one coat of Enamel	m	9.00		
	SUB TOTAL FOR METAL WORKS CARRIED TO SUMMARY				
G	<u>TIMBER WORK</u>				
	Timber shall be of approved quality, Frame shall be of Palai/Palu or Red Balau or Equivalent approved by the Engineer and Sashes Palai/Palu, Satin or Teak or Equivalent approved by the Engineer.	Note			
	All doors shall have stainless steel hinges unless specified, locks shall be Mortise cylinder locks with duplicate Keys.	Note			
	All Windows shall have stainless steel hinges unless specified,	Note			
	All Doors and Windows shall have necessary barrel bolts, Castement Stays, Draw rings etc.	Note			
	Rate to include for two coats of Varnish painting after preparation of surface.	Note			
	The Contractor shall submit detailed shop drawings for the approval of the Engineer, 14 days prior to fabrication.	Note			
	All cutting, notching, drilling, sinking, trimming, framing jointing,splayed edges and the like including fixing in position complete with all nails, spikes, screws and priming to joints and ends.	Note			
	No application of any description shall be made on any timber unless and until the timber is approved by the Engineer.	Note			
	All exposed faces of timber are to be wrot. The sizes given below are nominal without allowance for planning except where described as finished sizes.	Note			
	Rates shall include for:	Note			
	All labour in framing, jointing and fixing in position complete with all nails, spikes, screws etc.				
	All doors, windows and fanlight shall be fixed complete as per detail drawings.				
	All door frames shall be fixed with spur stone at the foot.				
	All door and window frames shall be fixed to brick walls with M.S. hold fasts.				
	All necessary brass oxidised mongery.				

ITEM NO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	Joinery				
	Doors				
G.01	Supply and Fixing Type D2, Double sash Swing Door in approved Timber, 1200mm x 2100mm in over all size comprising of door frame of 100mm x 75mm once rebated Jambs and Head, panelled door sash fixed to the frame using approved quality butt hinges including all iron mongery. Rate to include for One Primer Coat and Two Coats of Varnish including preparation of surface.	Nr	3.00		
G.02	Supply and Fixing Type D2, Double sash Swing Door in approved Timber, 900mm x 2100mm in over all size comprising of door frame of 100mm x 75mm once rebated Jambs and Head, panelled door sash fixed to the frame using approved quality butt hinges including all iron mongery. Rate to include for One Primer Coat and Two Coats of Varnish including preparation of surface.	Nr	2.00		
G.03	Supply and Fixing Type W 1200 mm x 1350 mm Window in approved Timber in over all size with Louver panels on top comprising of window frame of 100mm x 75mm once rebated Jambs and Head with Glazed sashes fixed to frame using approved quality butt hinges including all iron mongery. Rate to include for One Primer Coat and Two Coats of Varnish including preparation of surface and 16mm MS bar in 125mm C/c Space with two coat of anti corrosive.	Nr	6.00		
	SUB TOTAL FOR TIMBER WORK CARRIED TO SUMMARY				
H	<u>CEILING WORK</u>				
	Cement Fibre Ceiling				
H.01	Supplying and installation of 4.5mm think Cement Fibre ceiling Including eaves fixed with necessary timber frame work (50mm x 100mm joists and 50mm x 50mm bearers at 600mm c/c) of approved quality fixed with 40mm x 12mm timber beedings of 40mm x 40mm timber cove mouldings of approved quality with necessary screws and nail. Rate shall include for applying two coats of wood preservative to Timber frame work and One primer coat two coats of Fungus Resistant emulsion paint to ceiling and two coats of enamel paint to beedings mouldings.	m ²	145.00		
	SUB TOTAL FOR CEILING WORK CARRIED TO SUMMARY				
J	<u>ROOFER AND ROOF PLUMBING</u>				
	Roof Covering				
	Tile Roofing				
J.01	Supplying and placing of Calicut pattern Tile roofing laid on timber roof frame work consists of 50×100mm rafters at 450mm spacing ,50 x25mm reepers at 300mm spacing and at both eaves side spacing interval is 150mm shown in drawing,50×175 ridge plates, 50 x 175 Hip Rafters , 50 x 175 Valley Rafters, 100mm x 100mm Centre posts, 100mm x200mm & 75x150mm horizontal Beams and 100x75mm wall plate as shown in drawing . Timber shall be imported Hard wood, Red/ Yellow balaw or equivalent approved by the Engineer and treated well with two coats of approved quality wood preservatives. Rate shall include for necessary screws, nails and fittings.	m ²	174.35		

ITEM NO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
J.02	Supplying and fixing of Calicut pattern Ridge tiles jointed and bedded in 1:1:4 cement lime and sand mortar coloured to match tiles.	m	38.76		
J.03	Supplying and fixing 200x100mm size special upper class timber beam, post as directed by Engineer	Lm	32.00		
J.04	Supplying and fixing 150x100mm size special upper class timber beam, post as directed by Engineer	Lm	20.00		
J.05	Supplying and fixing of 20mm thick, 225mm timber valance & Barge Fascia board using brass screws and complete with painting	m	43.40		
	Roof Plumbing				
J.06	Supplying and fixing 0.47 mm thick Zinc aluminium alloy coated colour bonded type D of metroof/similar eave gutters of size 130 x 160mm of approved pattern and colour including end caps, running joints with including all necessary fittings.	m	49.20		
J.07	Supplying and fixing 0.47 mm thick Zinc aluminium alloy coated colour bonded down pipes of size 100mm x 100mm of approved pattern and colour with brackets and brass screws with wooden plugs including all necessary molded fittings	m	33.60		
	SUB TOTAL FOR ROOFER AND ROOF PLUMBING CARRIED TO SUMMARY				
K	<p><u>FLOOR, WALL & CEILING FINISHES</u></p> <p>The Bidders are requested to refer the General Notes, Pricing Preambles, Drawings, Specifications, Conditions of Contract, Special Conditions of Contract and all other relevant documents prior to pricing of the following items.</p> <p>1. Rates shall include for preparation of surfaces for proper bonding.</p> <p>2. Rate shall include for measures to provide suitable bonding between different surfaces such as concrete and brick/block surfaces as per specification. Rates shall also include for all tile specials such as corners, edges etc.,</p> <p>3. Rates shall include for cutting tiles as necessary.</p> <p>4. Rate for tiling shall include for providing acceptable adhesive and/or suitable cement in an approved quality which has no effect to the properties of tiles.</p> <p>5. Rates for floor finishes shall include for temporary rules, screeds, ground etc., all normal cutting arises, rounded angles and the like, bedding, pointing, forming joints making good between different surfaces, around pipes, sanitary fittings and other fixtures and cleaning down upon completion.</p> <p>All floor and wall tiles tiles shall be of approved quality (Lanka Tiles/ Rocell Brands) and colour. Tile samples shall be provided for approval by the Engineer/Architect prior to purchase of materials.</p> <p>Rates for plaster work shall include for reinforcing joints between different types of construction material (e.g. block work/ brickwork and concrete work) with 150mm wide galvanized steel mesh as directed by the Engineer. Rate shall include for Reveals.</p> <p>Rates for soffit finishes shall include for preparation of surfaces, cleaning down, smoothing, knotting, stopping, etc., protection of floors and fittings, removing and replacing door and window fittings, if required, and cleaning upon completion.</p>	<p>Note</p> <p>Note</p> <p>Note</p> <p>Note</p>			

ITEM NO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	<u>Floor Finishes</u>				
	<u>Rendering</u>				
K.01	25mm thick, 1:2 cement sand, cut and polished coloured rendering	m ²	155.32		
	<u>Wall Finishes</u>				
	<u>External Faces- Plastering</u>				
K.02	15mm thick 1:3 cement sand plaster finished smooth with approved coloured cement floating to plinths.	m ²	19.92		
K.03	15mm thick 1:3 cement sand plaster finished semi rough with to walls, Columns and Sides of Beams & Lintols in Building	m ²	73.00		
	<u>Internal Work- Plastering</u>				
K.04	15mm thick 1:3 cement sand plaster finished smooth to internal faces of walls, Columns and sides of Beams,tanks &	m ²	248.13		
K.05	15mm thick 1:3 cement sand plaster finished smooth to soffit of Beams	m ²	8.10		
	SUB TOTAL FOR FLOOR, WALL & CEILING FINISHES CARRIED TO SUMMARY				
L	<u>PAINTER & DECORATOR</u>				
	Rate shall include for preparation of surfaces, cleaning down, smoothing, knotting, stopping, patching up cracks, etc., protection of floors and fittings, removing and replacing door and window fittings, if required, and cleaning upon completion.	Note			
	All emulsion/ enamel/ weathershield paint shall be of approved make CIC or equivalent approved by Engineer	Note			
	Rate to include for the cost for the scaffoldings.	Note			
	<u>External Faces</u>				
L.01	Prepare & apply one alkaline resisting primer coat and two coats of weather shield emulsion of approved colour and quality to semi-rough rendered surfaces of walls, Columns and Sides of Lintols. (Rate shall include for reveals)	m ²	73.00		
	<u>Internal Faces- Walls</u>				
L.02	Prepare and apply one primer coat and two coats of Fungus Resistant emulsion of approved colour and quality to smooth plastered surfaces to internal faces of walls,Columns, sides of Lintel and column faces. (Rate shall include for reveals)	m ²	248.13		
L.03	Prepare and apply one primer coat and two coats of Fungus Resistant emulsion of approved colour and quality to smooth plastered surfaces to soffit of internal faces of beams. (Rate shall include for reveals)	m ²	8.10		
	SUB TOTAL FOR PAINTER & DECORATOR CARRIED TO SUMMARY				

[illegible]

ITEM NO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	Water Supply, Wastewater & Drainage Connection				
	Type 1000 Pipes for Cold Water Supply				
M.01	Supply and lay/Fix 20 mm dia Type 1000 PVC Pipe with specials	m	12.00		
M.02	Supply and lay/Fix 25 mm dia Type 1000 PVC Pipe with specials	m	20.00		
M.03	Supply and lay/Fix 40 mm dia Type 1000 PVC Pipe with specials	m	45.00		
M.04	Supply and lay/Fix 50 mm dia Type 1000 PVC Pipe with specials	m	55.00		
	Valves for Water Supply Lines				
	Supplying and fixing of approved quality Brass stop valves / Ball Valves including all necessary fixtures.Valves shall be of Pegler or equivalent Brands.	Note			
M.05	25 mm diameter valve	Nr	2.00		
M.06	40 mm diameter valve	Nr	3.00		
M.07	50 mm diameter valve	Nr	2.00		
M.08	Supplying and fixing Electric Water Pump and Construction of Pump Room as per Drawing. Pump with motor of 1 HP (Jinasena or equivalent), 1 1/2" x 1 1/2" , single phase on cement concrete bed 600 x 450 x 150mm in 1:2:4 (20mm) mix with 04 Nos 3/8" x 6" rag bolt & nuts, rendered in cement mortar 1:2 including foot valve & starter switch complete in working order.	Nr	1.00		
M.09	Supplying and installation of 1000 litre capacity plastishell overhead water tank with Steel Framework and 6m high Steel Tower as per Drawings. Rate shall include for reinforcement for the footing base concrete T 10@ 150 mm and for column 4T 12 @ R6 150mm including form work.	Nr	1.00		
	Type 600 uPVC pipe for Waste Water Lines				
M.10	50 mm diameter	m	10.00		
M.11	63 mm diameter	m	12.00		
	Valves for Waste Water Outlet				
	Supplying and fixing of approved quality Brass stop valves including all necessary fixtures.Valves shall be of Pegler or equivalent Brands.	Note			
M.12	50 mm diameter valve	Nr	1.00		
	Waste Water Catch Pits				
M.13	Supplying all material and construct water sealed catch pits (Average size 300 x 300 x 400 mm internally). Rate included for excavation & backfilling, screed concreting, formwork, reinforcement @ 150 c/c, 75mm thick concrete base & 125mm block walls, internal plastering, precast concrete cover slab with lifting handles, etc.	Nr	1.00		

ITEM NO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
M.14	Waste Water Manholes Supplying all material and construct Interceptor manholes (Average size 450 x 450 x 600 mm internally). Rate included for excavation & backfilling, screed concreting, formwork, reinforcement @ 150 c/c, 150mm thick concrete base & walls, benching, internal plastering, precast concrete cover slab with lifting handles, etc.	Nr	1.00		
	SUB TOTAL FOR PLUMBING AND SANITARY INSTALLATION CARRIED TO SUMMARY				
N	<u>ELECTRICAL INSTALLATION</u> Rates in Bill of Quantities shall include all necessary materials (Cables, conduits, PVC sunk box, bulbs, switches etc.) and labour required to complete the electrical installation to good working order. Testing and commissioning of all the systems & electrical installation is to be carried out and inspection report (02 sets) submitted according to the requirements of the power supply by a Chartered Electrical Engineer.Rate shall be include for Testing,commissionung and report submission. Rate Shall include for submission of shop drawings and submission of draft layouts, conduit layouts etc.for Consultant's approval before commencing the installation (03 sets)with Designing of Distribution board, Consumer unit and line diagram designing by a Chartered Electrical Engineer. Rate Shall include for submission of As-built drawings on completion of the contract (03 sets) Electrical Items (MCB,RCCB etc.) should be of European/Japanese origin or to the BS or equivalent and items without an accredited agent in Sri Lanka shall not be accepted. Guarantee cards(Fans etc.) should be provided from accredited agent before installation. All the quantities given here are approximated values and Quantities may change with the actual installation at the site. All types of fittings, materials, painting and finishes shall be approved by the Engineer prior to installation. All panel boards and consumer units should have wire numbering and a laminated circuit diagram should be pasted on the inside surface of the door. Electrical Coduits, which are laid along Earth should be securely protected by PVC conduits. Earth shall be backfilled Electrical Coduits, which are laid along internal Roads should be securely protected by PVC conduits. Cut road shall be filled with mass concrete and making good to roads.	Note Note Note Note Note Note Note Note Note Note			
N.01	Single phase Consumer units Supply and installation of wall mounted switch gear cubicle made out of polycarbonate enclosure to the approval of the engineer. Additional space to be provided inside the distribution board enclosure to install two additional breakers (of capacity with existing max. outgoing breaker) if necessary. 01 No. 40A, 2-pole MCB 6kA 01 Nos. 40A 2-pole RCCB, 30mA sensitivity 7 - 9 No. 6-32A, 1-pole MCB 6kA Earth Bar All internal connections. Equipment to be to the BS and European/Japanese make	Nr	1.00		

ITEM NO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
N.02	Supply and Installation of service bracket 5'-0" long 2 1/2" x 2 1/2" x 1/4" angle iron.	Nr	1.00		
N.03	Provisional Sum for obtaining main power supply connection from the Ceylon Electricity Board, including all the correspondence and co-ordination work, builders work. Etc.	P.Sum	P.Sum		20,000.00
N.04	Supply & installation of 32A single phase wiring to pump house . Rate to include for MCB, complete with pilot lamp to working order as per electrical specification.	Nr	1.00		
N.05	Cables Allow Provisional Sum for Suppling and Installation of Main Cables from Energy Meter to MDB and MDB to Cosumer Units	P.Sum	P.Sum		30,000.00
N.06	Fans Supply & installation of 1400mm sweep ceiling fan (European/Japanese make), complete with regulator, fan hook, extension rod & attachment - Guarantee cards should be provided from accredited agent. Rate to include for wiring (including supply of all material, earth wire & switch) of the above ceiling fans using approved type 1 mm2, Cu/PVC/PVC cable & 2.5 mm2 earth wire drawn through securely fixed concealed PVC conduits	Nr	6.00		
N.07	Socket Outlets Supply & installation of 13A shuttered switched single socket outlet to comply with BS 1363 . Rate to include for Wiring (including supply of all material required) of 15A socket outlets using approved type 2.5mm2 Cu/PVC/PVC, 2C cable & 2.5mm2 earth cable drawn through securely fixed concealed PVC conduit	Nr	1.00		
N.08	Supply & installation of 5A shuttered switched socket outlet to comply with BS 1363.Rate to include for Wring (including supply of 2.5 mm2 earth wire & all other material required) of above socket outlet using approved type 1.0mm2 Cu/PVC/PVC cable drawn through securely fixed concealed PVC conduits	Nr	4.00		
	Light Fitting Samples should be provided prior to the installtion for electrical engineer's approval. Guarantee cards should be provided for CFL bulbs.	Note			
N.09	Supply and installation of Ceiling Mounted Type Lamp Fittings. Rate to include the cost of 23W CFL Spiral bulbs (warm white) lamp.Rate to include for Wiring (including supply of all materials) of the above light points using approved type PVC insulated PVC sheathed 1 mm2 copper cable and 1mm2 Cu/PVC earth drawn through securely fixed concealed PVC conduit	Nr	14.00		
N.10	Supply and installation of Wall Mounted/ Bracket water tight external Lamp Fittings. Rate to include the cost of 23W approved type bulbs. Rate to include for Wiring (including supply of all materials) of the above light points using approved type PVC insulated PVC sheathed 1 mm2 copper cable and 1mm2 Cu/PVC earth drawn through securely fixed concealed PVC conduit	Nr	4.00		

ITEM NO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
N.11	Main Earthing System Supply and Installation of all required materials and cables and connection to respective equipment to provide complete Supply and Installation of an earth electrode of minimum 16mm dia. solid copper rod of length 1.2m or more with a clamp connection to earth conductor. Earth resistance shall be less than 10 Ohms tested on a dry day. An earth pit of size 300mm x 300mm x 200mm is to be prepared and covered by concrete plate to protect the earth electrode.	Note Nr	 1.00		
	SUB TOTAL FOR ELECTRICAL INSTALLATION CARRIED TO SUMMARY (Without Pro Sum)				

**CONSTRUCTION OF MULTI-PURPOSE CENTRE FOR MYLIDDY AT TELLIPALAI DS DIVISION IN
JAFFNA**

BILLS OF QUANTITIES

**BILL NO. 03- CONSTRUCTION OF TOILET
SUMMARY**

ITEM #	DESCRIPTION	AMOUNT (SLRs.)
B	EXCAVATION AND EARTH WORK	
C	CONCRETE WORK	
D	MASONRY WORK	
E	ASPHALT WORK	
F	TIMBER WORK	
G	ROOFER AND ROOF PLUMBING	
H	FLOOR, WALL & CEILING FINISHES	
J	PAINTER & DECORATOR	
K	PLUMBING AND SANITARY INSTALLATION	
L	ELECTRICAL INSTALLATION	
SUB TOTAL FOR CONSTRUCTION OF TOILET CARRIED TO GRAND SUMMARY		

**CONSTRUCTION OF MULTI-PURPOSE CENTRE FOR MYLIDY AT TELLIPALAI DS DIVISION IN
JAFFNA**

BILLS OF QUANTITIES

BILL NO. 03- CONSTRUCTION OF TOILET

ITEM NO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
B	<u>EXCAVATION AND EARTH WORK</u>				
	Rates for excavation shall include for : All necessary shoring, strutting, etc. and removal after completion of work. Stabilisation of excavated surfaces, if required. All working space required, including for planking, strutting, formwork etc. Bulking after excavation and disposal of excavated material as directed. Backfilling with approved material to required levels and surfaces, consolidating and ramming by an approved method for over excavation. Dewatering, if required. Measurement for payment for excavation shall be for the net contact volumes upto the concrete surface.	Note			
B.01	Allow Lump Sum for Clearing site, bushes, shrubs under growth hedges and up rooting trees	Item	1.00		
B.02	Excavating to reduce level average depth of 150mm	m ²	12.00		
B.03	Excavation for Wall and Column foundations in any material except rock requiring blasting, depth not exceeding 1500mm from the existing Ground level.	m ³	2.50		
B.04	Filling under floors and under Steps with Approved imported hard earth filling including levelling, watering and compacting in 150mm layers with 98% compaction. (Measured compacted volume)	m ³	2.50		
	SUB TOTAL FOR EXCAVATION AND EARTH WORK CARRIED TO SUMMARY				
C	<u>CONCRETE WORK</u>				
	Unless otherwise stated all concrete shall be of grade as per Specifications	Note			
	Rates for concrete shall include for construction joints, expansion joints or contraction joints as necessary.	Note			
	Concrete shall be measured as the net area/volume, as shown on the drawings.	Note			
	Rate for concrete shall include for : supply, handling at site, depositing, compacting, vibrating, curing and making good after removal of preparation of surfaces, roughening/chipping to the approval of the Engineer. providing water stops at temporary construction joints, if necessary. Reinforcement and Formwork paid separately unless specified in the Item.	Note			
	Rate for formwork shall include for all necessary boarding, supports, erecting, framing, cutting angles, cleaning, apply approved foam oil, wetting before placing concrete, removal etc.	Note			

ITEM NO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	Formwork is measured as the net contact surface measurement between formwork and concrete.	Note			
	All reinforcement shall be as per relevant British Standards having minimum characteristic strength of 460 N/mm ² for ribbed tor steel and 250 N/mm ² for mild	Note			
	Rate for reinforcement shall include for supplying, cleaning, cutting, bending, fabricating, binding, placing in position, binding wires, ties, supporting bars, spaces, chairs, wastage etc.	Note			
	1 :3 :6 (25mm) Volumed Batched Concrete				
C.01	75mm thick Screed concrete under Wall & Column	m ²	4.50		
	1 :2 1/2 :5 (25mm) Volumed Batched Concrete				
C.02	75mm thick, mass concrete in floors and Steps in Building and Ramp	m ²	2.25		
C.03	Construction of reinforced concrete (20 N/mm ² -20mm) lintel of size 100 mm x 150mm. Rate to including for form work & reinforcment (2 Y12 bars & Stirrups) in Building.	m	12.50		
	SUB TOTAL FOR CONCRETE WORK CARRIED TO SUMMARY				
D	<u>MASONRY WORK</u>				
	Rate shall include to, 1. All rough and fair cutting, plumbing angles, normal straight cutting, forming rebated reveals and raking out 2. Forming rough and fair groves, throats, mortises, chases, rebates and holes, stops and miters. 3. Supplying & Fixing	Note			
	Stone Work				
	<u>Random Rubble Masonry Work</u>				
D.01	Random Rubble(150 mm-225 mm) Masonry work in 1:5 Cement sand mortar in Wall Foundation of Building and in Disable Ramp	m ³	4.00		
	Block Work				
	All cement and sand concrete blocks shall comply with BS 6073.	Note			
	Characteristic strength of block work shall be 2.5 N/mm ²	Note			
	Mortar used for block work/ brick work shall be 1:5 cement and sand mixture unless otherwise specified.	Note			
	<u>100mm Concrete Block Work</u>				
D.02	100mm thick 1:4:5 (20mm) Concrete block work in 1:5 cement sand mortar for walls in Building.	m ²	32.00		
	SUB TOTAL FOR MASONRY WORK CARRIED TO SUMMARY				
E	<u>ASPHALT WORK</u>				
	Damp Proofing				
E.01	20mm thick 1:2 cement : sand DPC and finished with two coats of hot tar blinded with coarse sand.	m ²	4.50		
	SUB TOTAL FOR ASPHALT WORK CARRIED TO SUMMARY				

ITEM NO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
F	<u>TIMBER WORK</u>				
	Timber shall be of approved quality, Frame shall be of Palai/Palu or Red Balau or Equivalent approved by the Engineer and Sashes PAalai/Palu, Satin or Teak or Equivalent approved by the Engineer.	Note			
	All doors shall have stainless steel hinges unless specified, locks shall be Mortise cylinder locks with duplicate Keys.	Note			
	All Windows shall have stainless steel hinges unless specified,	Note			
	All Doors and Windows shall have necessary barrol bolts,Castement Stays, Draw rings etc.	Note			
	Rate to include for two coats of Varnish painting after preperation of surface.	Note			
	The Contractor shall submit detailed shop drawings for the approval of the Engineer, 14 days prior to fabrication.	Note			
	Joinery				
	Doors				
F.01	Supply and Fixing Type, Ledged, braced & battened Toilet Door in approved Timber, 1050mm x 2100mm in over all size comprising of door frame of 100mm x 75mm once rebated Jambs and Head, sash fixed to the frame using approved quality butt hinges including all iron mongery. Rate to include for One Primer Coat and Two Coats of enamel paint including preparation of surface.	Nr	1.00		
F.02	Supply and Fixing Type, Ledged, braced & battened Toilet Door in approved Timber, 750mm x 2100mm in over all size comprising of door frame of 100mm x 75mm once rebated Jambs and Head, sash fixed to the frame using approved quality butt hinges including all iron mongery. Rate to include for One Primer Coat and Two Coats of enamel paint including preparation of surface.	Nr	1.00		
F.03	Fanlight Supply and Fixing Type FL 600 mm x 450 mm Timber Fanlight in approved Timber comprising of frame of 100mm x 75mm once rebated Jambs and Head with Glazed sashes fixed to frame using approved quality butt hinges including all iron mongery. Rate to include for One Primer Coat and Two Coats of enamel including preparation of surface.	Nr	2.00		
	SUB TOTAL FOR TIMBER WORKS CARRIED TO SUMMARY				
G	<u>ROOFER AND ROOF PLUMBING</u>				
	<u>Roof Covering</u>				
	Metal Roofing				
	Zn/Al alloy coated steel Roofing sheet steel minimum tensile strength should be 550 N/mm ² and profile should be approved by the Engineer.Rate shall include for Supplying and fixing 0.47mm thick Zn/Al alloy coated colour bonded steel roofing ridge/Hip to match to roof	Note			
	Wood preservative should be applied to timber frame	Note			

ITEM NO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
G.01	Supplying and fixing of 0.47mm thick Corrugated Zn/Al alloy coated colour bonded with 3mm thick 3 way reinforced double side aluminum foil, 50 X 50 mm 8 Guage GI net bonded sheet steel roofing laid on timber roof frame work 100m x 50mm rafters max c/c 900mm and 50mm x50mm beares max 1000 mm c/c for Toilet as shown in Drawing rate shall include with timber frame work.Solignam to be applied to all timber frames	m ²	15.00		
G.02	Supplying and fixing of 20mm thick, 225mm timber valance & Barge Fascia board using brass screws and complete with one coat of primer and two coat of enamel approved colour painting	m	16.00		
	SUB TOTAL FOR ROOFER AND ROOF PLUMBING CARRIED TO SUMMARY				
H	<u>FLOOR, WALL & CEILING FINISHES</u> Rates for floor finishes shall include for temporary rules, screeds, ground etc., all normal cutting arises, rounded angles and the like, bedding, pointing, forming joints making good between different surfaces, around pipes, sanitary fittings and other fixtures and cleaning down upon completion. All floor and wall tiles tiles shall be of approved quality (Lanka Tiles/ Rocell Brands) and colour. Tile samples shall be provided for approval by the Engineer/Architect prior to purchase of materials. Rates for plaster work shall include for reinforcing joints between different types of construction material (e.g. block work/ brickwork and concrete work) with 150mm wide galvanized steel mesh as directed by the Engineer. Rate shall include for Reveals. Rates for soffit finishes shall include for preparation of surfaces, cleaning down, smoothing, knotting, stopping, etc., protection of floors and fittings, removing and replacing door and window fittings, if required, and cleaning upon completion. <u>Floor Finishes</u> <u>Rendering</u>	Note Note Note Note			
H.01	20mm thick 1:3 cement sand rendering including neat coloured cement floating to Floors of Building.	m ²	2.50		
H.02	<u>Tiling to Floors</u> Supply and Laying of 300 x 300mm Anti slip Homogenous tiles of approved quality and colour, fixed with straight joints in both ways including all angles corners and including 1:3 cement sand bedding and pointed in matching colour in Toilet and Bathroom floors <u>Wall Finishes</u> <u>External Faces</u> <u>Plastering</u>	m ²	6.00		
H.03	15mm thick 1:3 cement sand plaster finished smooth with approved coloured cement floating to plinths.	m ²	5.50		

ITEM NO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
H.04	15mm thick 1:3 cement sand plaster finished semi rough with to walls, Columns and Sides of Beams & Lintols in Building <u>Internal Work</u> <u>Plastering</u>	m ²	35.00		
H.05	15mm thick 1:3 cement sand plaster finished smooth to internal faces of walls, Columns and sides of Beams,tanks & Lintel <u>Wall Tiling</u>	m ²	15.00		
H.06	Supply & laid 300 x 450 mm Glazed Ceramic Wall Tiles of approved quality and colour for Walls fixed with straight joints in both ways including all angles corners including 1:3 cement sand bedding and pointed in matching colour.	m ²	16.50		
SUB TOTAL FOR FLOOR, WALL & CEILING FINISHES CARRIED TO SUMMARY					
J	<u>PAINTER & DECORATOR</u> Rate shall include for preparation of surfaces, cleaning down, smoothing, knotting, stopping, patching up cracks, etc., protection of floors and fittings, removing and replacing door and window fittings, if required, and cleaning upon completion. All emulsion/ enamel/ weathershield paint shall be of approved make CIC or equivalent approved by Engineer Rate to include for the cost for the scaffoldings. <u>External Faces</u>	Note Note Note			
J.01	Prepare & apply one alkaline resisting primer coat and two coats of weather shield emulsion of approved colour and quality to semi-rough rendered surfaces of walls and Sides of Lintols. (Rate shall include for reveals) <u>Internal Faces</u> <u>Walls</u>	m ²	35.00		
J.02	Prepare and apply one primer coat and two coats of Fungus Resistant emulsion of approved colour and quality to smooth plastered surfaces to internal faces of walls and sides of Lintel . (Rate shall include for reveals)	m ²	16.50		
SUB TOTAL FOR PAINTER & DECORATOR CARRIED TO SUMMARY					
K	<u>PLUMBING AND SANITARY INSTALLATION</u> Unplasticized polyvinyl chloride (uPVC) pipes shall be used in the plumbing installation and they must confirm in every respect to the requirements of the SLS 147 of 1989 & 1972 or BS 4514. All fittings and pipe specials used in the plumbing installation shall be suitable and compatible with all respects to the pipe line to which fittings and specials are fixed. All sanitary fittings & fixtures shall be American Standards or equivalent.	Note Note Note			

ITEM NO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
K.01	<p>Rates for plumbing work shall include for:-</p> <p>(a) Complying with the relevant Sri Lankan, British or any other standard as given under the specifications and with the regulations of the Local Authority and or any other relevant authorities.</p> <p>(b) Cutting and waste of pipes etc., and joining pipes.</p> <p>(c) All specials such as elbows, bends, tees, junctions, plugs, reducers and similar pipe fittings except for valves which will be measured separately.</p> <p>(d) Connecting pipes to sanitary fixtures and appliances.</p> <p>(e) Casing to brick walls etc. and making good all works disturbed.</p> <p>(f) Necessary screws, nails sockets, connection back nuts standard pipe fixing or supporting clips, saddles, brackets, holder bats, straps etc.</p> <p>(g) Connecting different types of pipes.</p> <p>(h) Testing and disinfection after completion.</p> <p>(i) Submitting shop drawings where necessary.</p> <p>(j) Excavation, backfilling, disposal of surplus soil</p>	Note			
	<p>Rates for sanitary fittings shall include for:-</p> <p>(a) Fittings such as taps, waste water outlet, internal overflows etc. and supporting brackets, incidental materials for fixing.</p> <p>(b) Assembling, jointing together fixing components parts, and jointing to pipes including necessary coupling and for leaving perfectly clean and in perfect working</p> <p>(c) Jointing and connecting pipes to sanitary fittings.</p> <p>(d) Testing and commissioning of the installation.</p> <p>(e) Making good the work disturbed.</p> <p>(f) Submitting samples for the approval of the Engineer.</p> <p>(g) Protecting the works.</p>	Note			
	<p>Rates for drainage work shall include for :-</p> <p>(a) Laying of pipes to falls.</p> <p>(b) Excavation, backfilling, disposal of surplus soil</p> <p>(c) All pipe specials such as bends, junctions, elbows, tees, "Y" junctions, reducers, inspection openings, stop ends, etc.</p> <p>(d) Connection to sides of manholes etc.</p> <p>(e) Providing sleeves etc., when pipes pass through walls, foundations etc.</p> <p>(f) Giving notices, obtaining permits, paying fees, fixing, testing and commissioning etc.</p>	Note			
	<p>Sanitary Fixtures</p> <p>Supply and installation of floor mounted ceramic water closet with 100 mm trap and 6 litre (Dual Flush) capacity low level ceramic cistern conforming to BS 1125 with plastic syphon, 15 mm angle valve with wall plate, flexible hose connection and all fixtures and fittings necessary for the completion of water closet installation. Rate shall include for Bidet shower.Closet shall be of American Stanadard or equivalent.</p>	Nr	2.00		

ITEM NO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
K.02	Supply & Installation of Pesdestal type wash basin conforming to SLS 377 including bottle trap with 40 mm waste outlet, 15 mm angle valve with wall plate, 15 mm pillar tap, chrome plated exposed piping and all fixtures and fittings necessary for the completion of wash basin installation.Wash Basin shall be of American Stanadard or equivalent.	Nr	2.00		
K.03	Provisional Sum for Supply and fixing of complete set of Chromium plated 3 numbers of horizontal and vertical grab-rails and foldable grab bar in disabled toilet with all required accessories.	P.Sum	P.Sum	15,000.00	15,000.00
K.04	Supply and installation of Stainless Steel soap dish	Nr	2.00		
K.05	Supply Installation of mirror of size 750x 600 x6 mm with bevelled edges and fixed to the wall with chromium plated studs	Nr	2.00		
K.06	Supplying and fixing of chromium plated 25mm bib tap, chinese or indian.(Rate shall include for forcet socket)	Nr	2.00		
K.07	Supply and installation of 150x150 mm Stainless Steel floor gully with cover for Toilets .	Nr	2.00		
	Water Supply, Wastewater & Drainage Connection				
	Type 1000 Pipes for Cold Water Supply				
K.08	20mm dia.	m	4.00		
K.09	25mm dia.	m	6.00		
	Valves for Water Supply Lines				
	Supplying and fixing of approved quality Brass stop valves /Ball Valves including all necessary fixtures.Valves shall be of Pegler or equivalent Brands.	Note			
K.10	25 mm diameter valve	Nr	2.00		
	Sewerage Disposal System				
	Type 600 uPVC pipe for Waste Water Lines				
K.11	110 mm diameter	m	12.00		
	Sewer Manholes				
K.12	Supplying all material and construct Sewer interceptor manholes (Average size 450 x 450 x 600 mm internally). Rate included for excavation & backfilling, screed concreting, formwork, reinforcement @ 150 c/c, 150mm thick concrete base & walls, benching, internal plastering, precast concrete cover slab with lifting handles, etc.	Nr	1.00		

ITEM NO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
K.13	Septic Tank cum Soakage Pit Supplying all material and construct septic tank cum soakage pits in grade 30(20mm) concrete, internal size of Septic Tank (chamber-1 & 2) is 1800 x 900 mm ,1500 mm average depth,100 mm thick base, 125 mm thick walls and 75 mm thick top slab and Soakage Pit (chamber-3) is 900 x 900 mm, 1500 mm average depth , 125 mm thick walls and 75 mm thick top slab.. Rate included for excavation (partly in hard rock ,, backfilling, formwork, reinforcement (125kg/m ³), concreting, covers slabs with lifting handles, all necessary pipe work inside the pit, etc.Septic tank internal walls should be plastering with cement floating .Details as per drawings.	Nr	1.00		
	SUB TOTAL FOR PLUMBING AND SANITARY INSTALLATION CARRIED TO SUMMARY (Without Pro Sum)				
L	<u>ELECTRICAL INSTALLATION</u> Rates in Bill of Quantities shall include all necessary materials (Cables, conduits, PVC sunk box, bulbs, switches etc.) and labour required to complete the electrical installation to good working order. Testing and commissioning of all the systems & electrical installation is to be carried out and inspection report (02 sets) submitted according to the requirements of the power supply by a Chartered Electrical Engineer.Rate shall be include for Testing,commissionung and report submission. Rate Shall include for submission of shop drawings and submission of draft layouts, conduit layouts etc.for Consultant's approval before commencing the installation (03 sets)with Designing of Distribution board, Consumer unit and line diagram designing by a Chartered Electrical Engineer. Rate Shall include for submission of As-built drawings on completion of the contract (03 sets) Electrical Items (MCB,RCCB etc.) should be of European/Japanese origin or to the BS or equivalent and items without an accredited agent in Sri Lanka shall not be accepted. Guarantee cards(Fans etc.) should be provided from accredited agent before installation. All the quantities given here are approximated values and Quantities may change with the actual installation at the site. All types of fittings, materials, painting and finishes shall be approved by the Engineer prior to installation. All panel boards and consumer units should have wire numbering and a laminated circuit diagram should be pasted on the inside surface of the door. Electrical Coduits, which are laid along Earth should be securely protected by PVC conduits. Earth shall be backfilled properly. Electrical Coduits, which are laid along internal Roads should be securely protected by PVC conduits. Cut road shall be filled with mass concrete and making good to roads.	Note Note Note Note Note Note Note Note Note			

ITEM NO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	Light Fitting Samples should be provided prior to the installtion for electrical engineer's approval. Guarantee cards should be provided for CFL bulbs.	Note			
L.01	Supply and installation of Pendent Type Lamp Fittings. Rate to include the cost of 24W CFL Spiral bulbs (warm white) lamp.Rate to include for Wiring (including supply of all materials) of the above light points using approved type PVC insulated PVC sheathed 1 mm2 copper cable and 1mm2 Cu/PVC earth drawn through securely fixed concealed PVC conduit.	Nr	2.00		
L.02	Supply and installation of Wall Mounted/ Bracket water tight Lamp Fittings. Rate to include the cost of 20W approved type bulbs. Rate to include for Wiring (including supply of all materials) of the above light points using approved type PVC insulated PVC sheathed 1 mm2 copper cable and 1mm2 Cu/PVC earth drawn through securely fixed concealed PVC conduit.	Nr	1.00		
	SUB TOTAL FOR ELECTRICAL INSTALLATION CARRIED TO SUMMARY				

**CONSTRUCTION OF MULTI-PURPOSE CENTRE FOR MYLIDY AT TELLIPALAI DS DIVISION IN
JAFFNA**

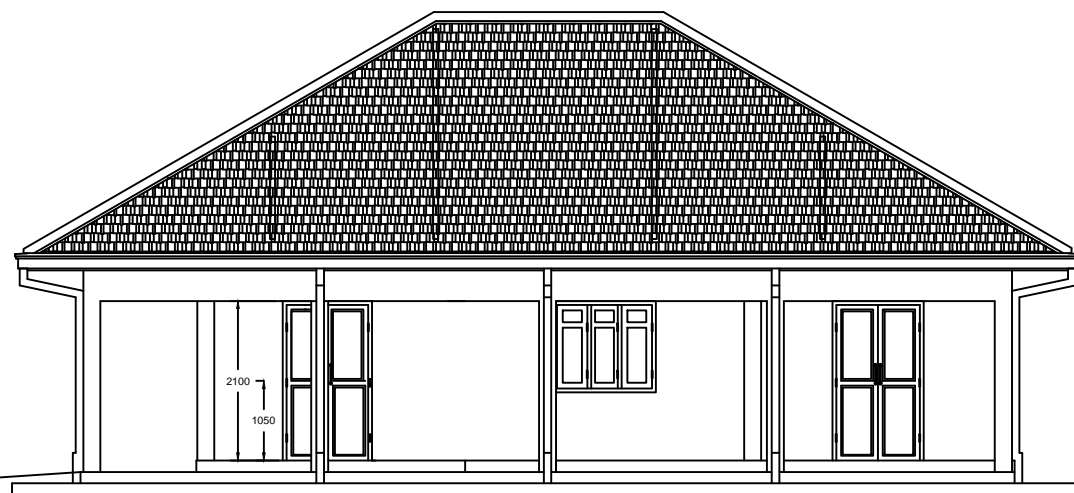
BILLS OF QUANTITIES
BILL NO. 04 - EXTERNAL SERVICE

ITEM NO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
4.01	Steel Gate Supplying, fabricating and fixing of Gates of sized 4000mm (wide) x 1650mm (height) with made out of heavy duty 75x 50mm Hollow GI Box section and 25mm diameter G.I pipes as shown in Drawings. . Rate to include for 2 Nos 300 x 300mm RCC pillars for 2.0 m height in 1:2:4 (3/4") concrete 4Y12 reinforced and R6 at 150mm crs stirrups rate include for Excavation base concrete footing R/F with Y10 @ 200mm c/c both way and 16mm thick 1:4 plastering, 3 Nos pintol and stirrups locking device barrel bolt etc. and 2 coats of anticorrosive paint and 2 coats of enamel paint and 2 coats of painting to pillars as directed.	nr	1.00		
4.02	Chainlink Mesh Fence Supplying and fixing of 1.80 m high (above Ground) gauge 10 PVC coated chainlink mesh on the fence posts. Rate to include for 3 Nos, top.middle and bottom line wires, stretcher bars and bolting bracket arrangement with cleats, washers etcf including Casting, transport & erection of intermediate (at 2.4 m intervals) , corner, end and strainer RCC fence posts (2.25 m, 100mm x 100mm at top & 150mm x 150mm at bottom ,Reinforced with 4 no R6 Mild steel with High tensile wire stirrups spaced at 225mm . Rate to include for excavation of pits and erection of fence posts along boundary line with lower end buried in ground and surround with 1:3:6 (25mm) concrete for the 250 x 250 x 450 mm .	m	112.00		
	SUB TOTAL FOR EXTERNAL WORKS CARRIED TO GRAND SUMMARY				

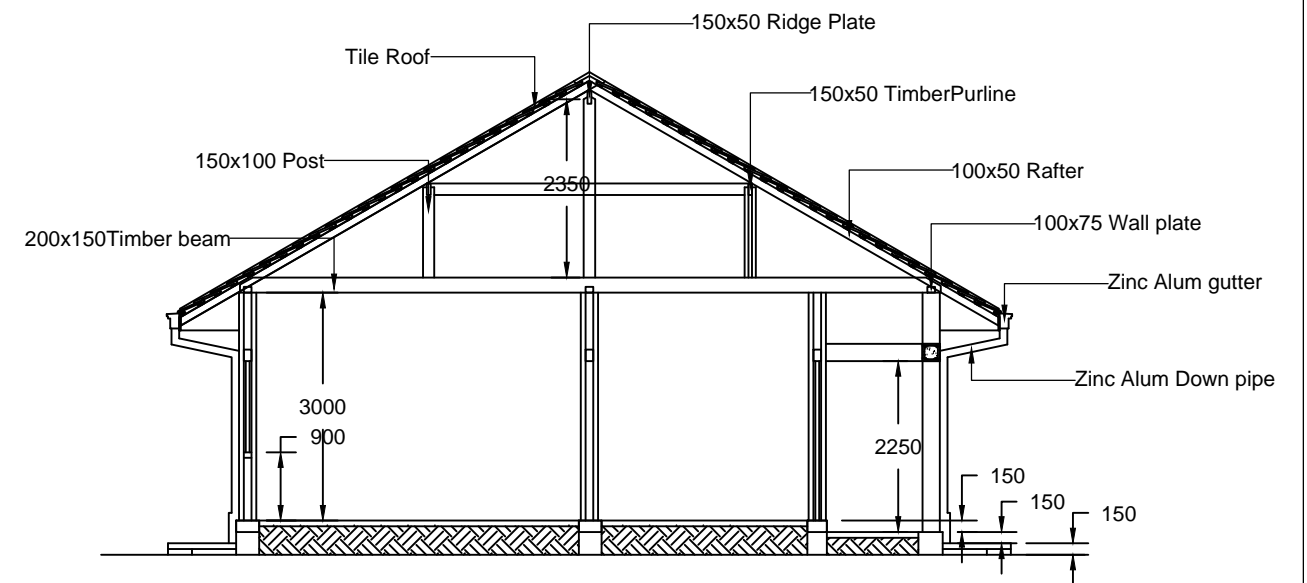
Construction of Multipurpose Centre for
Myliddy at Tellipalai DS Division
in Jaffna

JAF/RNRA/101335/001/1B/02

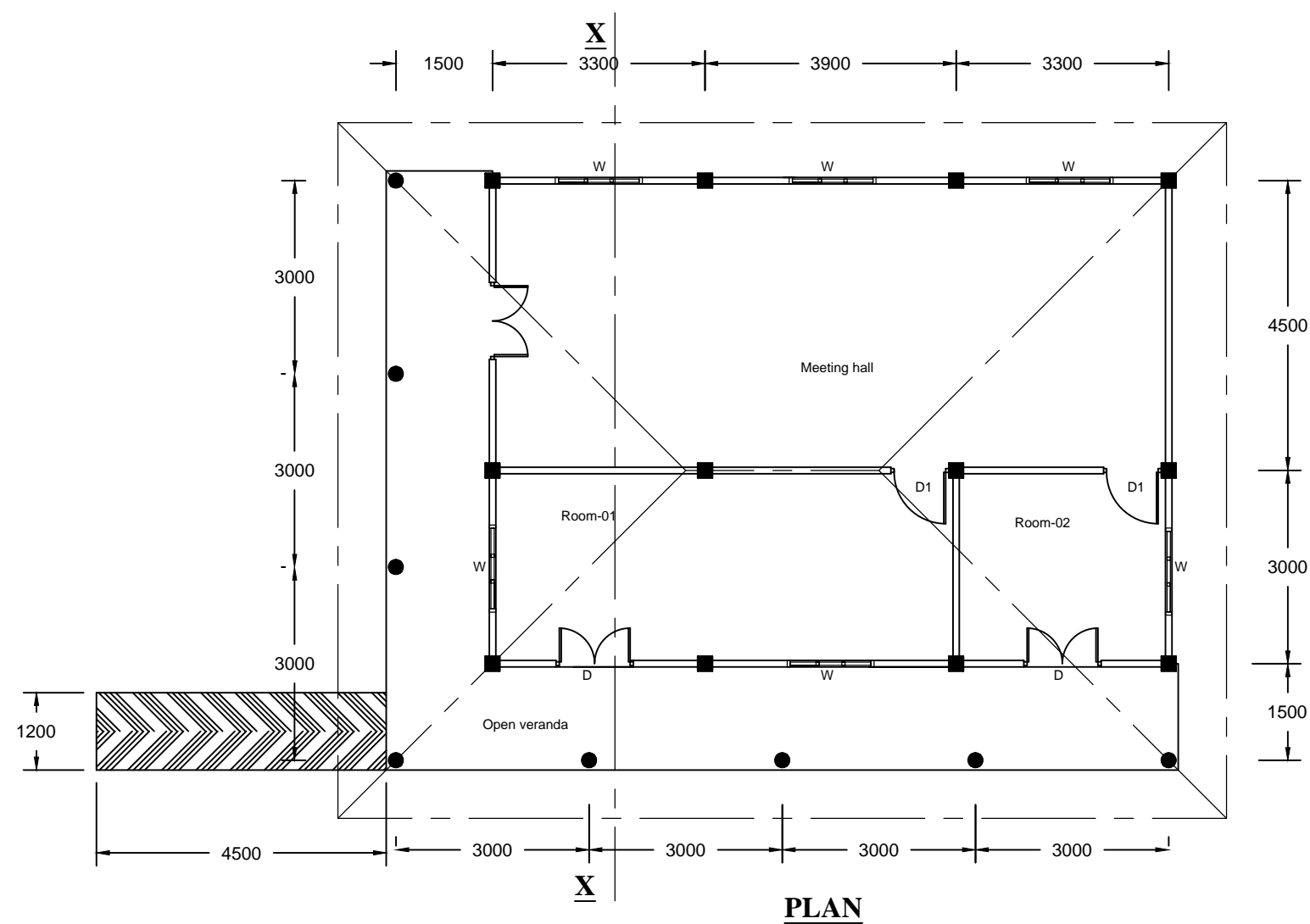
DRAWINGS



FRONT ELEVATION



SECTION ON X-X



PROPOSED SCHEDULE OF OPENINGS			
NAME	DESCRIPTION	SIZE	NOS
D	FULLY TIMBER PANELED DOOR	1200 x 2100	03
D1	FULLY TIMBER PANELED DOOR	900 x 2100	02
W	FULLY TIMBER PANELED WINDOW	1200 x 1200	06

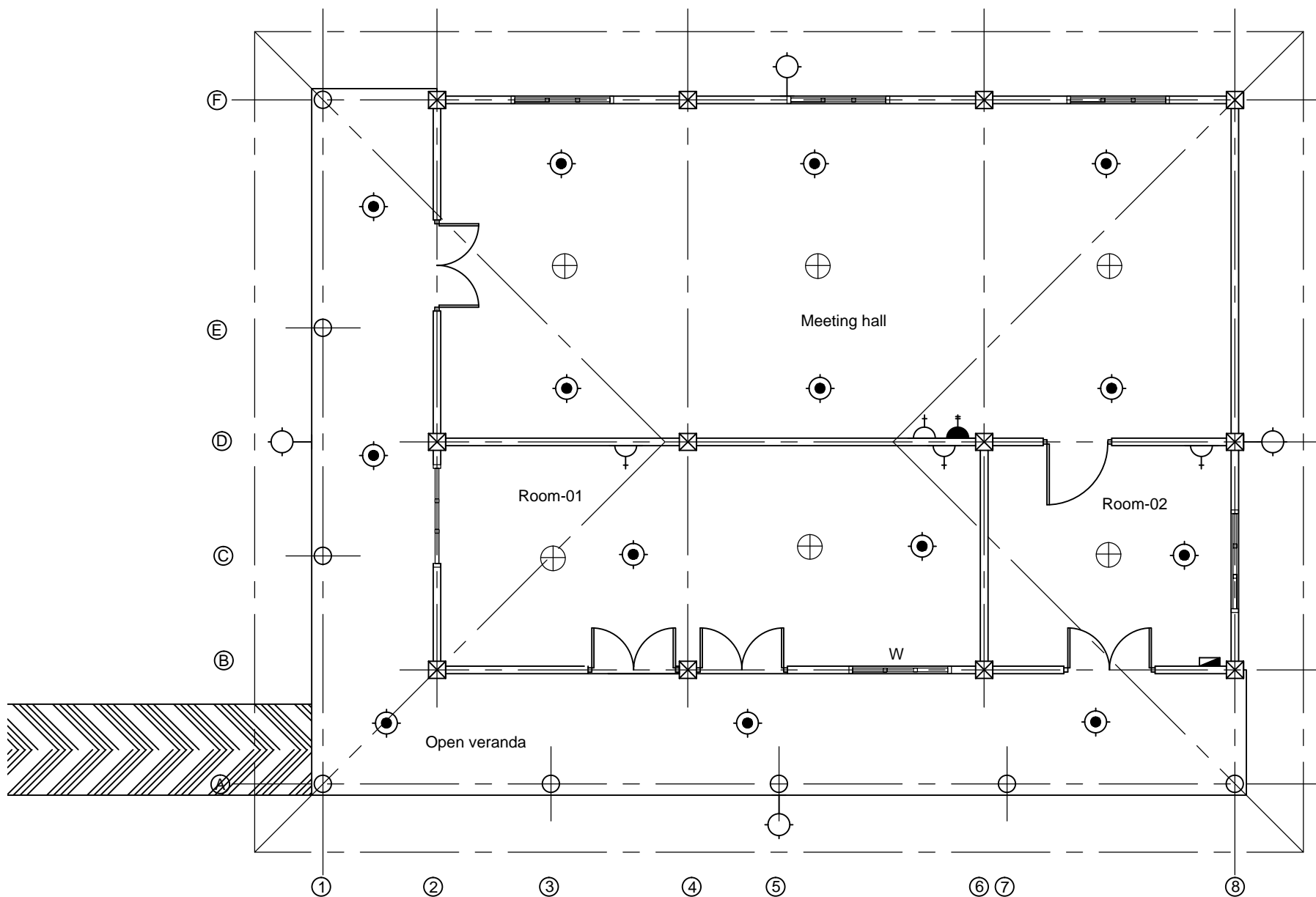


**UNITED NATIONS
DEVELOPMENT PROGRAMME**

PROJECT REF. No:
JAF/RNRA/101335/001/1B/02

Construction of Multipurpose Centre for Myliddy at Tellipalai DS Division in Jaffna

DRAWING TITLE	Key plan		
DRAWN	A.B		
CHECKED	A.T		
DATE	19.04.2018		
SCALE	N.T.S.		
DRAWING NO	UNDP/JF/TRFCS/CPB/KP/001	REV. NO	



ELECTRICAL LEGEND	
TYPE	DESCRIPTION
	Wall Bracket Lamp
	Pendent Lamp(CFL Lamp)
	(5A) Socket Outlet
	(13A) Socket Outlet
	DB
	Fan
	Switch

ELECTRICAL FLOOR PLAN

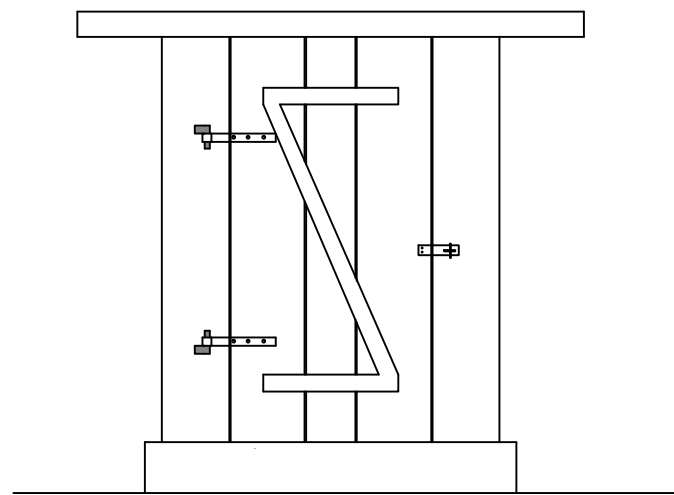


**UNITED NATIONS
DEVELOPMENT PROGRAMME**

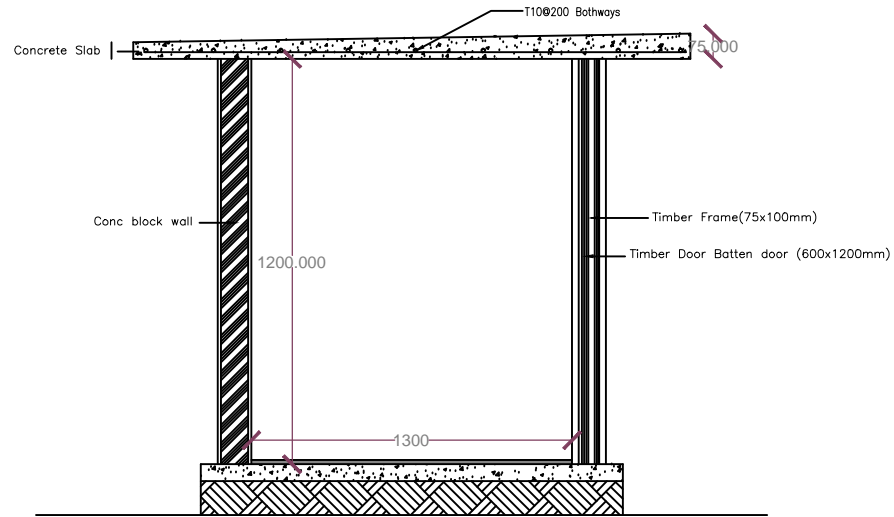
PROJECT REF. No:
JAF/RNRA/101335/001/1B/02

Construction of Multipurpose Centre for Myliddy at Tellipalai DS Division
in Jaffna

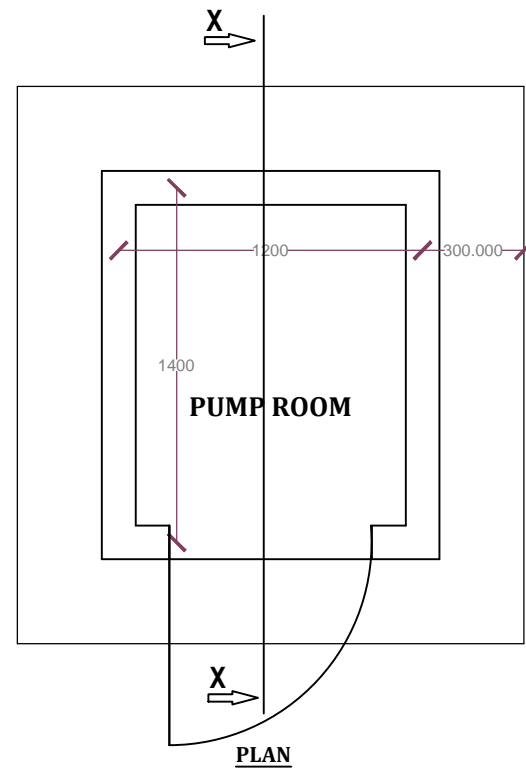
DRAWING TITLE	ELECTRICAL INSTALLATION		
DRAWN	A.B		
CHECKED	A.T		
DATE	19.04.2018		
SCALE	N.T.S.		
DRAWING NO	UNDP/JF/TRFCS/CPB/EL/001	REV. NO	



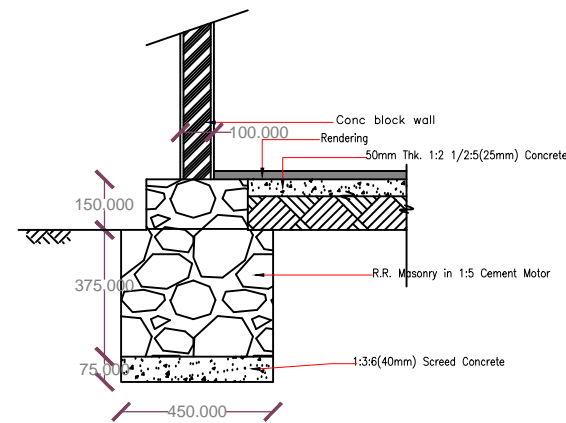
FRONT ELEVATION



SECTION ON X-X



PLAN



FOUNDATION DETAILS

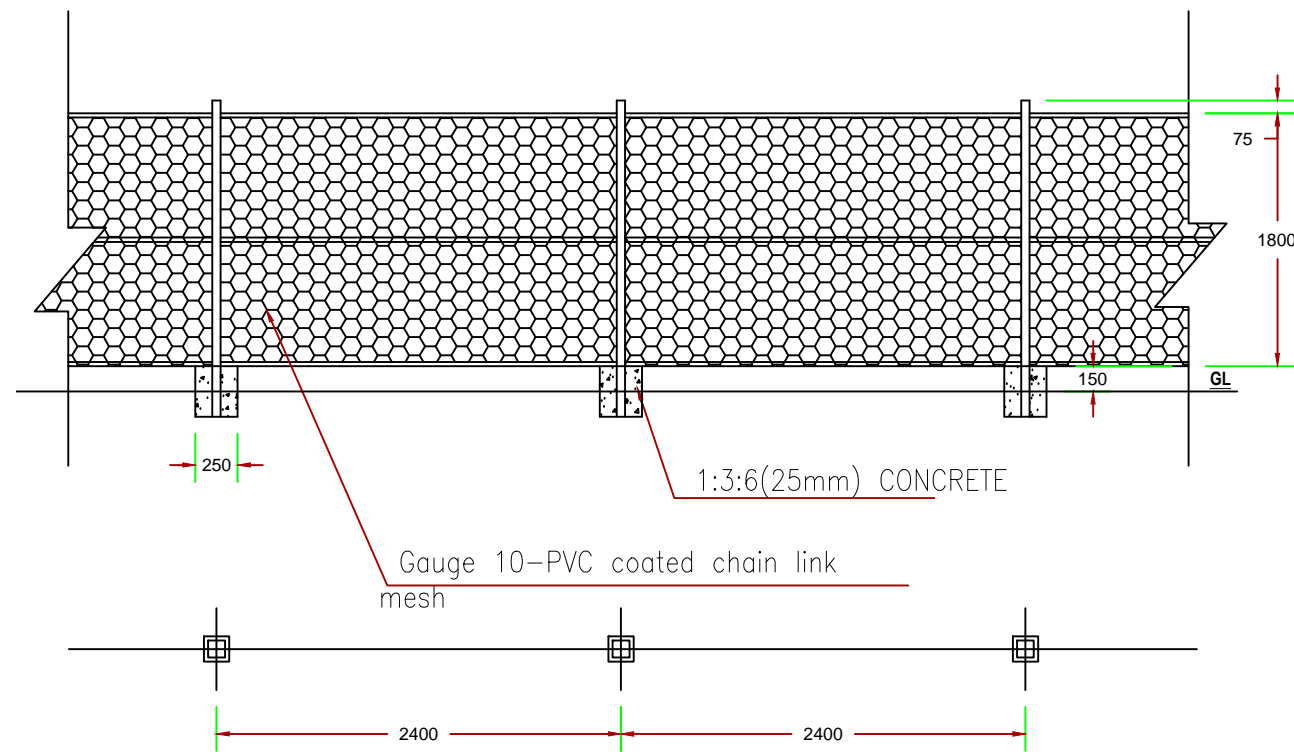


**UNITED NATIONS
DEVELOPMENT PROGRAMME**

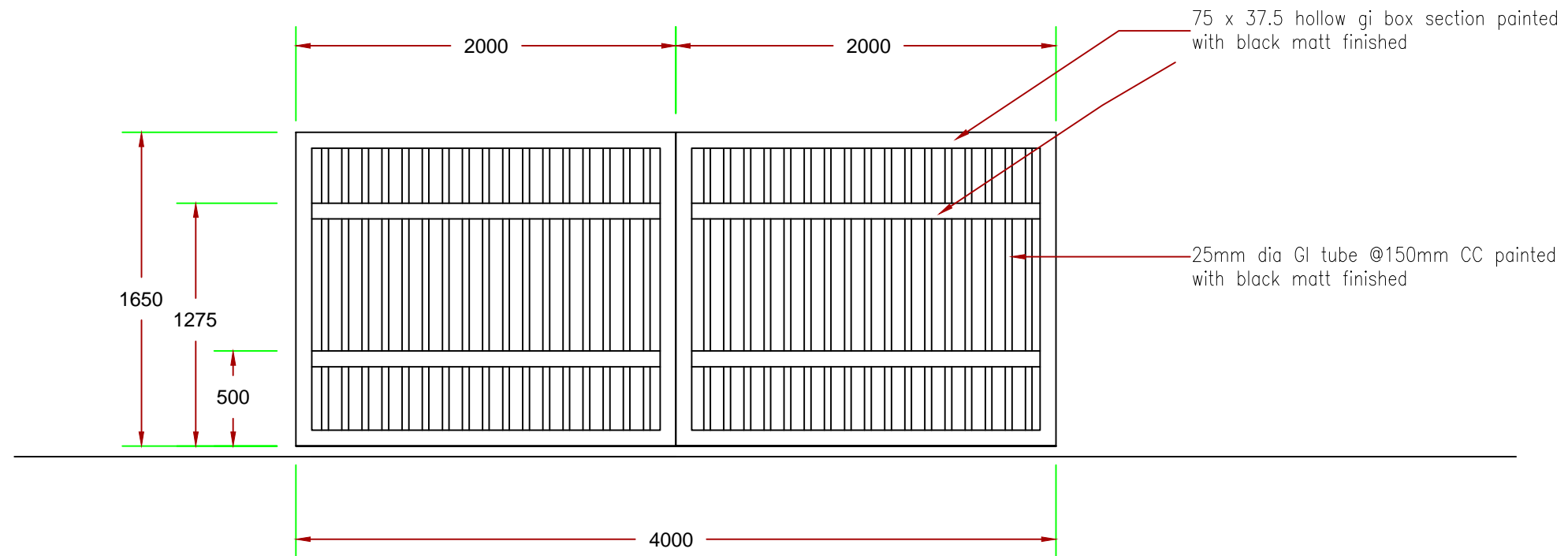
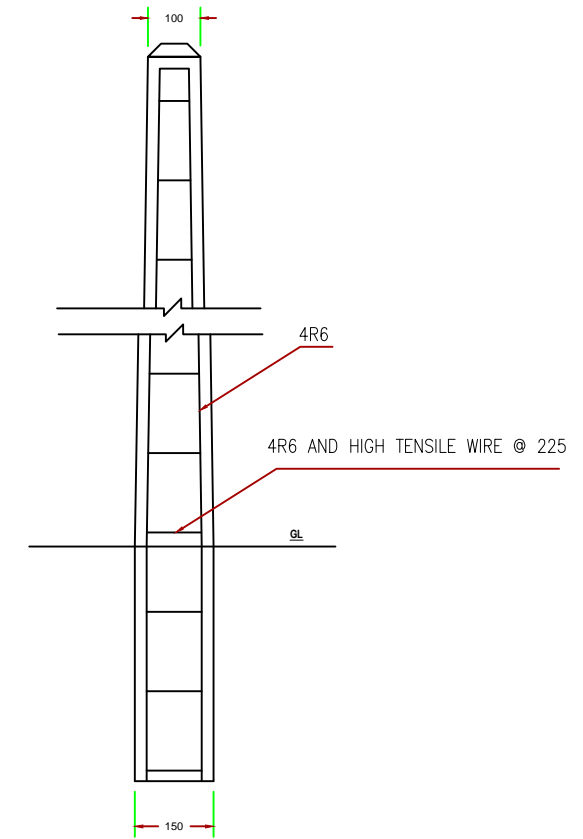
PROJECT REF. No:
JAF/RNRA/101335/001/1B/02

Construction of Multipurpose Centre for Myliddy at Tellipalai DS Division in Jaffna

DRAWING TITLE	PUMP HOUSE		
DRAWN	A.B		
CHECKED	A.T		
DATE	19.04.2018		
SCALE	N.T.S.		
DRAWING NO	UNDP/JF/TRFCS/CPB/PH/001	REV. NO	



DETAILS OF PVC MESH FENCE



**UNITED NATIONS
DEVELOPMENT PROGRAMME**

PROJECT REF. No:
JAF/RNRA/101335/001/1B/02

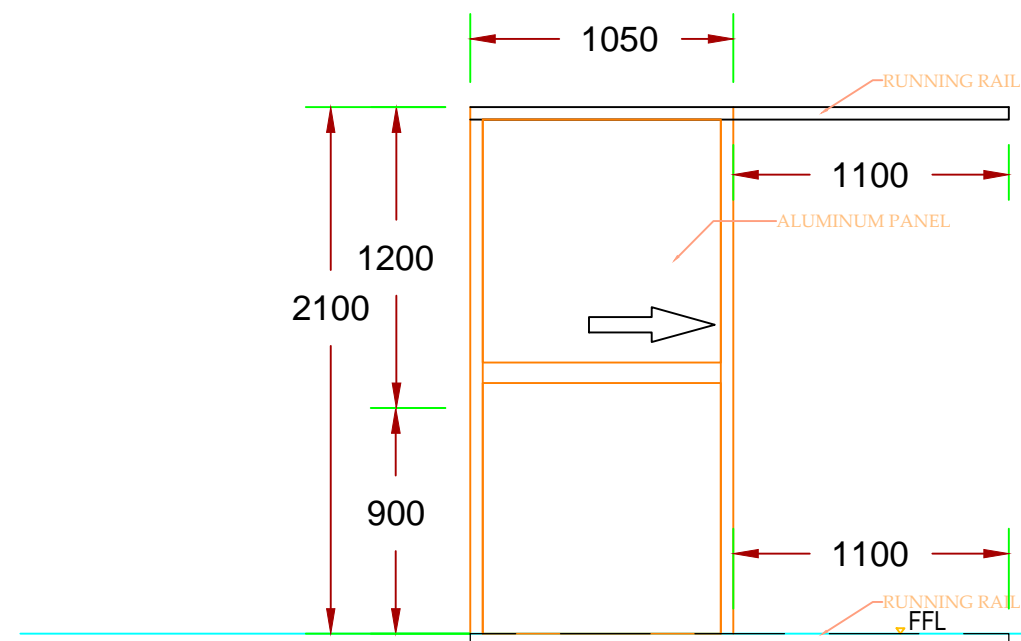
Construction of Multipurpose Centre for Myliddy at Tellipalai DS Division in Jaffna

DRAWING TITLE	DETAIL OF FENCE & GATE		
DRAWN	A.B		
CHECKED	A.T		
DATE	19.04.2018		
SCALE	N.T.S.		
DRAWING NO	UNDP/JF/TRFCS/CPB/FG/001	REV. NO	

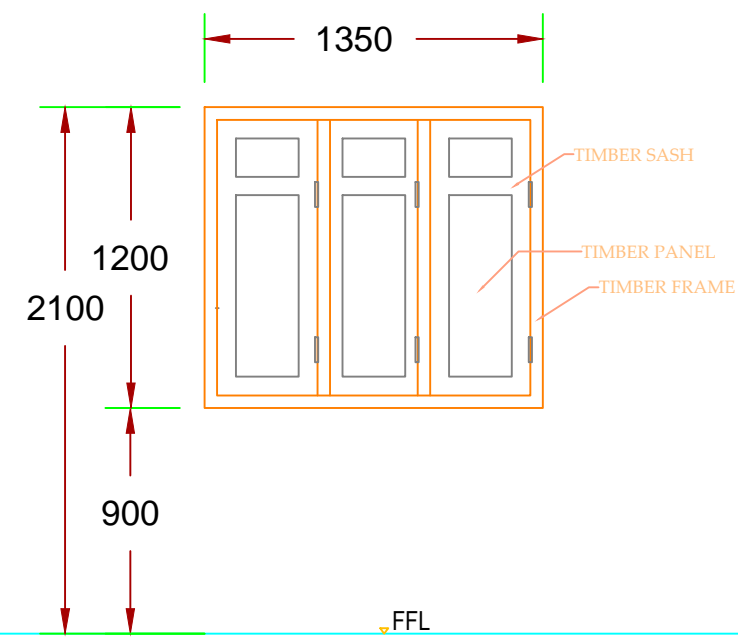


D1
Fully Timber Paneled Door

D2
Fully Timber Paneled Door



SD
Aluminum Sliding Door



W1
Fully Timber Paneled Window

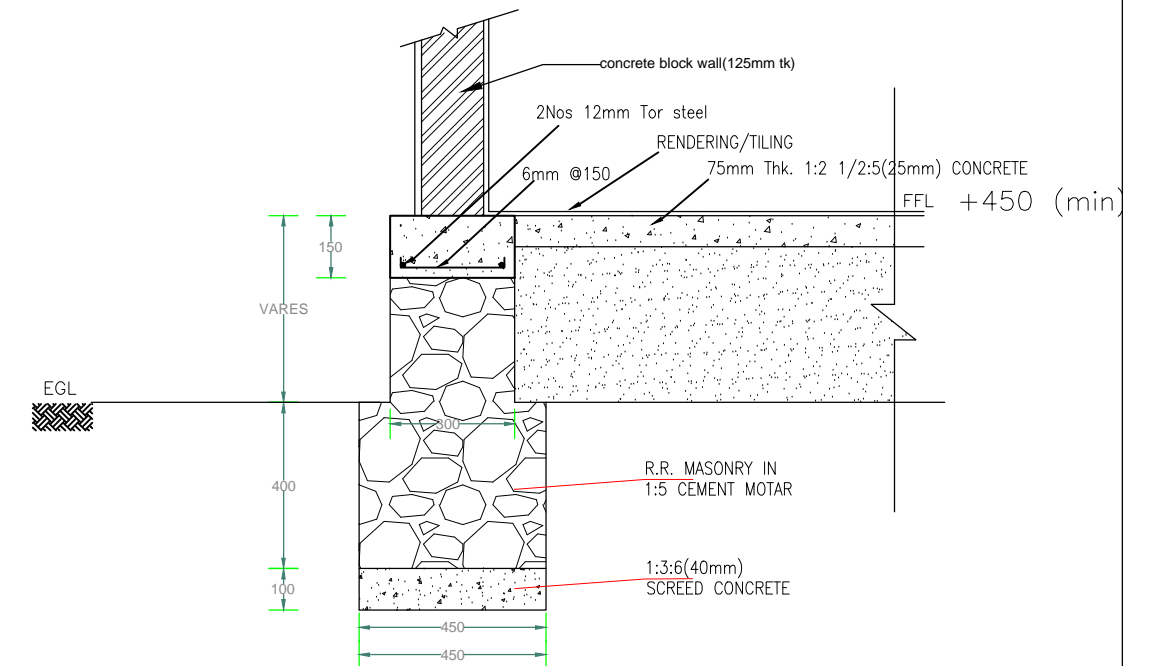
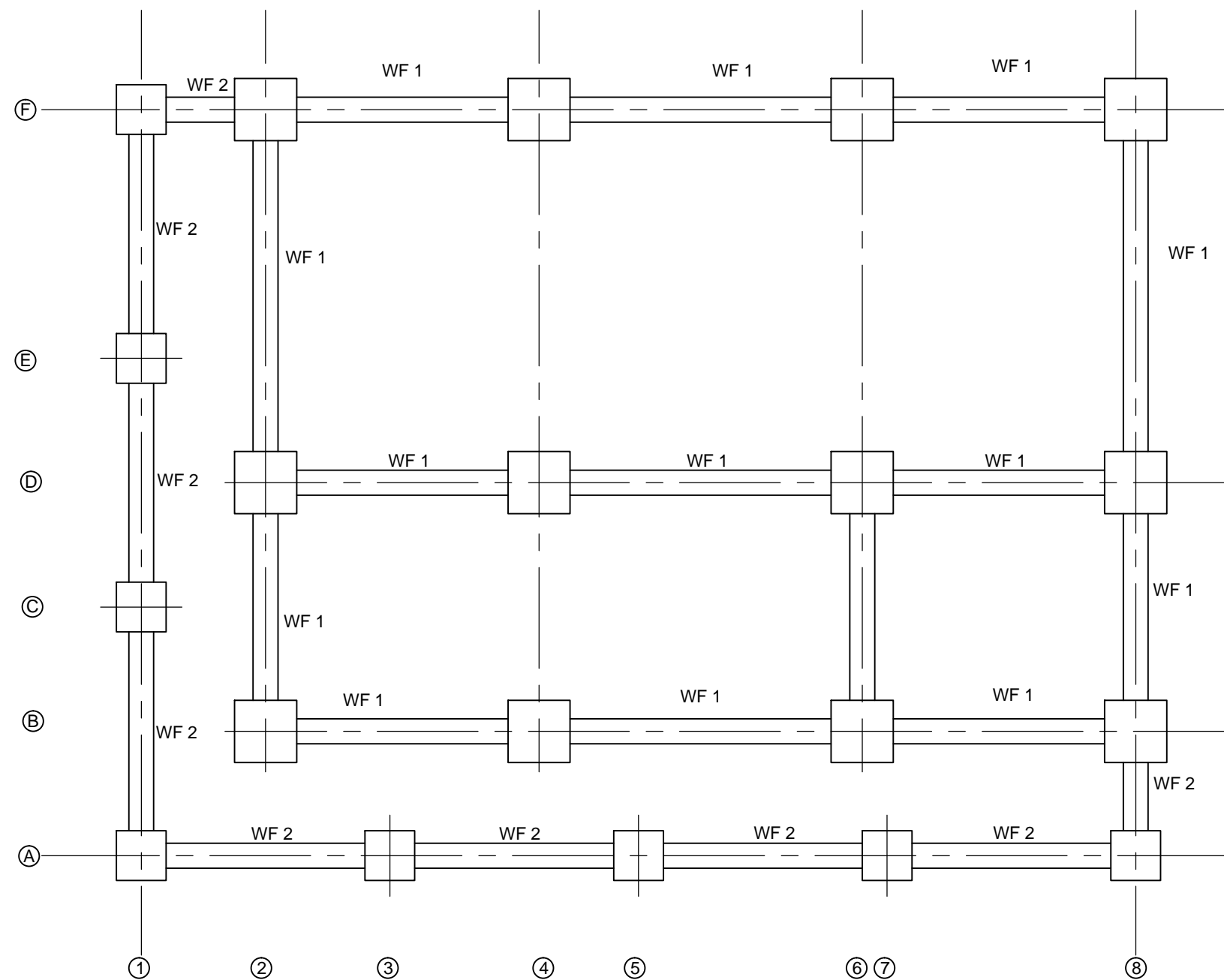


**UNITED NATIONS
DEVELOPMENT PROGRAMME**

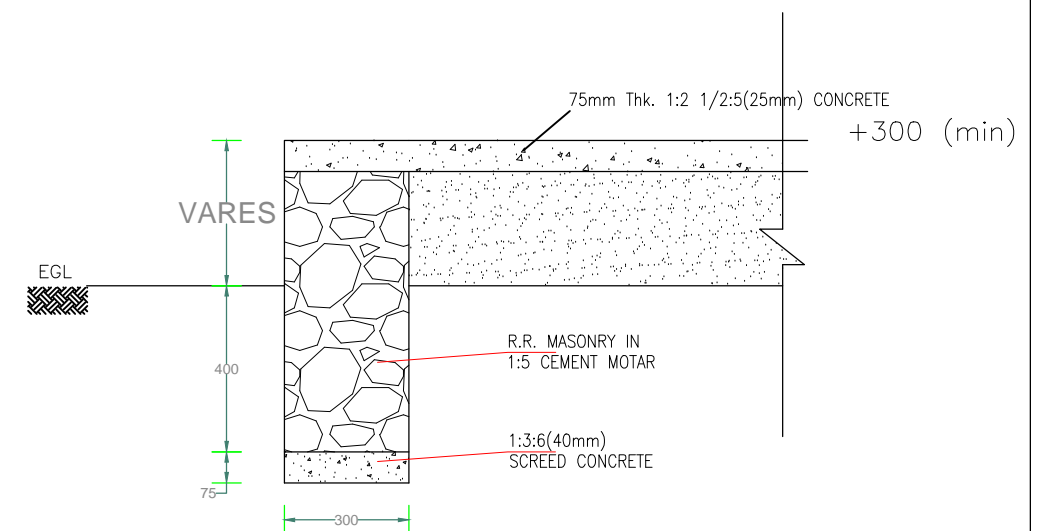
PROJECT REF. No:
JAF/RNRA/101335/001/1B/02

Construction of Multipurpose Centre for Myliddy at Tellipalai DS Division in Jaffna

DRAWING TITLE	DETAIL OF DOORS & WINDOWS		
DRAWN	A.B		
CHECKED	A.T		
DATE	19.04.2018		
SCALE	N.T.S.		
DRAWING NO	UNDP/JF/TRFCS/CPB/AR/002	REV. NO	



WALL FOUNDATION WF 1



DETAILS OF FOUNDATION WF 2

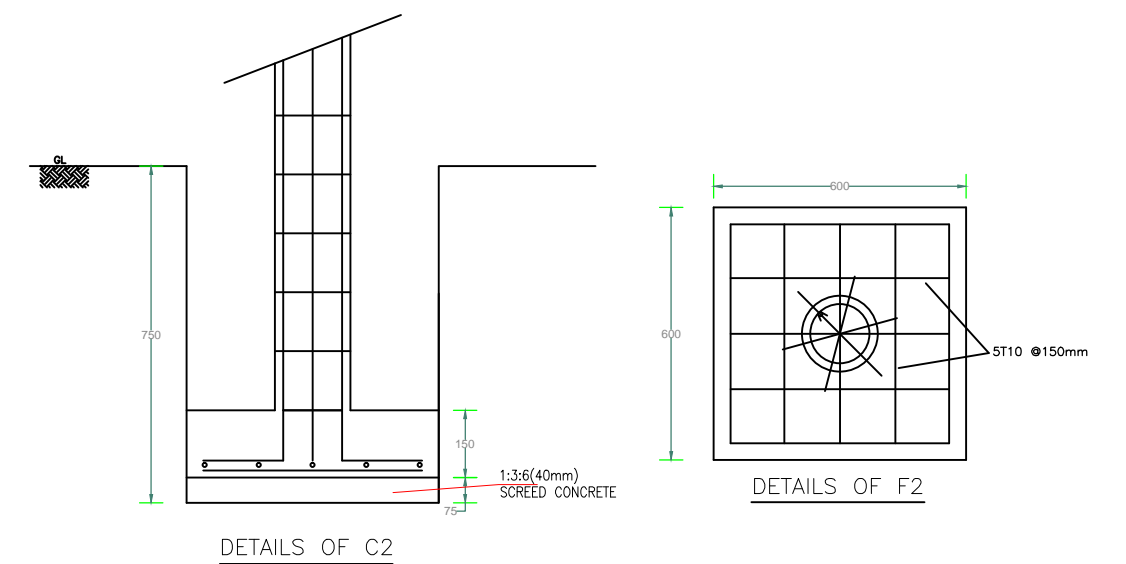
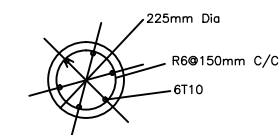
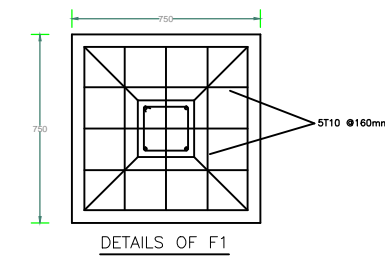
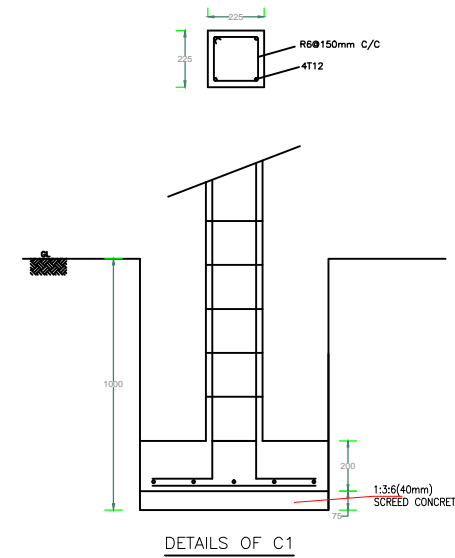
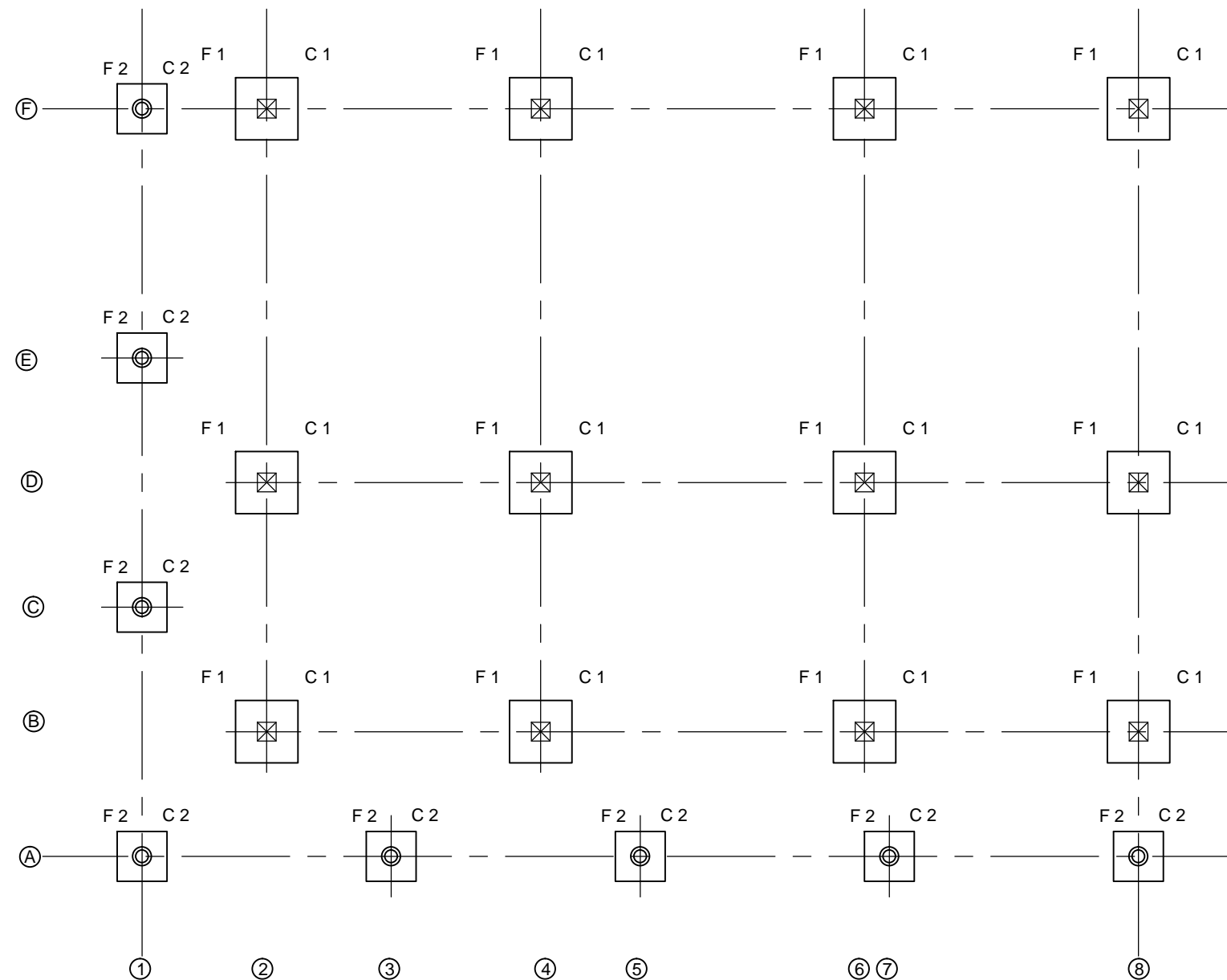


**UNITED NATIONS
DEVELOPMENT PROGRAMME**

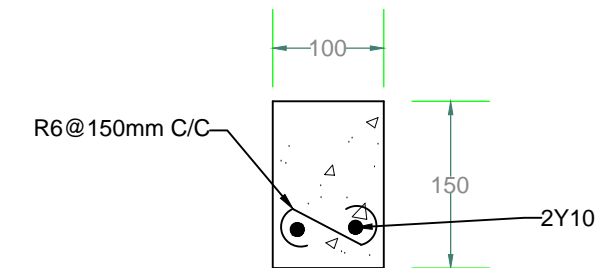
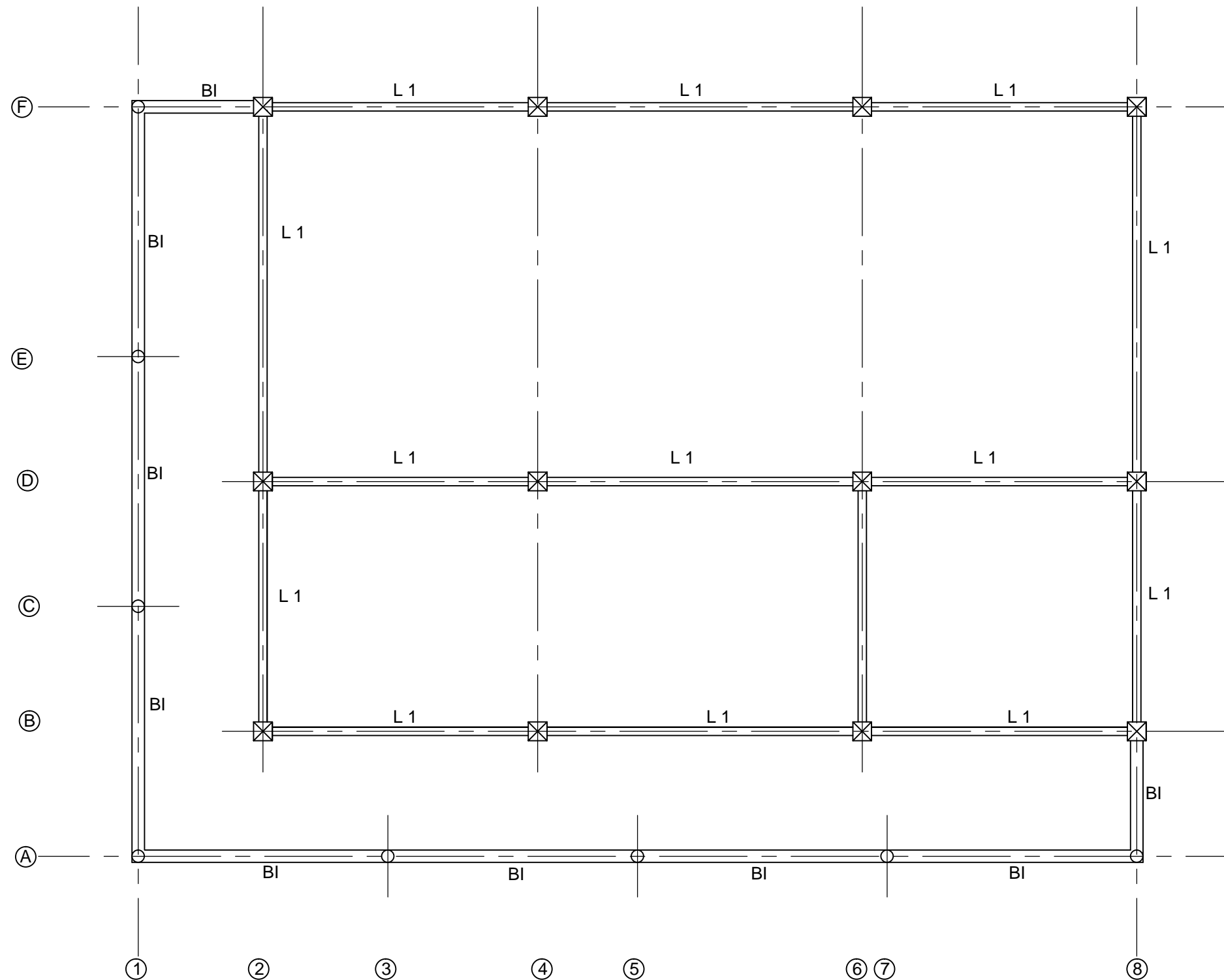
PROJECT REF. No:
JAF/RNRA/101335/001/1B/02

Construction of Multipurpose Centre for Myliddy at Tellipalai DS Division in Jaffna

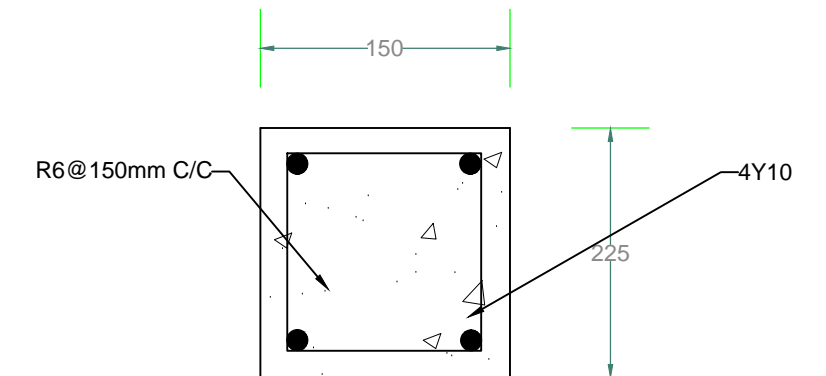
DRAWING TITLE	LAYOUT OF FOUNDATION AND DETAILS		
DRAWN	A.B		
CHECKED	A.T		
DATE	19.04.2018		
SCALE	N.T.S.		
DRAWING NO	UNDP/JF/TRFCS/CPB/SD/001	REV. NO	



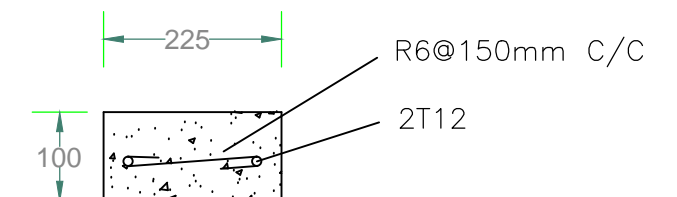
DRAWING TITLE	LAYOUT OF FOUNDATION AND DETAILS		
DRAWN	A.B		
CHECKED	A.T		
DATE	19.04.2018		
SCALE	N.T.S.		
DRAWING NO	UNDP/JF/TRFCS/CPB/SD/002	REV. NO	



DETAILS OF LINTEL L1

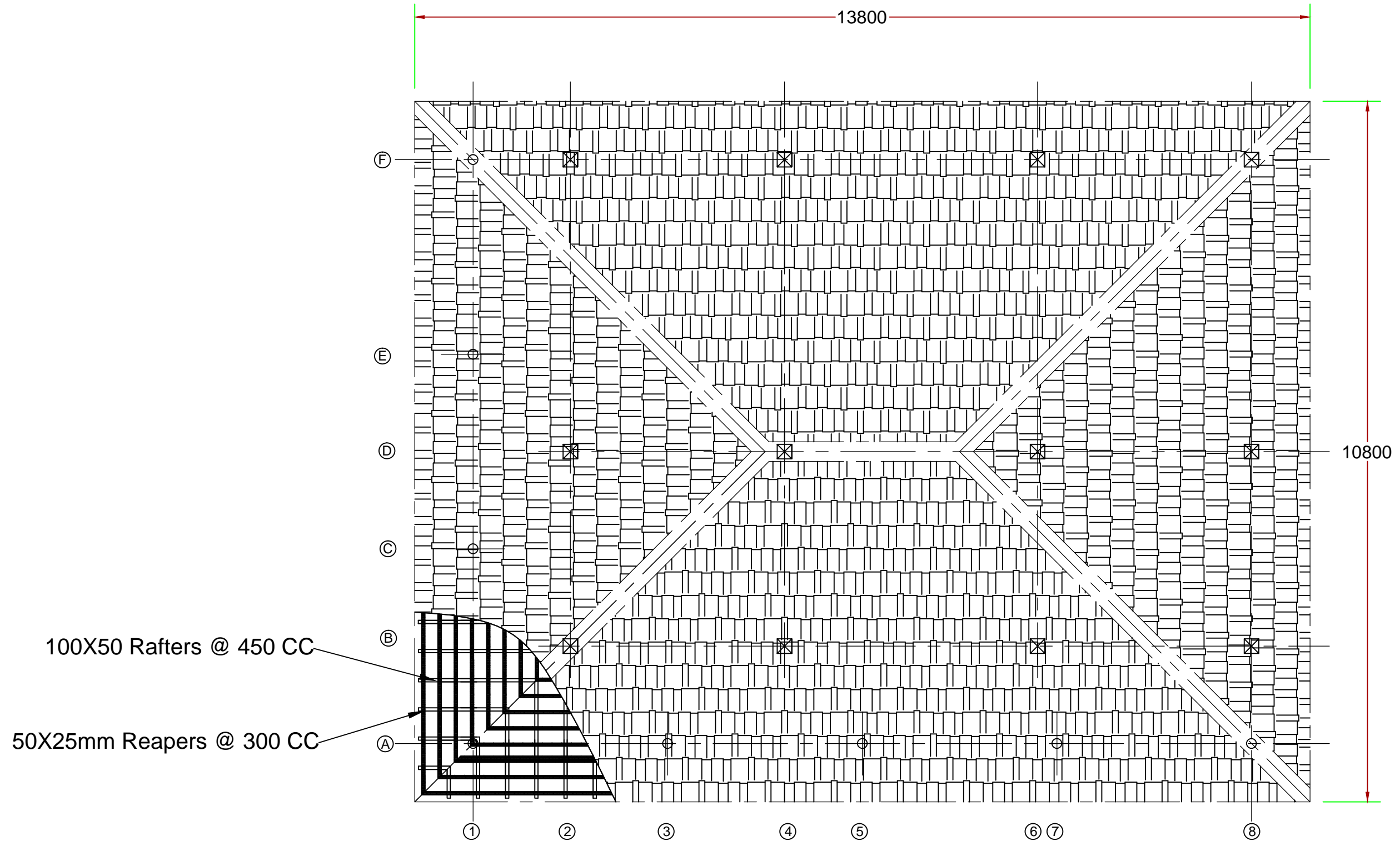


DETAILS OF BEAM B1



DETAILS OF S1

DRAWING TITLE	LAYOUT & DETAIL OF PLINTH BEAM		
DRAWN	A.B		
CHECKED	A.T		
DATE	19.04.2018		
SCALE	N.T.S.		
DRAWING NO	UNDP/JF/TRFCS/CPB/SD/003	REV. NO	



ROOF PLAN

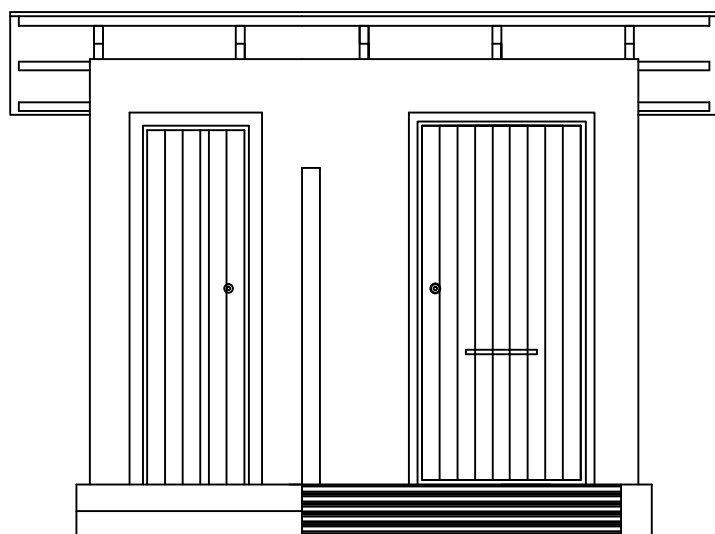


**UNITED NATIONS
DEVELOPMENT PROGRAMME**

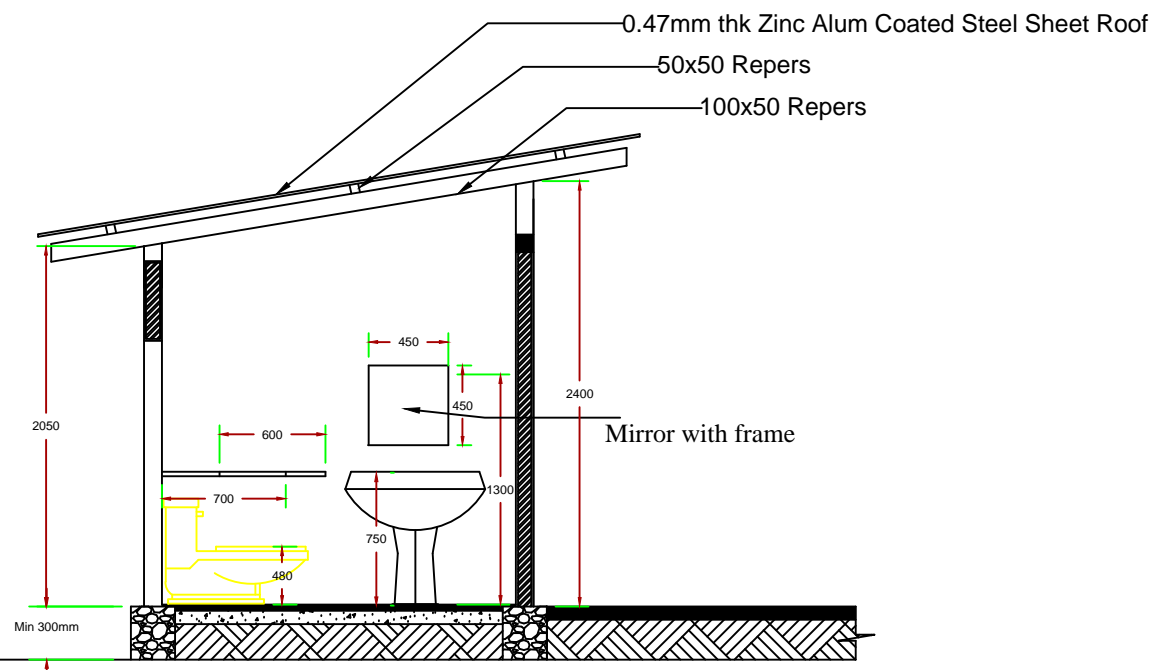
PROJECT REF. No:
JAF/RNRA/101335/001/1B/02

Construction of Multipurpose Centre for Myliddy at Tellipalai DS Division
in Jaffna

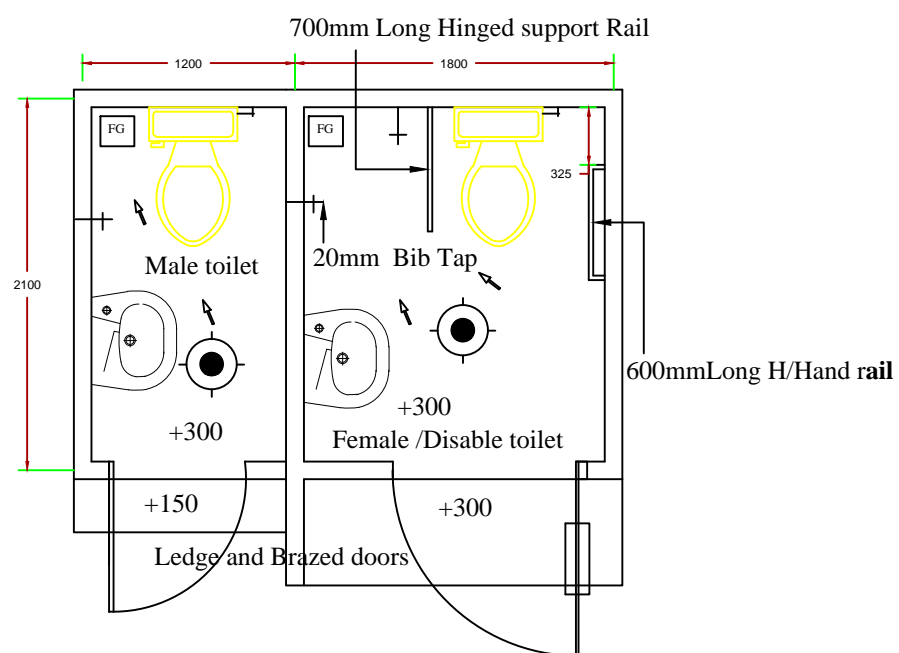
DRAWING TITLE	DETAIL OF ROOFING		
DRAWN	A.B		
CHECKED	A.T		
DATE	19.04.2018		
SCALE	N.T.S.		
DRAWING NO	UNDP/JF/TRFCS/CPB/SD/004	REV. NO	



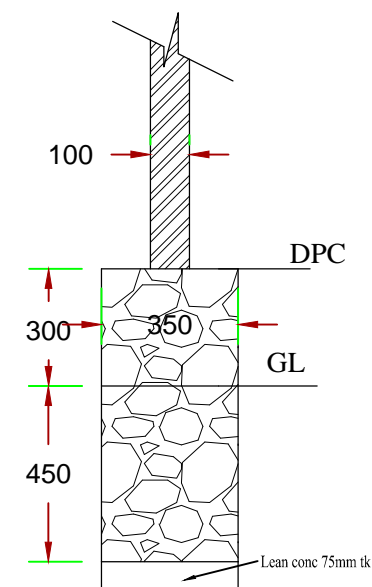
FRONT ELEVATION



SECTION ON X-X



PLAN



FOUNDATION SECTION

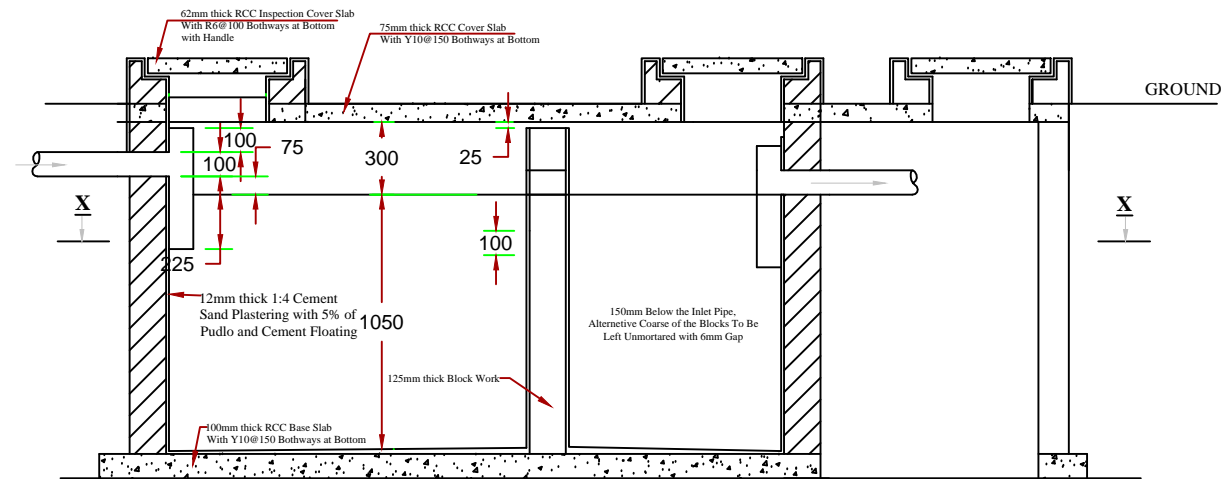


**UNITED NATIONS
DEVELOPMENT PROGRAMME**

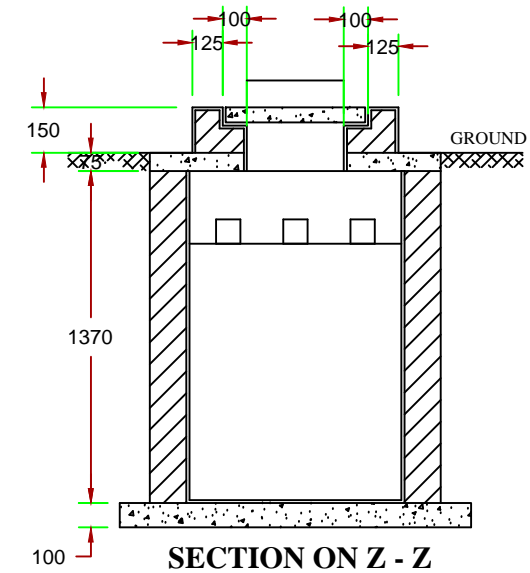
PROJECT REF. No:
JAF/RNRA/101335/001/1B/02

Construction of Multipurpose Centre for Myliddy at Tellipalai DS Division
in Jaffna

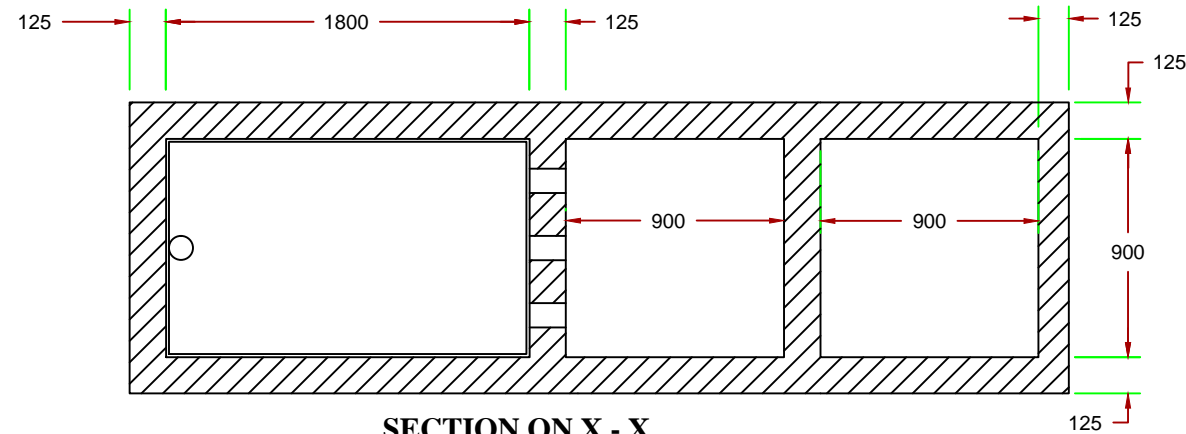
DRAWING TITLE	TOILET		
DRAWN	A.B		
CHECKED	A.T		
DATE	19.04.2018		
SCALE	N.T.S.		
DRAWING NO	UNDP/JF/TRFCS/CPB/T/001	REV. NO	



SECTION ON Y - Y

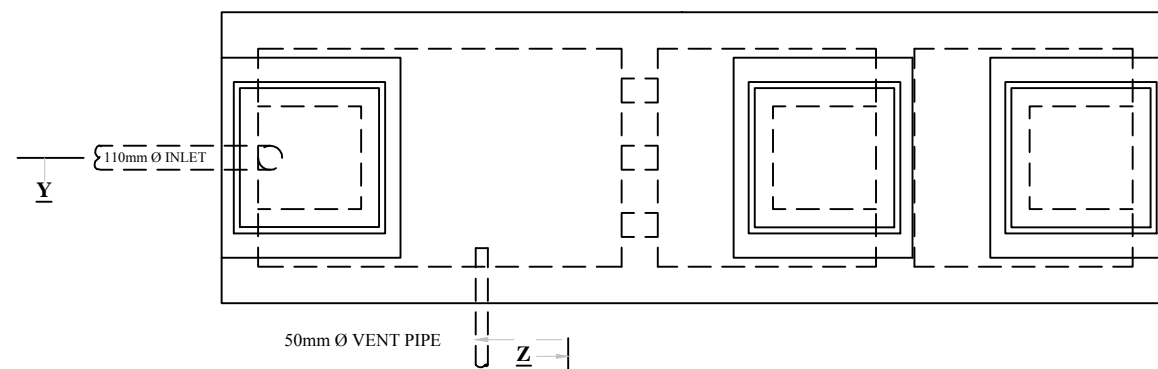


SECTION ON Z - Z



SECTION ON X - X

Z



PLAN

SEPTIC TANK

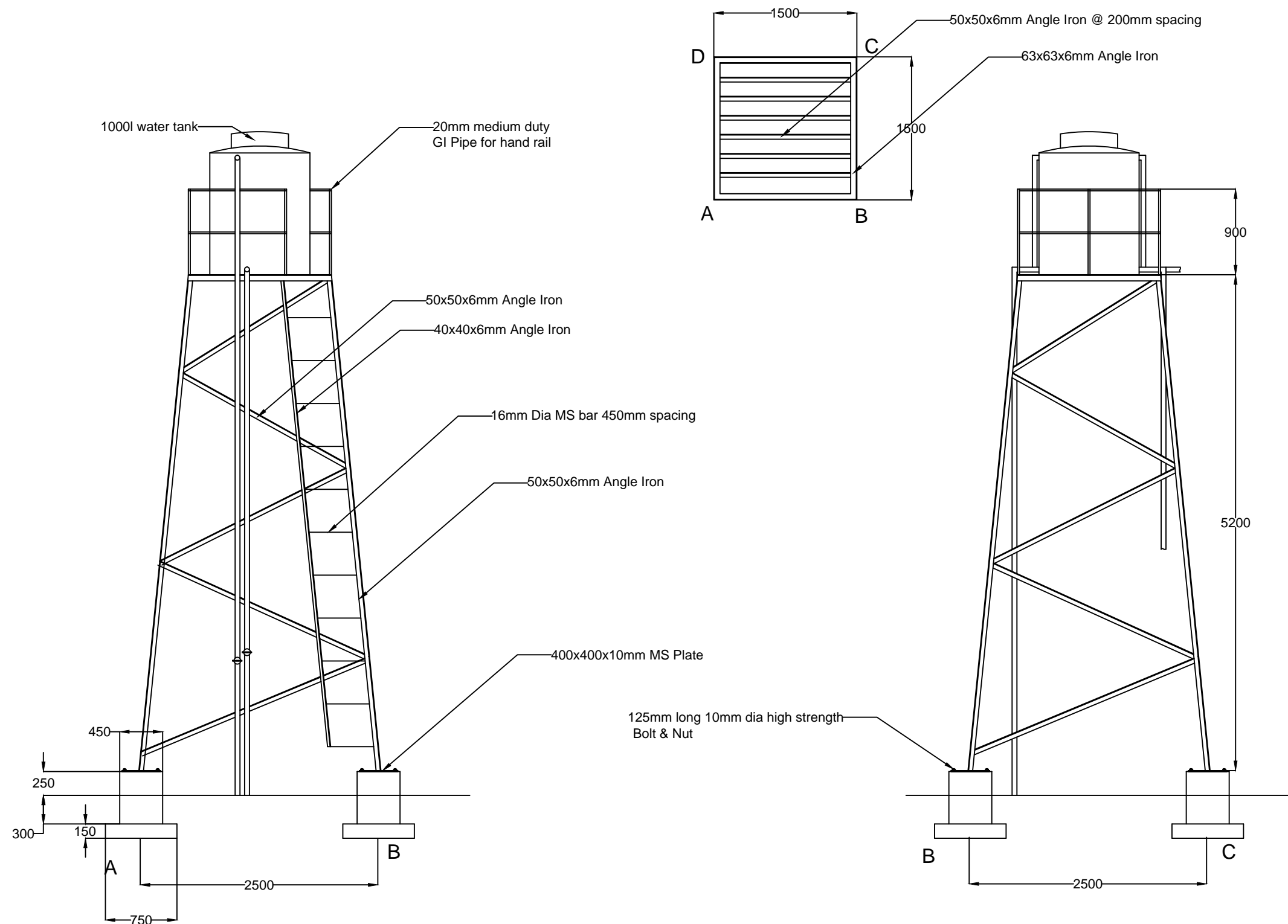


**UNITED NATIONS
DEVELOPMENT PROGRAMME**

PROJECT REF. No:
JAF/RNRA/101335/001/1B/02

Construction of Multipurpose Centre for Myliddy at Tellipalai DS Division in Jaffna

DRAWING TITLE	SEPTIC TANK & SOAKAGE PIT		
DRAWN	A.B		
CHECKED	A.T		
DATE	19.04.2018		
SCALE	N.T.S.		
DRAWING NO	UNDP/JF/TRFCS/CPB/SW/001	REV. NO	



**UNITED NATIONS
DEVELOPMENT PROGRAMME**

PROJECT REF. No:
JAF/RNRA/101335/001/1B/02

Construction of Multipurpose Centre for Myliddy at Tellipalai DS Division in Jaffna

DRAWING TITLE	WATER TANK		
DRAWN	A.B		
CHECKED	A.T		
DATE	19.04.2018		
SCALE	N.T.S.		
DRAWING NO	UNDP/JF/TRFCS/CPB/WT/001	REV. NO	