



**BIDDING DOCUMENT  
for  
BIDDING DOCUMENT  
for  
Construction of Recreation Centre at  
Babutlang, Zarkawt, Aizawl**

**VOLUME-II**

(Price Bid)

Issued on : 14<sup>th</sup> November 2024  
Invitation for Bids No : No. D. 13024/16/CEO/ASCL  
Package No : SASCI/ASCL/RC-Zarkawt/48  
State : MIZORAM  
Country : INDIA



**AIZAWL SMART CITY LIMITED, AIZAWL**

# Price Bid

This Section contains the forms which are to be completed by the Bidder and submitted as part of his Price Bid.

## Table of Forms

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**FORM LETTER OF FINANCIAL BID**

Name of Work: \_\_\_\_\_

Bid No: \_\_\_\_\_

To

 \_\_\_\_\_ [Employer]  
 \_\_\_\_\_ [Address]

Sir,

We, the undersigned, declare that:

1. We have examined and have no reservations to the Bidding Document including Addenda.
2. We offer to execute the Works described above and remedy any defects therein in conformity with the Conditions of Contract including Additional Conditions and Special Conditions, Specifications, Drawings, Bill of Quantities accompanying this Bid for Rs. \_\_\_\_\_ (Rupees \_\_\_\_\_) only
3. We undertake to abide by the Final Sum coming out of the correction of arithmetical errors as indicated in the General Conditions of Contract.
4. We also undertake, if our Bid is accepted, to commence the work within the period as indicated in the Contract Document and to complete the whole work comprised in the Contract within the time stated in the Contract Document.
5. Our Bid shall be valid for a period of 75 days from the date fixed for the bid submission deadline in accordance with the Bidding Documents, and it shall remain binding upon us and may be accepted at any time before the expiration of that period;
6. We undertake that unless and until a formal Agreement is prepared and executed, this Bid, together with your written notification of Letter of Acceptance shall constitute a binding contract between us.
7. We understand that you are not bound to accept the lowest or any tender you may receive.
8. I/We do hereby submit our Financial Bid, complete with all the required information as stipulated in your Bidding Documents.

Signature of authorized signatory.....

Name.....

Title.....

Date.....

# **Schedules**

## **Bill of Quantities**

### **Preamble**

#### **(A) General**

1. The Bill of Quantities shall be read in conjunction with the Instructions to Bidders, Conditions of Contract, Specifications and Drawings.
2. For the construction of works, the quantities given in the Bill of Quantities are estimated quantities, and are given to provide a common basis for bidding. The basis of payment will be the actual quantities of work ordered and carried out, as measured by the Contractor and verified by the Engineer and valued at the agreed individual item rates. Bills will be raised monthly. The method of measurement shall be as per norms laid out by the Bureau Of Indian Standard's publication IS: 1200 (Latest Editions with updated amendments).
3. A rate or price shall be entered against each item in the Priced Bill of Quantities, whether quantities are stated or not. The cost of items against which the Contractor has failed to enter a price or rate shall be deemed to be covered by other rates and prices entered in the Bill of Quantities.
4. The whole cost of complying with the provisions of the contract shall be included in the items provided in the priced Bill of Quantities, and where no items are provided, the cost shall be deemed to be distributed among the rates and prices entered for the related items of work.
5. General directions and descriptions of work and materials are not necessarily repeated nor summarized in the Bill of Quantities. Reference to relevant sections of the Contract documentation shall be made before entering prices against each item in the priced Bill of Quantities.
6. The rates and prices tendered in the priced Bill of Quantities shall, except in so far as it is otherwise provided under the Contract, include all constructional plant, labour, supervision, materials, erection, maintenance, insurance, profit, taxes and duties, together with all general risks, liabilities and obligations set out in the Contract. Import duty and excise duty on materials and goods to be imported shall not be included in the Unit Rates
7. Arithmetic errors will be corrected by the Employer as follows:
  - a. if there is a discrepancy between the unit price and the total price that is obtained by multiplying the unit price and quantity, the unit price shall prevail and the total price shall be corrected, unless in the opinion of the Employer there is an obvious misplacement of the decimal point in the unit price, in which case the total price as quoted shall govern and the unit price shall be corrected;
  - b. if there is an error in a total corresponding to the addition or subtraction of subtotals, the subtotals shall prevail and the total shall be corrected; and
  - c. if there is a discrepancy between words and figures, the Amount (In INR) in words shall prevail, unless the Amount (In INR) expressed in words is related to an

arithmetic error, in which case the Amount (In INR) in figures shall prevail subject to (a) and (b) above.

8. Rock is defined as all materials that, in the opinion of the Engineer, require blasting, or the use of metal wedges and sledgehammers, or the use of compressed air drilling for their removal, and that cannot be extracted by ripping with a tractor of at least 150 brake hp with a single, rear-mounted, heavy-duty ripper.

**(B) Work Items**

The Bill of Quantities contains Schedules as at the next page:

## **SUB-HEAD WISE ABSTRACT OF COST**

### **Construction of Recreation Centre at Babutlang, Zarkawt, Aizawl.**

The quoted rate and amount are inclusive of taxes, duties and cess including all cost payable by the successful Bidders in executing the contract .

| <b>Sub Head No.</b> | <b>Name of Sub Head</b>    | <b>Amount (₹)</b> |
|---------------------|----------------------------|-------------------|
| 1                   | Earth Work                 |                   |
| 2                   | PCC                        |                   |
| 3                   | RCC                        |                   |
| 4                   | Brick work                 |                   |
| 5                   | Stone works                |                   |
| 6                   | Wood work                  |                   |
| 7                   | Steel works                |                   |
| 8                   | Aluminium works            |                   |
| 9                   | Flooring                   |                   |
| 10                  | D&W Fittings               |                   |
| 11                  | Roofing                    |                   |
| 12                  | Sanitary installation      |                   |
| 13                  | Water Supply               |                   |
| 14                  | Plastering                 |                   |
| 15                  | Painting                   |                   |
| 16                  | Wall cladding              |                   |
| 17                  | Artificial grass           |                   |
| 18                  | Geotechnical investigation |                   |
| 19                  | Dismantling & demolition   |                   |
| 20                  | Internal electrification   |                   |
|                     | G. Total                   |                   |

## Construction of Recreation Centre at Babutlang, Zarkawt, Aizawl.

| S/No                          | Description   | Qty            | Unit       | Rate (₹) | Amount (₹) |
|-------------------------------|---|----------------|------------|----------|------------|
| <b>Sub Head 1 : Earthwork</b> |   |                |            |          |            |
| 1.1                           | Earth work in excavation by mechanical means (Hydraulic excavator)/manual means over areas (exceeding 30 cm in depth, 1.5 m in width as well as 10 sqm on plan) including getting out and disposal of excavated earth lead upto 50 m and lift upto 1.5 m, as directed by Engineer-in-charge.        |                |            |          |            |
|                               | b) Ordinary Rock  |                |            |          |            |
|                               |   | <b>404.96</b>  | <b>cum</b> |          |            |
| 1.2                           | Disposal of excavated earth   |                |            |          |            |
|                               | Disposal at Phunchawng 13km   |                |            |          |            |
|                               |   | <b>634.33</b>  | <b>cum</b> |          |            |
|                               | For remaining 8km, rate is ₹19.59/km/cum  |                |            |          |            |
|                               |   | <b>634.33</b>  | <b>cum</b> |          |            |
| 1.3                           | Earthwork in excavation in foundation trenches or drains etc. (not exceeding 1.5m in width or 10sqm on plan) including dressing of sides and ramming of bottoms, lift upto 1.5m including getting out excavated soil and disposal of surplus excavated soil as directed within a lead of 50 metres. |                |            |          |            |
|                               | b) Hard Soil ( pick work )  |                |            |          |            |
|                               |   | <b>1184.13</b> | <b>cum</b> |          |            |
| 1.4                           | Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 m and lift upto 1.5 m.   |                |            |          |            |
|                               |   | <b>954.76</b>  | <b>cum</b> |          |            |
| <b>Sub Head 1 Total</b>       |   |                |            |          |            |
| <b>Sub Head 2 : PCC</b>       |   |                |            |          |            |
| 2.1                           | Providing and laying in position cement concrete of specified grade excluding cost of centering and shuttering - All work upto plinth level:  |                |            |          |            |
|                               | a) 1:2:4 (1 cement :2 course sand :4 stone aggregate 20mm nominal size)   |                |            |          |            |
|                               |   | <b>250.58</b>  | <b>cum</b> |          |            |
| 2.2                           | Providing and laying in position cement concrete of specified grade excluding cost of centering and shuttering - All work upto plinth level:  |                |            |          |            |
|                               | a) 1:3:6(1 cement :3 course sand :6 stone aggregate 20mm nominal size)  |                |            |          |            |
|                               |   | <b>49.32</b>   | <b>cum</b> |          |            |
| <b>Sub Head 2 Total</b>       |   |                |            |          |            |

| S/No                    | Description  | Qty              | Unit       | Rate (₹) | Amount (₹) |
|-------------------------|--|------------------|------------|----------|------------|
| <b>Sub Head 3 : RCC</b> |  |                  |            |          |            |
| 3.1                     | Providing and laying in position machine batched and machine mixed design mix M-20 grade cement concrete for reinforced cement concrete work, using cement content as per approved design mix, including pumping of concrete to site of laying but excluding the cost of centering, shuttering, finishing and reinforcement, including admixtures in recommended proportions as per IS: 9103 to accelerate, retard setting of concrete, improve workability without impairing strength and durability as per direction of Engineer-in-charge. "(Note:- Cement content considered in this item is @ 330 kg/cum."Excess/ less cement used as per design mix is payable/recoverable separately) |                  |            |          |            |
|                         | a) All work upto plinth level.   |                  |            |          |            |
|                         |  | <b>195.68</b>    | <b>cum</b> |          |            |
|                         | b) All work above plinth level upto floor V level.   |                  |            |          |            |
|                         |  | <b>1837.38</b>   | <b>cum</b> |          |            |
| 3.2                     | Centering and shuttering including strutting,propping etd. And removal of form for:  |                  |            |          |            |
|                         | a) Foundations, footings, bases of columns etc. for mass concrete.   |                  |            |          |            |
|                         |  | <b>278.14</b>    | <b>sqm</b> |          |            |
|                         | c) Columns, pillars, piers, abutments, posts and struts.   |                  |            |          |            |
|                         | <b>Column</b>  |                  |            |          |            |
|                         |  | <b>2545.03</b>   | <b>sqm</b> |          |            |
|                         | d) Lintels, beams, plinth beams, girders, bressumers and cantilevers, etc.   |                  |            |          |            |
|                         | <b>Beams</b>   |                  |            |          |            |
|                         |  | <b>7809.68</b>   | <b>sqm</b> |          |            |
|                         | e) Suspended floors, roofs, landings, shelves and their support, balconies and chajja,etc.   |                  |            |          |            |
|                         |  | <b>3591.16</b>   | <b>sqm</b> |          |            |
|                         | k) Vertical and horizontal fins individually or forming box, louvres and bends, eaves boards..   |                  |            |          |            |
|                         |  | <b>77.19</b>     | <b>sqm</b> |          |            |
| 3.3                     | Steel reinforcement for RCC work including straightening, cutting, bending, placing in position and binding all complete.  |                  |            |          |            |
|                         | b) Thermo-Mechanically Treated bars of grade Fe-500 or more.   |                  |            |          |            |
|                         |  | <b>434814.50</b> | <b>kg</b>  |          |            |
|                         | <b>Sub Head 3 Total</b>  |                  |            |          |            |



| S/No                           | Description  | Qty                     | Unit | Rate (₹) | Amount (₹) |
|--------------------------------|--|-------------------------|------|----------|------------|
|                                |  |                         |      |          |            |
| <b>Sub Head 4 : Brickwork</b>  |  |                         |      |          |            |
|                                |  |                         |      |          |            |
| 4.1                            | Half brick masonry with first class brick in superstructure above plinth level upto floor V level.   |                         |      |          |            |
|                                | b) in cement mortar 1 : 4 ( 1 cement : 4coarse sand )  |                         |      |          |            |
|                                |  | 2632.78                 | sqm  |          |            |
|                                |  |                         |      |          |            |
| 4.2                            | Extra for providing and placing in position 2 nos 6mm dia. MS bars at every third course of half brick masonry.  |                         |      |          |            |
|                                | Quantity vide item no 4.1  | 2632.78                 | sqm  |          |            |
|                                |  | 2632.78                 | sqm  |          |            |
|                                |  |                         |      |          |            |
|                                |  | <b>Sub Head 4 Total</b> |      |          |            |
|                                |  |                         |      |          |            |
| <b>Sub Head 5 : Stone work</b> |  |                         |      |          |            |
|                                |  |                         |      |          |            |
| 5.1                            | Regular coursed rubble masonry with hard stone in foundation upto one storey above and below ground level including curing, etc. complete.   |                         |      |          |            |
|                                | b) in cement mortar 1 : 4 ( 1cement : 4 fine sand)   |                         |      |          |            |
|                                |  | 24.99                   | cum  |          |            |
|                                |  |                         |      |          |            |
|                                |  | <b>Sub Head 5 Total</b> |      |          |            |
|                                |  |                         |      |          |            |
|                                |  |                         |      |          |            |
| <b>Sub Head 6 : Wood work</b>  |  |                         |      |          |            |
|                                |  |                         |      |          |            |
| 6.1                            | Providing 1st class teak wood dressed in frames of chaukhat for doors, windows, clerestory windows fixed in position.  |                         |      |          |            |
|                                |  | 1.70                    | cum  |          |            |
|                                |  |                         |      |          |            |
| 6.2                            | Providing and fixing readymade door (Masonite or equivalent quality) including M.S. butt hinges with necessary screws complete.  |                         |      |          |            |
|                                | a) 35mm Readymade White primer Door  |                         |      |          |            |
|                                |  | 51.80                   | sqm  |          |            |
|                                |  |                         |      |          |            |
|                                |  | <b>Sub Head 6 Total</b> |      |          |            |
| <b>Sub Head 7 : Steel work</b> |  |                         |      |          |            |
|                                |  |                         |      |          |            |
| 7.1                            | Steel work in built up tubular (round, square or rectangular hollow tubes etc.)trusses etc., including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer, including welding and bolted with special shaped washers etc. complete. |                         |      |          |            |
|                                |  | 11279.04                | kg   |          |            |
|                                |  |                         |      |          |            |
|                                |  |                         |      |          |            |

| S/No                               | Description  | Qty              | Unit | Rate (₹) | Amount (₹) |
|------------------------------------|--|------------------|------|----------|------------|
| 7.2                                | Steel work welded in built up sections/framed work including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer using structural steel etc. as   |                  |      |          |            |
|                                    | b) In a grating, frames, guard bar, ladders, railings, brackets, gates & similar works.  |                  |      |          |            |
|                                    |  | 35485.81         | kg   |          |            |
|                                    |  |                  |      |          |            |
|                                    |  | Sub Head 7 Total |      |          |            |
| <b>Sub Head 8 : Aluminium work</b> |  |                  |      |          |            |
| 8.1                                | Providing and fixing anodised aluminium work for doors, windows, ventilators and partitions with extruded built up standard sections/ other sections of approved make conforming to IS : 733 and IS : 1285 fixing with dash fasteners of required dia and size, including necessary filling up of gaps at junctions, at top, bottom and sides with required PVC/ neoprene gaskets etc. Aluminium sections shall be smooth, rust free, straight, mitred and jointed mechanically wherever required including cleat angle, aluminium snap beading for glazing /panelling, CP brass /stainless steel screws all complete including fixing of glasses but excluding cost of glasses.   |                  |      |          |            |
|                                    | b) Anodised  |                  |      |          |            |
|                                    | ii) 3 - track sliding windows/ventilators.   |                  |      |          |            |
|                                    |  | 111.84           | sqm  |          |            |
|                                    |  |                  |      |          |            |
| 8.2                                | Supplying of glass panes at site.  |                  |      |          |            |
|                                    | b) 5mm thick plate sheet glass.  |                  |      |          |            |
|                                    |  | 111.84           | sqm  |          |            |
|                                    |  |                  |      |          |            |
| 8.1                                | Providing and fixing aluminium work for doors, windows, ventilators and partitions with extruded built up standard tubular and other sections of approved make conforming to IS: 733 and IS : 1285, anodised transparent or dyed to required shade according to IS : 1868. (Minimum anodic coating of grade AC 15), fixed with rawl plugs and screws or with fixing clips, or with expansion hold fastners including necessary filling up of gaps at junctions, at top, bottom and sides with required PVC/neoprene felt etc. Aluminium sections shall be smooth, rust free, straight, mitred and jointed mechanically wherever required including cleat angle, Aluminium snap beading for glazing / paneling, C.P. brass / stainless steel screws, all complete as per architectural drawings and the directions of Engineer-in-charge. (Glazing and paneling to be paid for separately ). For fixed portion. |                  |      |          |            |
|                                    | b) Anodised  |                  |      |          |            |
|                                    |  | 72.76            | sqm  |          |            |
|                                    |  |                  |      |          |            |

| S/No | Description   | Qty    | Unit | Rate (₹) | Amount (₹) |
|------|---|--------|------|----------|------------|
| 8.2  | For shutters of doors, windows & ventilators including providing and fixing hinges/ pivots and making provision for fixing of fittings wherever required including the cost of PVC / neoprene gasket required. (Glazing to be paid for separately)  |        |      |          |            |
|      | b) Anodised   |        |      |          |            |
|      |   | 5.76   | sqm  |          |            |
| 8.3  | Providing and fixing glazing in aluminium door, window, ventilator shutters and partitions etc. with PVC/ neoprene gasket etc. complete as per the architectural drawings and the directions of engineer-in-charge .  |        |      |          |            |
|      | b) With glass panes of 5.00 mm thickness.   |        |      |          |            |
|      |   | 72.76  | sqm  |          |            |
|      |   |        |      |          |            |
|      | <b>Sub Head 8 Total</b>   |        |      |          |            |
|      |   |        |      |          |            |
|      | <b>Sub Head 9 : Flooring</b>  |        |      |          |            |
| 9.1  | Providing and ceramic glazed floor tiles of size 300x300mm or more (thickness to be specified by the manufacturer) of 1st quality conforming to IS: 15622 of approved make in all colours,shades, except white,ivory,grey,fume red brown, laid on 20mm thick cement mortar 1 : 4 (1cement : 4 course sand ) including pointing the joints with white cement and matching pigments etc. complete. as per designed colour.  |        |      |          |            |
|      | b) Matt/Antiscratch   |        |      |          |            |
|      |   | 60.56  | sqm  |          |            |
| 9.2  | Providing and fixing Ist quality ceramic glazed wall tiles conforming to IS : 15622 (thickness to e specified by the manufacaturer),of approved make, in all colours, shades wxcept burgundy, bottle green, black of any size as approved by Engineer-in-Charge, in skirting, risers of steps and dados, over 12mm thick bed of cemunt mortar 1:3 (1cemeny :3 coarse sand) and jointing with cement slurry @ 3.3kg per sqm, including pointing in white cement mixed with pigment of matching shade complete. |        |      |          |            |
|      | Toilet walls  |        |      |          |            |
|      |   | 135.40 | sqm  |          |            |
| 9.3  | Providing & fixing vinyl tile in flooring and skirting in approved pattern on a smooth and damp proof base using rubber based adhesives of approved quality and manufacturer (Armstrong or equivalent) including rolling with light wooden  |        |      |          |            |



| S/No | Description  | Qty | Unit | Rate (₹) | Amount (₹) |
|------|--|-----|------|----------|------------|
|      | W.C. pan) with 100 mm UPVC P or S trap, 10 litre low level       |     |      |          |            |
|      | white P.V.C. flushing cistern, including flush pipe, with        |     |      |          |            |
|      | manually controlled device (handle lever) conforming to IS :     |     |      |          |            |
|      | 7231, with all fittings and fixtures complete, including cutting |     |      |          |            |
|      | and making good the walls and floors wherever required:          |     |      |          |            |
|      | (b) Asian pan with integral type foot rests                      |     |      |          |            |
|      | i) White   |     |      |          |            |
|      |  | 9   | nos  |          |            |
|      |  |     |      |          |            |
| 12.2 | Providing and fixing vitreous china pedestal type water closet   |     |      |          |            |
|      | (European type W.C. pan) with seat and lid, 10 litre low level   |     |      |          |            |
|      | white P.V.C. flushing cistern, including flush pipe, with        |     |      |          |            |
|      | manually controlled device (handle lever), conforming to IS :    |     |      |          |            |
|      | 7231, with all fittings and fixtures complete, including cutting |     |      |          |            |
|      | and making good the walls and floors wherever required :         |     |      |          |            |
|      | i) White   |     |      |          |            |
|      |  | 2   | nos  |          |            |
|      |  |     |      |          |            |
| 12.3 | Providing and fixing vitreous china Urinal Flat Back Large 59 x  |     |      |          |            |
|      | 37.5 x 39cm of Parryware/ Hindware/ Cera and equivalent          |     |      |          |            |
|      | make with flush valve/spray with C.I or R.S brackets standard    |     |      |          |            |
|      | size of G.I flush pipe and C.P brass spreaders with brass        |     |      |          |            |
|      | unions and G.I clamps complete including painting of fittings    |     |      |          |            |
|      | and brackets, cutting and making good the walls and floors       |     |      |          |            |
|      | wherever required.   |     |      |          |            |
|      | i) White   |     |      |          |            |
|      |  | 4   | nos  |          |            |
|      |  |     |      |          |            |
| 12.4 | Providing and fixing vitreous Division Plate 69 x 30 cm size for |     |      |          |            |
|      | Urinals.   |     |      |          |            |
|      | i) White   |     |      |          |            |
|      |  | 4   | nos  |          |            |
|      |  |     |      |          |            |
| 12.5 | Providing and fixing Health faucet with flexible tube upto 1     |     |      |          |            |
|      | metre long and holder of quality and make as approved by         |     |      |          |            |
|      | Engineer - in - charge.  |     |      |          |            |
|      | i) White   |     |      |          |            |
|      |  | 11  | nos  |          |            |
|      |  |     |      |          |            |
| 12.6 | Providing and fixing White vitreous china wash basin             |     |      |          |            |
|      | Standard of Parryware/ Hindware/ Cera and equivalent make        |     |      |          |            |
|      | with R.S. or C.I. brackets, 15mm C.P. brass pillar taps, C.P.    |     |      |          |            |
|      | brass chain with rubber plugs, 32mm C.P. brass waste of          |     |      |          |            |
|      | standard pattern, 32mm C.P. brass traps and union complete       |     |      |          |            |
|      | including painting of fittings and brackets, cutting and making  |     |      |          |            |
|      | good the walls wherever required.                                |     |      |          |            |
|      |  |     |      |          |            |

| S/No  | Description  | Qty | Unit | Rate (₹) | Amount (₹) |
|-------|--|-----|------|----------|------------|
|       | c) Vitreous China corner Wash basin 450 x 390 mm with single 15 mm C.P. brass pillar taps  |     |      |          |            |
|       | i) White   |     |      |          |            |
|       |  | 10  | nos  |          |            |
|       |  |     |      |          |            |
| 12.7  | Providing and fixing vitreous china tall pedestal of Parryware/ Hindware/ Cera and equivalent make for wash basin completely recessed at the back for the reception of pipes and fittings.   |     |      |          |            |
|       | i) White   |     |      |          |            |
|       |  | 9   | nos  |          |            |
|       |  |     |      |          |            |
| 12.8  | Providing and fixing Stainless Steel A ISI 304 (18/8) kitchen sink as per IS: 13983 with C.I. brackets and stainless steel plug 40 mm, including painting of fittings and brackets, cutting and making good the walls wherever required : (Hindware or equivalent) |     |      |          |            |
|       | b) Single Sink 610x510 mm bowl depth 200mm   |     |      |          |            |
|       |  | 1   | nos  |          |            |
|       |  |     |      |          |            |
| 12.9  | Providing and fixing 600x450mm bevelled edge mirror of superior glass (of approved quality) complete with 6mm thick asbestos sheet ground fixed to cleats with C.P. brass screws and washers.  |     |      |          |            |
|       |  | 9   | nos  |          |            |
|       |  |     |      |          |            |
| 12.10 | Providing and fixing Glass shelf Diplomat of Essline/Omkar/Agmeco or equivalent make with C.P. brass brackets and guard soil complete fixed to wooden cleats with C.P. brass screws.   |     |      |          |            |
|       | c) Glass shelf Diplomat 600mm  |     |      |          |            |
|       |  | 1   | nos  |          |            |
|       |  |     |      |          |            |
| 12.11 | Providing and fixing anodised aluminium towel rail with two anodised aluminium brackets to wooden cleats with C.P. brass screws.   |     |      |          |            |
|       | b) 600x20mm size.  |     |      |          |            |
|       |  | 2   | nos  |          |            |
|       |  |     |      |          |            |
| 12.12 | Providing and fixing toilet paper holder.  |     |      |          |            |
|       | (b) Plastic toilet paper holder of standard size.  |     |      |          |            |
|       | i) White   |     |      |          |            |
|       |  | 11  | nos  |          |            |
|       |  |     |      |          |            |
| 12.13 | Providing and fixing liquid soap container with C.P. brass lid and brackets fixed to wooden cleats with C.P. brass screws.   |     |      |          |            |
|       | b) Soap dish chromium plated with brackets.  |     |      |          |            |
|       |  | 2   | nos  |          |            |
|       |  |     |      |          |            |

| S/No  | Description  | Qty    | Unit | Rate (₹) | Amount (₹) |
|-------|--|--------|------|----------|------------|
| 12.14 | Providing and fixing on wall face SWRPVC soil, waste and vent pipes including jointing with rubber lubricant/cement solvent complete.                |        |      |          |            |
|       | a) 110mm dia.  |        |      |          |            |
|       |  | 150.00 | rm   |          |            |
|       | b) 75mm dia.   |        |      |          |            |
|       |  | 150.00 | rm   |          |            |
| 12.15 | Providing and fixing SWRPVC plain bend of required degree ( 87.50° ) including jointing with rubber lubricant/cement solvent complete.               |        |      |          |            |
|       | a) 110mm dia.  |        |      |          |            |
|       |  | 50     | nos  |          |            |
|       | b) 75mm dia.   |        |      |          |            |
|       |  | 50     | nos  |          |            |
| 12.16 | Providing and fixing SWRPVC plain bend of required degree (45°) including jointing with rubber lubricant/cement solvent complete.                    |        |      |          |            |
|       | a) 110mm dia.  |        |      |          |            |
|       |  | 30     | nos  |          |            |
|       | b) 75mm dia.   |        |      |          |            |
|       |  | 30     | nos  |          |            |
| 12.17 | Providing and fixing SWRPVC bend with access door of required degree including jointing with rubber lubricant/cement solvent complete.               |        |      |          |            |
|       | a) 110mm dia SWRPVC bend with access door.   |        |      |          |            |
|       |  | 10     | nos  |          |            |
|       | b) 75mm dia SWRPVC bend with access door.  |        |      |          |            |
|       |  | 10     | nos  |          |            |
| 12.18 | Providing and fixing single equal SWRPVC plain junction of required degree ( T-junction ) .  |        |      |          |            |
|       | a) 110x110x110mm.  |        |      |          |            |
|       |  | 15     | nos  |          |            |
|       | b) 75x75x75mm.   |        |      |          |            |
|       |  | 15     | nos  |          |            |
| 12.19 | Providing and fixing SWRPVC plain junction of required degree with access door (Y-junction) including jointing with rubber lubricant/cement solvent. |        |      |          |            |
|       | a) 110 mm Y-junction of SWRPVC with access door.   |        |      |          |            |
|       |  | 5      | nos  |          |            |

| S/No                              | Description   | Qty               | Unit | Rate (₹) | Amount (₹) |
|-----------------------------------|---|-------------------|------|----------|------------|
|                                   |   |                   |      |          |            |
|                                   | b) 75 mm Y-junction of SWRPVC with access door  |                   |      |          |            |
|                                   |   | 5                 | nos  |          |            |
|                                   |   |                   |      |          |            |
| 12.20                             | Providing and fixing SWRPVC socket including jointing with rubber lubricant/cement solvent.   |                   |      |          |            |
|                                   |   |                   |      |          |            |
|                                   | a) 110mm dia socket.  |                   |      |          |            |
|                                   |   | 20                | nos  |          |            |
|                                   |   |                   |      |          |            |
|                                   | b) 75 mm dia socket.  |                   |      |          |            |
|                                   |   | 20                | nos  |          |            |
|                                   |   |                   |      |          |            |
| 12.21                             | Providing and fixing W.C. connection bend type (siphon) (SWRPVC) including jointing with rubber lubricant/ solvent cement.  |                   |      |          |            |
|                                   |   | 2                 | nos  |          |            |
|                                   |   |                   |      |          |            |
| 12.22                             | Providing and fixing 125/110 S-trap SWRPVC including joining with rubber lubricant/ solvent cement.   |                   |      |          |            |
|                                   |   | 9                 | nos  |          |            |
|                                   |   |                   |      |          |            |
| 12.23                             | Providing and fixing uPVC multi floor trap with floor trap grating including jointing with rubber lubricant/ solvent cement complete.   |                   |      |          |            |
|                                   |   | 18                | nos  |          |            |
|                                   |   |                   |      |          |            |
|                                   |   | Sub Head 12 Total |      |          |            |
|                                   |   |                   |      |          |            |
| <b>Sub Head 13 : Water Supply</b> |   |                   |      |          |            |
|                                   |   |                   |      |          |            |
| 13.1                              | Providing and placing on terrace (at all floor levels) polyethylene water storage tank, with cover and suitable locking arrangement and making necessary holes for inlet, outlet and overflow pipes but without fittings and the base support for tank. |                   |      |          |            |
|                                   |   |                   |      |          |            |
|                                   | a) Sintex or equivalent   |                   |      |          |            |
|                                   |   | 6000.00           | lit  |          |            |
|                                   |   |                   |      |          |            |
| 13.2                              | Providing and fixing 15 mm nominal bore C.P. brass angle stop cock for basin mixer and geyser points of approved quality conforming to IS:8931 .  |                   |      |          |            |
|                                   |   |                   |      |          |            |
|                                   | b) Class-II   |                   |      |          |            |
|                                   |   | 24                | nos  |          |            |
|                                   |   |                   |      |          |            |
|                                   |   |                   |      |          |            |
| 13.3                              | Providing and fixing 15mm nominal bore chromium plated brass bib cock of approved quality.  |                   |      |          |            |
|                                   |   |                   |      |          |            |
|                                   | b) Class-II   |                   |      |          |            |
|                                   |   | 3                 | nos  |          |            |



| S/No  | Description   | Qty    | Unit | Rate (₹) | Amount (₹) |
|-------|---|--------|------|----------|------------|
| 13.4  | Providing and fixing chromium plated brass long neck pillar cock of approved quality.   |        |      |          |            |
|       | b) 15mm nominal bore. Element   |        |      |          |            |
|       |   | 1      | nos  |          |            |
| 13.5  | Providing and fixing chromium plated brass shower rose with 15 or 20mm inlet.   |        |      |          |            |
|       | a) 100mm dia CP brass shower rose.  |        |      |          |            |
|       |   | 1      | nos  |          |            |
| 13.6  | Providing and fixing chromium plated brass wall mixer 15mm nominal bore of approved make with necessary fittings including cutting and making good the wall.  |        |      |          |            |
|       | iii) Wall Mixer with L-Bend (provision for OH Shower)   |        |      |          |            |
|       |   | 1      | nos  |          |            |
| 13.7  | Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply, including all CPVC plain & brass threaded fittings, including fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step CPVC solvent cement and testing of joints complete as per direction of Engineer in Charge.<br>Internal work - Exposed on wall |        |      |          |            |
|       | b) 20mm dia nominal bore  |        |      |          |            |
|       |   | 100.00 | rm   |          |            |
|       | c) 25mm dia nominal bore.   |        |      |          |            |
|       |   | 150.00 | rm   |          |            |
| 13.8  | Extra for concealed in brick and RCC works by making chases upto 7.5x7.5cm in walls and making good the same after housing pipes, etc.  |        |      |          |            |
|       | b) 20mm dia nominal bore  |        |      |          |            |
|       |   | 100.00 | rm   |          |            |
| 13.9  | Making connection of Astral CPVC pipes distribution branch by providing and fixing reducing Tee with jointing, testing complete including cutting and making good etc.  |        |      |          |            |
|       | a) 25x25x20mm   |        |      |          |            |
|       |   | 9      | nos  |          |            |
| 13.10 | Making connection of Astral CPVC pipes distribution branch by providing and fixing Brass FPT Tee with jointing, testing complete including cutting and making good etc.   |        |      |          |            |
|       | b) 20x20x15mm   |        |      |          |            |
|       |   | 50     | nos  |          |            |

| S/No  | Description  | Qty | Unit | Rate (₹) | Amount (₹) |
|-------|--|-----|------|----------|------------|
| 13.11 | Making connection of Astral CPVC pipes distribution branch by providing and fixing Elbow 90o with jointing, testing complete including cutting and making good etc.              |     |      |          |            |
|       | b) 20mm dia.   |     |      |          |            |
|       |  | 100 | nos  |          |            |
|       | c) 25mm dia.   |     |      |          |            |
|       |  | 50  | nos  |          |            |
| 13.12 | Making connection of Astral CPVC pipes distribution branch by providing and fixing Elbow 45o with jointing, testing complete including cutting and making good etc.              |     |      |          |            |
|       | b) 20mm dia.   |     |      |          |            |
|       |  | 30  | nos  |          |            |
|       | c) 25mm dia.   |     |      |          |            |
|       |  | 30  | nos  |          |            |
| 13.13 | Making connection of Astral CPVC pipes distribution branch by providing and fixing Brass Elbow 90o with jointing, testing complete including cutting and making good etc.        |     |      |          |            |
|       | a) 20x15mm   |     |      |          |            |
|       |  | 30  | nos  |          |            |
| 13.14 | Making connection of Astral CPVC pipes distribution branch by providing and fixing Male Adaptor (Brass) with jointing, testing complete including cutting and making good etc.   |     |      |          |            |
|       | b) 20mm dia.   |     |      |          |            |
|       |  | 20  | nos  |          |            |
| 13.15 | Making connection of Astral CPVC pipes distribution branch by providing and fixing Female Adaptor (Brass) with jointing, testing complete including cutting and making good etc. |     |      |          |            |
|       | b) 20mm dia.   |     |      |          |            |
|       |  | 20  | nos  |          |            |
| 13.16 | Making connection of Astral CPVC pipes distribution branch by providing and fixing Socket/Coupling with jointing, testing complete including cutting and making good etc.        |     |      |          |            |
|       | b) 20mm dia.   |     |      |          |            |
|       |  | 30  | nos  |          |            |
|       | c) 25mm dia.   |     |      |          |            |
|       |  | 30  | nos  |          |            |



| S/No  | Description  | Qty               | Unit | Rate (₹) | Amount (₹) |
|---|--|-------------------|------|----------|------------|
| 15.2  | Applying priming coat with ready mixed pink or Grey primer of approved brand and manufacture on wood work (hard and soft wood) & Plywood.  |                   |      |          |            |
|   |  | 103.60            | sqm  |          |            |
| 15.3  | Painting with synthetic enamel paint of approved brand and manufacture in all shades on new work (two or more coats).  |                   |      |          |            |
|   |  | 103.60            | sqm  |          |            |
|   |  | 103.60            | sqm  |          |            |
|   |  |                   |      |          |            |
|   |  | Sub Head 15 Total |      |          |            |
|   |  |                   |      |          |            |
| <b>Sub Head 16 : Wall</b>   |  |                   |      |          |            |
| 16.1  | Providing & fixing External wall cladding with decorative high pressure laminated sheet of approved quality and make (Greenlam or equivalent) to frame, backing or studding with screws etc. complete (Frames, backing or studding to be paid separately). |                   |      |          |            |
|   | a) 6 mm thick  |                   |      |          |            |
|   |  | 745.96            | sqm  |          |            |
|   |  |                   |      |          |            |
|   |  | Sub Head 16 Total |      |          |            |
|   |  |                   |      |          |            |
| <b>Sub Head 17 : Articial grass</b>   |  |                   |      |          |            |
| 17.1  | Providing and fixing in position artificial grass of approved quality and make.  |                   |      |          |            |
|   |  | 894.24            | sqm  |          |            |
|   |  |                   |      |          |            |
|   |  | Sub Head 17 Total |      |          |            |
|   |  |                   |      |          |            |
| <b>Sub Head 18 : Getechnical investigation</b>  |  |                   |      |          |            |
| (Geological investigation rate are as per the schedule of charges published by Govt. of Mizoram vide No. 1901/51/94-IND, the 28th Sept, 2016) |  |                   |      |          |            |
| 18.1  | Drilling of 2 bore holes of 15m depth  |                   |      |          |            |
|   |  | 30.00             | rm   |          |            |
| 18.2  | Cost of making core boxes for 2 bore holes   |                   |      |          |            |
|   |  | 20.00             | rm   |          |            |
| 18.3  | Cost of transportation of drilling machine & pump inclusive of drilling accessories from G&M complex to drill sites inclusive of labour charges etc (to & fro)   |                   |      |          |            |
|   |  | 1.00              | LS   |          |            |
|   |  |                   |      |          |            |
|   |  |                   |      |          |            |

| S/No  | Description  | Qty               | Unit | Rate (₹) | Amount (₹) |
|---|--|-------------------|------|----------|------------|
| 18.4  | Construction of water pit  |                   |      |          |            |
|   |  | 1.00              | LS   |          |            |
|   |  |                   |      |          |            |
| 18.5  | Geological logging of bore holes   |                   |      |          |            |
|   |  | 25.00             | rm   |          |            |
|   |  |                   |      |          |            |
| 18.6  | Preparation of report  |                   |      |          |            |
|   |  | 1.00              | LS   |          |            |
|   |  |                   |      |          |            |
| 18.7  | Performance of Direct Shear test   |                   |      |          |            |
|   |  | 4.00              | nos  |          |            |
|   |  |                   |      |          |            |
| 18.8  | Standard Proctor test (OMC, Unit weight, MDD)  |                   |      |          |            |
|   |  | 4.00              | nos  |          |            |
|   |  |                   |      |          |            |
| 18.9  | Performance of Atterberg Limit Test  |                   |      |          |            |
|   |  | 4.00              | nos  |          |            |
|   |  |                   |      |          |            |
| 18.10   | Performance of Point Load / UCS Test   |                   |      |          |            |
|   |  | 9.00              | nos  |          |            |
|   |  |                   |      |          |            |
| 18.11   | Slake durability Test  |                   |      |          |            |
|   |  | 9.00              | nos  |          |            |
|   |  |                   |      |          |            |
|   |  | Sub Head 18 Total |      |          |            |
|   |  |                   |      |          |            |
| <b>Sub Head 19 : Dismantling and demolition</b> |  |                   |      |          |            |
|   |  |                   |      |          |            |
| <b>Block 1: Engineers Club</b>                  |  |                   |      |          |            |
| 19.1  | Demolishing R.C.C. work manually/ by mechanical means including stacking of steel bars and disposal of unserviceable material within 50 metres lead as per direction of Engineer - in- charge. |                   |      |          |            |
|   |  | 216.66            | cum  |          |            |
|   |  |                   |      |          |            |
| 19.2  | Demolishing brick work manually/ by mechanical means including stacking of serviceable material and disposal of unserviceable material within 50 metres lead:                                  |                   |      |          |            |
|   |  | 133.74            | cum  |          |            |
|   |  |                   |      |          |            |
| 19.3  | Dismantling doors, windows and clerestory windows (steel or wood) shutter including chowkhats, architrave, holdfasts etc. complete and stacking within 50 metres lead :                        |                   |      |          |            |
|   | a) Of area 3 sq. metres and below  |                   |      |          |            |
|   |  | 80                | nos  |          |            |
|   |  |                   |      |          |            |
| 19.4  | Disposal of dismantled RCC, brick etc.   |                   |      |          |            |
|   | Disposal at Phunchawng 13km  |                   |      |          |            |
|   |  | 350.40            | cum  |          |            |

| S/No                               | Description  | Qty           | Unit       | Rate (₹) | Amount (₹) |
|------------------------------------|--|---------------|------------|----------|------------|
|                                    |  |               |            |          |            |
|                                    | For remaining 8km, rate is ₹19.59/km/cum   |               |            |          |            |
|                                    |  | <b>350.40</b> | <b>cum</b> |          |            |
| <b>Block 2 : Quarter</b>           |  |               |            |          |            |
| 19.5                               | Demolishing R.C.C. work manually/ by mechanical means including stacking of steel bars and disposal of unserviceable material within 50 metres lead as per direction of Engineer - in- charge. |               |            |          |            |
|                                    |  | <b>157.85</b> | <b>cum</b> |          |            |
|                                    |  |               |            |          |            |
| 19.6                               | Demolishing brick work manually/ by mechanical means including stacking of serviceable material and disposal of unserviceable material within 50 metres lead:                                  |               |            |          |            |
|                                    |  | <b>95.05</b>  | <b>cum</b> |          |            |
|                                    |  |               |            |          |            |
| 19.7                               | Dismantling doors, windows and clerestory windows (steel or wood) shutter including chowkhats, architrave, holdfasts etc. complete and stacking within 50 metres lead :                        |               |            |          |            |
|                                    | a) Of area 3 sq. metres and below  |               |            |          |            |
|                                    |  | <b>42</b>     | <b>nos</b> |          |            |
|                                    |  |               |            |          |            |
| 19.8                               | Disposal of dismantled RCC, brick etc.   |               |            |          |            |
|                                    | Disposal at Phunchawng 13km  |               |            |          |            |
|                                    |  | <b>252.90</b> | <b>cum</b> |          |            |
|                                    |  |               |            |          |            |
|                                    | For remaining 8km, rate is ₹19.59/km/cum   |               |            |          |            |
|                                    |  | 252.90        | cum        |          |            |
|                                    |  | <b>252.90</b> | <b>cum</b> |          |            |
|                                    |  |               |            |          |            |
| <b>Block 3 : Recreation Centre</b> |  |               |            |          |            |
| 19.9                               | Demolishing R.C.C. work manually/ by mechanical means including stacking of steel bars and disposal of unserviceable material within 50 metres lead as per direction of Engineer - in- charge. |               |            |          |            |
|                                    |  | <b>145.91</b> | <b>cum</b> |          |            |
|                                    |  |               |            |          |            |
| 19.10                              | Demolishing brick work manually/ by mechanical means including stacking of serviceable material and disposal of unserviceable material within 50 metres lead:                                  |               |            |          |            |
|                                    |  | <b>114.65</b> | <b>cum</b> |          |            |
|                                    |  |               |            |          |            |
| 19.11                              | Dismantling doors, windows and clerestory windows (steel or wood) shutter including chowkhats, architrave, holdfasts etc. complete and stacking within 50 metres lead :                        |               |            |          |            |
|                                    | a) Of area 3 sq. metres and below  |               |            |          |            |
|                                    |  | <b>56</b>     | <b>nos</b> |          |            |
|                                    |  |               |            |          |            |

| S/No  | Description                                   | Qty               | Unit | Rate (₹) | Amount (₹) |
|---|---|-------------------|------|----------|------------|
| 19.12   | Disposal of dismantled RCC, brick etc.        |                   |      |          |            |
|   | Disposal at Phunchawng 13km                   |                   |      |          |            |
|   | For first 5km                                 |                   |      |          |            |
|   |   | 260.56            | cum  |          |            |
|   |   |                   |      |          |            |
|   | For remaining 8km, rate is ₹19.59/km/cum      |                   |      |          |            |
|   |   | 260.56            | cum  | 156.72   |            |
|   |   |                   |      |          |            |
|   |   | Sub Head 19 Total |      |          |            |
|   |   |                   |      |          |            |
| <b>Sub Head 20 : Internal electrification</b> |   |                   |      |          |            |
|   |   |                   |      |          |            |
| 20.1  | Detailed estimates enclosed at the ATTACHMENT |                   |      |          |            |
|   |   |                   |      |          |            |
|   |   | Sub Head 20 Total |      |          |            |
|   |   |                   |      |          |            |
|   |   | Grand total       |      |          |            |

## **ATTACHMENT**

### **INTERNAL ELECTRIFICATION FOR RECREATION CENTRE AT BABU TLANG, ZARKAWT.**

#### **ABSTRACT OF COST**

The quoted rate and amount are inclusive of taxes, duties and cess including all cost payable by the successful Bidders in executing the contract .

| <b>SL NO</b> | <b>NAME OF FLOOR / ESTIMATE</b> | <b>ESTIMATE AMOUNT</b> |
|--------------|---------------------------------|------------------------|
| 1            | Ground floor                    |                        |
| 2            | First floor                     |                        |
| 3            | Second floor                    |                        |
| 4            | Third floor                     |                        |
| 5            | Top floor                       |                        |
| 6            | Earthing & Lightning arrestor   |                        |
| 7            | Main panel                      |                        |
|              | <b>TOTAL</b>                    |                        |



**Name of works: INTERNAL ELECTRIFICATION FOR RECREATION CENTRE AT BABU TLANG.**

**EARTHING & ARRESTOR**

| Sl. No. | Description   | Unit | Qty | Rate         | Amount |
|---------|---|------|-----|--------------|--------|
|         | <b>EARTHING AND LOOP EARTHING</b>   |      |     |              |        |
| 1       | Earthing with Copper Earth Plate 600mmx600mmx6mm thick including accessories and providing masonry enclosure with cover plate having locking arrangement and water pipe, etc. ( but without charcoal or coke and salt ) complete as required. |      |     |              |        |
|         |   | Sets | 1   |              |        |
|         |   |      |     |              |        |
| 2       | Providing and fixing of 20mmx3mm copper strip on surface or in recess for connection etc. as required.  |      |     |              |        |
|         | 20mmx3mm Copper Tape ( 1.0 Kg/M )   | Kg   | 5   |              |        |
| 3       | Providing and fixing of 8 SWG Copper Wire on surface or in recess for loop earthing alongwith the existing surface/recess conduit/sub-main wiring/cables etc.as required.   |      |     |              |        |
|         | 8 SWG Copper Wire ( 4mm dia )   | Kg   | 12  |              |        |
|         | <b>LIGHTNING ARRESTOR</b>   |      |     |              |        |
| 4       | Earthing with Copper Earth Plate 600mmx600mmx6mm thick including accessories and providing masonry enclosure with cover plate having locking arrangement and water pipe, etc. ( but without charcoal or coke and salt ) complete as required. |      |     |              |        |
|         |   | Sets | 1   |              |        |
|         |   |      |     |              |        |
| 5       | Providing and fixing of 20mmx3mm copper strip on surface or in recess for connection etc. as required.  |      |     |              |        |
|         | 20mmx3mm Copper Tape ( 1.0 Kg/M )   | Kg   | 5   |              |        |
| 6       | Providing and fixing of 8 SWG Copper Wire on surface or in recess for loop earthing alongwith the existing surface/recess conduit/sub-main wiring/cables etc.as required.   |      |     |              |        |
|         | 8 SWG Copper Wire ( 4mm dia )   | Kg   | 36  |              |        |
|         |   |      |     |              |        |
|         | <b>LIGHTNING CONDUCTOR</b>  |      |     |              |        |
| 7       | Providing & fixing of lightning conductor finial, made of 25mm dia' 300mm long, copper tube, heaving single prong at the top, with 85mm dia' 3mm thick copper base plate including holes etc. complete as required.                           |      |     |              |        |
|         |   | Each | 12  |              |        |
|         |   |      |     | <b>TOTAL</b> |        |

**Name of works: INTERNAL ELECTRIFICATION FOR RECREATION CENTRE AT BABU TLANG.**

**TOP FLOOR**

| Sl. No. | Description   | Unit | Qty | Rate         | Amount |
|---------|---|------|-----|--------------|--------|
|         | <b>FOR LIGHT POINT,CEILING FAN POINT,EXHAUST FAN POINT ETC (MODULAR TYPE)</b>   |      |     |              |        |
| 1       | Wiring in looping system with PVC wire sheathed standard copper conductor/wires as per IS:694(1990) and Halogen Free Flame Retardant (HFFR) 1100 voltage graded copper flexible wire stranded copper running inside PVC casing & capping (Gr-I) 20mm dia fixed, surface on the wall/ceiling/floor as per convenience including junction box having required numbers of ways from control switch to the light point etc as required:                       |      |     |              |        |
| a       | Very short point  | Each | 1   |              |        |
| b       | Short point   | Each | 1   |              |        |
| c       | Medium point  | Each | 2   |              |        |
| 2       | <b>FOR POWER PLUG/SOCKET POINT 15/16 AMPERES (MODULAR TYPE)</b>   |      |     |              |        |
|         | Wiring in looping system with PVC wire sheathed standard copper conductor/wires as per IS:694(1990) and Life shield- Halogen Free Flame Retardant (HFFR) 1100 voltage graded copper flexible wire stranded copper running inside PVC casing & capping (Gr-I) 30x12mm fixed, surface on the wall/ceiling/floor as per convenience including junction box having required numbers of ways from DB to the power plug/socket 15/16A point etc. as required :- |      |     |              |        |
|         | Medium point  | Each | 1   |              |        |
|         |   |      |     |              |        |
| 3       | <b>SUPPLYING AND FIXING OF SWITCH BOARDS ( MODULAR TYPE )</b> grade-I Supplying and fixing of Modular switch board of the following sizes/modules on surface/recess including PVC/Steel boxes,modular plate and necessary switches,plug/socket, and fan regulators etc. with necessary painting if necessary  |      |     |              |        |
|         | <b>Four module</b>  |      |     |              |        |
| a       | 4S ( Cost for 1 SB )  | Nos  | 1   |              |        |
| b       | 2S + 1 R (2M)   | Nos  | 1   |              |        |
|         |   |      |     |              |        |
| 4       | <b>MCBs SP/SP&amp;N/DP/TP/TP&amp;N/FP:</b> Supplying, and fixing of 5 Amps' to 32 Amps' SP rating 240 volts, B-series, Maniature Circuit Breaker Single Poles (SP)of the following sizes in the existing MCB DB complete with connections, testing & commissioning etc, as required.  |      |     |              |        |
|         | 5 Amps' to 32 Amps' rating,SP, MCB B-series   | Each | 5   |              |        |
| 5       | <b>MCBs SP/SP&amp;N/DP/TP/TP&amp;N/FP:</b> Supplying, and fixing of 6-32 Amps' DP rating 240 volts, B-series, Maniature Circuit Breaker Double Pole (DP)of the following sizes in the existing MCB DB complete with connections testing & commissioning etc, as required.   |      |     |              |        |
|         | 6-32 Amps' rating,DP, MCB B- series   | Each | 1   |              |        |
|         |   |      |     |              |        |
| 6       | <b>MCB DISTRIBUTION BOARD</b> Supplying,fitting,&fixing of 8-Ways MCB DB single door in sheet steel,Phosphatised powder painted MCB DBs with Bus Bar, Neutral link,earth bar and din rail conforms to IS:13032,IS:8623,BS:5486 240 Volts 50 Hz, on surface/recess including inter-connection,painting etc, as required  |      |     |              |        |
|         | 8-ways MCB DB SP&N Single Door  | Each | 1   |              |        |
|         |   |      |     |              |        |
| 7       | Supplying,fitting and fixing of(Syska) 18 watt concealed type (ISI) certified company make completed with connection, etc. in completed.  |      |     |              |        |
|         |   | Each | 4   |              |        |
|         |   |      |     | <b>TOTAL</b> |        |

**Name of works: INTERNAL ELECTRIFICATION FOR RECREATION CENTRE AT BABU TLANG.**

**THIRD FLOOR**

| Sl. No. | Description  | Unit  | Qty | Rate | Amount |
|---------|--|-------|-----|------|--------|
| 1       | <b>FOR LIGHT POINT,CEILING FAN POINT,EXHAUST FAN POINT ETC (MODULAR TYPE)</b>  |       |     |      |        |
|         | Wiring in looping system with PVC wire sheathed standard copper conductor/wires as per IS:694(1990) and Halogen Free Flame Retardant (HFFR) 1100 voltage graded copper flexible wire stranded copper running inside PVC casing & capping (Gr-I) 20mm dia fixed, surface on the wall/ceiling/floor as per convenience including junction box having required numbers of ways from control switch to the light point etc as required:  |       |     |      |        |
| a       | Very short point   | Each  | 6   |      |        |
| b       | Short point  | Each  | 6   |      |        |
| c       | Medium point   | Each  | 16  |      |        |
| d       | Long point ,   | Each  | 2   |      |        |
|         |  |       |     |      |        |
| 2       | <b>FOR POWER PLUG/SOCKET POINT 15/16 AMPERES (MODULAR TYPE)</b>  |       |     |      |        |
|         | Wiring in looping system with PVC wire sheathed standard copper conductor/wires as per IS:694(1990) and Life shield- Halogen Free Flame Retardant (HFFR) 1100 voltage graded copper flexible wire stranded copper running inside PVC casing & capping (Gr-I) 30x12mm fixed, surface on the wall/ceiling/floor as per convenience including junction box having required numbers of ways from DB to the power plug/socket 15/16A point etc. as required :-                        |       |     |      |        |
| a       | Medium point   | Each  | 4   |      |        |
| b       | Long point   | Each  | 3   |      |        |
|         |  |       |     |      |        |
| 3       | <b>MAIN TO SUB-MAIN IN COPPER WIRE GRADE-I SURFACE (SINGLE PHASE TWO WIRES)</b>  |       |     |      |        |
|         | Wiring in looping system with PVC wire sheathed standard copper conductor/wires as per IS:694(1990) and Life shield- Halogen Free Flame Retardant flexible wire stranded copper running inside PVC Casing & capping (Grade-I) of all available sizes diameter fixed,surface on the wall/ceiling/floor as per convenience including junction box having required numbers of ways from Main to Sub-Main/DB/Sub-Main/DB to SDB/SDB/Switch boards/SDB to switch boards as required:- |       |     |      |        |
|         | 2X 6 Sqmm copper conductor/cable + 1 x 6 Sqmm earthwire  | Meter | 28  |      |        |
|         |  |       |     |      |        |
| 4       | <b>SUPPLYING AND FIXING OF SWITCH BOARDS ( MODULAR TYPE )</b> grade-I Supplying and fixing of Modular switch board of the following sizes/modules on surface/recess including PVC/Steel boxes,modular plate and necessary switches,plug/socket, and fan regulators etc. with necessary painting if necessary   |       |     |      |        |
|         | Two modules  |       |     |      |        |
| a       | 2 S  | Nos   | 3   |      |        |
|         | Three modules  |       |     |      |        |
| b       | 3S ( Cost for 1 SB )   | Nos   | 1   |      |        |
|         | <b>Four module</b>   |       |     |      |        |
| c       | 1S (2M) + 1 SOC ( Cost for 1 SB )  | Nos   | 7   |      |        |
| d       | 2S + 1 R (2M)  | Nos   | 1   |      |        |
| 5       | <b>MCBs SP/SP&amp;N/DP/TP/TP&amp;N/FP:</b> Supplying, and fixing of 5 Amps' to 32 Amps' SP rating 240 volts, B-series, Miniature Circuit Breaker Single Poles (SP)of the following sizes in the existing MCB DB complete with connections, testing & commissioning etc, as required.   |       |     |      |        |
|         | 5 Amps' to 32 Amps' rating,SP, MCB B-series  | Each  | 8   |      |        |
|         |  |       |     |      |        |

| Sl. No. | Description  | Unit | Qty | Rate         | Amount |
|---------|--|------|-----|--------------|--------|
| 6       | <b>MCBs SP/SP&amp;N/DP/TP/TP&amp;N/FP:</b> Supplying, and fixing of 6-32 Amps' DP rating 240 volts, B-series, Miniature Circuit Breaker Double Pole (DP) of the following sizes in the existing MCB DB complete with connections testing & commissioning etc, as required.   |      |     |              |        |
|         | 6-32 Amps' rating, DP, MCB B- series   | Each | 2   |              |        |
|         |  |      |     |              |        |
| 7       | <b>MCB DISTRIBUTION BOARD</b> Supplying, fitting, & fixing of 8-Ways MCB DB single door in sheet steel, Phosphatised powder painted MCB DBs with Bus Bar, Neutral link, earth bar and din rail conforms to IS:13032, IS:8623, BS:5486 240 Volts 50 Hz, on surface/recess including inter-connection, painting etc, as required |      |     |              |        |
|         | 8-ways MCB DB SP&N Single Door   | Each | 2   |              |        |
|         |  |      |     |              |        |
| 8       | <b>ALLUMINIUM BUS BAR AND BUS BAR CHAMBER</b>  |      |     |              |        |
|         | Supplying, and fixing of Bus Bar Chamber with 4- strips bus bar of length 1200mm made of aluminium alloy or wrought aluminium suitable for 300 amps' capacity (where rating should not be more than one ampere per one Sqmm) complete with all accessories including connections, earthing the body etc, as required:-         |      |     |              |        |
|         |  | Each | 1   |              |        |
|         |  |      |     |              |        |
| 9       | Supplying, fitting and fixing of (Syska) SSK-T5T 18 watt LED tube surface type (ISI) certified company make completed with connection, etc. in completed.  |      |     |              |        |
|         |  | Each | 18  |              |        |
| 10      | Supplying, fitting and fixing of (Syska) SSK- 9 watt LED Bulb surface type (ISI) certified company make completed with connection, etc. in completed.  |      |     |              |        |
|         |  | Each | 4   |              |        |
|         |  |      |     | <b>TOTAL</b> |        |

**Name of works: INTERNAL ELECTRIFICATION FOR RECREATION CENTRE AT BABU TLANG.**  
**SECOND FLOOR**

| SI No. | Description  | Unit  | Qty | Rate | Amount |
|--------|--|-------|-----|------|--------|
| 1      | <b>FOR LIGHT POINT,CEILING FAN POINT,EXHAUST FAN POINT ETC (MODULAR TYPE)</b>  |       |     |      |        |
|        | Wiring in looping system with PVC wire sheathed standard copper conductor/wires as per IS:694(1990) and Halogen Free Flame Retardant (HFFR) 1100 voltage graded copper flexible wire stranded copper running inside PVC casing & capping (Gr-I) 20mm dia fixed, surface on the wall/ceiling/floor as per convenience including junction box having required numbers of ways from control switch to the light point etc as required:  |       |     |      |        |
| a      | Very short point   | Each  | 11  |      |        |
| b      | Short point  | Each  | 6   |      |        |
| c      | Medium point   | Each  | 6   |      |        |
| d      | Long point ,   | Each  | 8   |      |        |
| e      | Very long point  | Each  | 8   |      |        |
| f      | Extra ordinary long point  | Each  | 14  |      |        |
|        |  |       |     |      |        |
| 2      | <b>FOR POWER PLUG/ SOCKET POINT 15/16 AMPERES (MODULAR TYPE)</b>   |       |     |      |        |
|        | Wiring in looping system with PVC wire sheathed standard copper conductor/wires as per IS:694(1990) and Life shield- Halogen Free Flame Retardant (HFFR) 1100 voltage graded copper flexible wire stranded copper running inside PVC casing & capping (Gr-I) 30x12mm fixed, surface on the wall/ceiling/floor as per convenience including junction box having required numbers of ways from DB to the power plug/socket 15/16A point etc. as required :-                        |       |     |      |        |
| a      | Medium point   | Each  | 5   |      |        |
| b      | Long point   | Each  | 5   |      |        |
|        |  |       |     |      |        |
| 3      | <b>MAIN TO SUB-MAIN IN COPPER WIRE GRADE-I SURFACE (SINGLE PHASE TWO WIRES)</b>  |       |     |      |        |
|        | Wiring in looping system with PVC wire sheathed standard copper conductor/wires as per IS:694(1990) and Life shield- Halogen Free Flame Retardant flexible wire stranded copper running inside PVC Casing & capping (Grade-I) of all available sizes diameter fixed,surface on the wall/ceiling/floor as per convenience including junction box having required numbers of ways from Main to Sub-Main/DB/Sub-Main/DB to SDB/SDB/Switch boards/SDB to switch boards as required:- |       |     |      |        |
| a      | 2X 6 Sqmm copper conductor/cable + 1 x 6 Sqmm earthwire  | Meter | 42  |      |        |
| b      | 4X 6 Sqmm copper conductor/cable   | Meter | 22  |      |        |
|        |  |       |     |      |        |
| 4      | <b>SUPPLYING AND FIXING OF SWITCH BOARDS ( MODULAR TYPE )</b> grade-I Supplying and fixing of Modular switch board of the following sizes/modules on surface/recess including PVC/Steel boxes,modular plate and necessary switches,plug/socket, and fan regulators etc. with necessary painting if necessary   |       |     |      |        |
|        | Two modules  |       |     |      |        |
| a      | 2 S  | Nos   | 3   |      |        |
|        | Three modules  |       |     |      |        |
| b      | 3S ( Cost for 1 SB )   | Nos   | 1   |      |        |
|        | Four module  |       |     |      |        |
| c      | 1S (2M) + 1 SOC ( Cost for 1 SB )  | Nos   | 10  |      |        |
| d      | 2S + 1 R (2M)  | Nos   | 1   |      |        |
|        | Six modules  |       |     |      |        |
| e      | 6S   | Nos   | 2   |      |        |
|        | Twelve modules   |       |     |      |        |
| f      | 12 S with indicator ( Cost for 1 SB )  | Nos   | 3   |      |        |

| SI No. | Description  | Unit | Qty | Rate         | Amount |
|--------|--|------|-----|--------------|--------|
| 5      | <b>MCBs SP/SP&amp;N/DP/TP/TP&amp;N/FP:</b> Supplying, and fixing of 5 Amps' to 32 Amps' SP rating 240 volts, B-series, Miniature Circuit Breaker Single Poles (SP) of the following sizes in the existing MCB DB complete with connections, testing & commissioning etc, as required.  |      |     |              |        |
| a      | 5 Amps' to 32 Amps' rating, SP, MCB B-series   | Each | 14  |              |        |
|        |  |      |     |              |        |
| 6      | <b>MCBs SP/SP&amp;N/DP/TP/TP&amp;N/FP:</b> Supplying, and fixing of 6-32 Amps' DP rating 240 volts, B-series, Miniature Circuit Breaker Double Pole (DP) of the following sizes in the existing MCB DB complete with connections testing & commissioning etc, as required.   |      |     |              |        |
| a      | 6-32 Amps' rating, DP, MCB B-series  | Each | 2   |              |        |
| b      | 50/63 Amps' rating, FP, MCB C-series   | Each | 1   |              |        |
|        |  |      |     |              |        |
| 7      | <b>MCB DISTRIBUTION BOARD</b> Supplying, fitting, & fixing of 8-Ways MCB DB single door in sheet steel, Phosphatised powder painted MCB DBs with Bus Bar, Neutral link, earth bar and din rail conforms to IS:13032, IS:8623, BS:5486 240 Volts 50 Hz, on surface/recess including inter-connection, painting etc, as required   |      |     |              |        |
|        | 8-ways MCB DB SP&N Single Door   | Each | 2   |              |        |
|        |  |      |     |              |        |
| 8      | <b>MCB DISTRIBUTION BOARD</b> Supplying, fitting, & fixing of 12-Ways MCB DB single door in sheet steel, Phosphatised powder painted MCB DBs with Bus Bar, Neutral link, earth bar and din rail conforms to IS:13032, IS:8623, BS:5486 240 Volts 50 Hz, on surface/recess including inter-connection, painting etc, as required. |      |     |              |        |
|        | 12-ways MCB DB SP&N Single Door  | Each | 1   |              |        |
| 9      | <b>ALLUMINIUM BUS BAR AND BUS BAR CHAMBER</b>  |      |     |              |        |
|        | Supplying, and fixing of Bus Bar Chamber with 4- strips bus bar of length 1200mm made of aluminium alloy or wrought aluminium suitable for 300 amps' capacity (where rating should not be more than one ampere per one Sqmm) complete with all accessories including connections, earthing the body etc, as required:-           |      |     |              |        |
|        |  | Each | 1   |              |        |
|        |  |      |     |              |        |
| 10     | Panasonic 150W LED Flood light, BVP176 Voltage (440V) protection, 6500K Warm white.  |      |     |              |        |
|        |  | Each | 10  |              |        |
|        |  |      |     |              |        |
| 11     | 40Watt 2 x 2 LED panel light, cool white light (6500 K)  |      |     |              |        |
|        |  | Each | 20  |              |        |
| 12     | Supplying, fitting and fixing of (Syska) SSK-T5T 18 watt LED tube surface type (ISI) certified company make completed with connection, etc. in completed.  |      |     |              |        |
|        |  | Each | 18  |              |        |
| 13     | Supplying, fitting and fixing of (Syska) SSK- 9 watt LED Bulb surface type (ISI) certified company make completed with connection, etc. in completed.  |      |     |              |        |
|        |  | Each | 4   |              |        |
|        |  |      |     | <b>TOTAL</b> |        |

**Name of works: INTERNAL ELECTRIFICATION FOR RECREATION CENTRE AT BABU TLANG.**

**FIRST FLOOR**

| Sl. No. | Description  | Unit  | Qty | Rate | Amount |
|---------|--|-------|-----|------|--------|
| 1       | <b>FOR LIGHT POINT,CEILING FAN POINT,EXHAUST FAN POINT ETC (MODULAR TYPE)</b>  |       |     |      |        |
|         | Wiring in looping system with PVC wire sheathed standard copper conductor/wires as per IS:694(1990) and Halogen Free Flame Retardant (HFFR) 1100 voltage graded copper flexible wire stranded copper running inside PVC casing & capping (Gr-I) 20mm dia fixed, surface on the wall/ceiling/floor as per convenience including junction box having required numbers of ways from control switch to the light point etc as required:  |       |     |      |        |
| a       | Very short point   | Each  | 6   |      |        |
| b       | Short point  | Each  | 8   |      |        |
| c       | Medium point   | Each  | 16  |      |        |
| d       | Long point ,   | Each  | 12  |      |        |
| e       | Very long point  | Each  | 10  |      |        |
|         |  |       |     |      |        |
| 2       | <b>FOR POWER PLUG/SOCKET POINT 15/16 AMPERES (MODULAR TYPE)</b>  |       |     |      |        |
|         | Wiring in looping system with PVC wire sheathed standard copper conductor/wires as per IS:694(1990) and Life shield- Halogen Free Flame Retardant (HFFR) 1100 voltage graded copper flexible wire stranded copper running inside PVC casing & capping (Gr-I) 30x12mm fixed, surface on the wall/ceiling/floor as per convenience including junction box having required numbers of ways from DB to the power plug/socket 15/16A point etc. as required :-                        |       |     |      |        |
| a       | Medium point   | Each  | 7   |      |        |
| b       | Long point   | Each  | 6   |      |        |
|         |  |       |     |      |        |
| 3       | <b>MAIN TO SUB-MAIN IN COPPER WIRE GRADE-I SURFACE (SINGLE PHASE TWO WIRES)</b>  |       |     |      |        |
|         | Wiring in looping system with PVC wire sheathed standard copper conductor/wires as per IS:694(1990) and Life shield- Halogen Free Flame Retardant flexible wire stranded copper running inside PVC Casing & capping (Grade-I) of all available sizes diameter fixed,surface on the wall/ceiling/floor as per convenience including junction box having required numbers of ways from Main to Sub-Main/DB/Sub-Main/DB to SDB/SDB/Switch boards/SDB to switch boards as required:- |       |     |      |        |
| a       | 2X 6 Sqmm copper conductor/cable + 1 x 6 Sqmm earthwire  | Meter | 45  |      |        |
| 4       | <b>SUPPLYING AND FIXING OF SWITCH BOARDS ( MODULAR TYPE )</b> grade-I Supplying and fixing of Modular switch board of the following sizes/modules on surface/recess including PVC/Steel boxes,modular plate and necessary switches,plug/socket, and fan regulators etc. with necessary painting if necessary   |       |     |      |        |
|         | <b>Two modules</b>   |       |     |      |        |
| a       | 1 S 2M   | Nos   | 11  |      |        |
| b       | 2 S  | Nos   | 7   |      |        |
|         | <b>Three modules</b>   |       |     |      |        |
| c       | 3S ( Cost for 1 SB )   | Nos   | 1   |      |        |
|         | <b>Six modules</b>   |       |     |      |        |
| d       | 4 S (3S+1S with indicator) + 1 R ( Cost for 1 SB )   | Nos   | 2   |      |        |
|         |  |       |     |      |        |
| 4       | <b>MCBs SP/SP&amp;N/DP/TP/TP&amp;N/FP:</b> Supplying, and fixing of 5 Amps' to 32 Amps' SP rating 240 volts, B-series, Miniature Circuit Breaker Single Poles (SP)of the following sizes in the existing MCB DB complete with connections, testing & commissioning etc, as required.   |       |     |      |        |
| a       | 5 Amps' to 32 Amps' rating,SP, MCB B-series  | Each  | 11  |      |        |
|         |  |       |     |      |        |

| Sl. No. | Description  | Unit | Qty | Rate         | Amount |
|---------|--|------|-----|--------------|--------|
| 5       | <b>MCBs SP/SP&amp;N/DP/TP/TP&amp;N/FP:</b> Supplying, and fixing of 6-32 Amps' DP rating 240 volts, B-series, Miniature Circuit Breaker Double Pole (DP) of the following sizes in the existing MCB DB complete with connections testing & commissioning etc, as required.   |      |     |              |        |
|         | 6-32 Amps' rating, DP, MCB B- series   | Each | 3   |              |        |
|         |  |      |     |              |        |
| 6       | <b>MCB DISTRIBUTION BOARD</b> Supplying, fitting, & fixing of 8-Ways MCB DB single door in sheet steel, Phosphatised powder painted MCB DBs with Bus Bar, Neutral link, earth bar and din rail conforms to IS:13032, IS:8623, BS:5486 240 Volts 50 Hz, on surface/recess including inter-connection, painting etc, as required |      |     |              |        |
|         | 8-ways MCB DB SP&N Single Door   | Each | 3   |              |        |
| 7       | <b>ALLUMINIUM BUS BAR AND BUS BAR CHAMBER</b>  |      |     |              |        |
|         | Supplying, and fixing of Bus Bar Chamber with 4- strips bus bar of length 1200mm made of aluminium alloy or wrought aluminium suitable for 300 amps' capacity (where rating should not be more than one ampere per one Sqmm) complete with all accessories including connections, earthing the body etc, as required:-         |      |     |              |        |
|         |  | Each | 1   |              |        |
|         |  |      |     |              |        |
| 8       | Supplying, fitting and fixing of (Syska) SSK-T5T 18 watt LED tube surface type (ISI) certified company make completed with connection, etc. in completed.  |      |     |              |        |
|         |  | Each | 25  |              |        |
| 9       | Supplying, fitting and fixing of (Syska) SSK- 9 watt LED Bulb surface type (ISI) certified company make completed with connection, etc. in completed.  |      |     |              |        |
|         |  | Each | 4   |              |        |
| 10      | Supplying, fitting and fixing of (Syska) 18 watt concealed type (ISI) certified company make completed with connection, etc. in completed.   |      |     |              |        |
|         |  | Each | 26  |              |        |
|         |  |      |     | <b>TOTAL</b> |        |



**Name of works: INTERNAL ELECTRIFICATION FOR RECREATION CENTRE AT BABU TLANG.**

**GROUND FLOOR**

| Sl. No. | Description  | Unit  | Qty | Rate | Amount |
|---------|--|-------|-----|------|--------|
| 1       | <b>FOR LIGHT POINT,CEILING FAN POINT,EXHAUST FAN POINT ETC (MODULAR TYPE)</b>  |       |     |      |        |
|         | Wiring in looping system with PVC wire sheathed standard copper conductor/wires as per IS:694(1990) and Halogen Free Flame Retardant (HFFR) 1100 voltage graded copper flexible wire stranded copper running inside PVC casing & capping (Gr-I) 20mm dia fixed, surface on the wall/ceiling/floor as per convenience including junction box having required numbers of ways from control switch to the light point etc as required:  |       |     |      |        |
| a       | Short point  | Each  | 4   |      |        |
| b       | Medium point   | Each  | 13  |      |        |
| c       | Long point ,   | Each  | 12  |      |        |
| d       | Very long point  | Each  | 4   |      |        |
| e       | Extra ordinary long point  | Each  | 5   |      |        |
|         |  |       |     |      |        |
| 2       | <b>FOR POWER PLUG/SOCKET POINT 15/16 AMPERES (MODULAR TYPE)</b>  |       |     |      |        |
|         | Wiring in looping system with PVC wire sheathed standard copper conductor/wires as per IS:694(1990) and Life shield- Halogen Free Flame Retardant (HFFR) 1100 voltage graded copper flexible wire stranded copper running inside PVC casing & capping (Gr-I) 30x12mm fixed, surface on the wall/ceiling/floor as per convenience including junction box having required numbers of ways from DB to the power plug/socket 15/16A point etc. as required :-                        |       |     |      |        |
| a       | Medium point   | Each  | 7   |      |        |
| b       | Long point   | Each  | 7   |      |        |
|         |  |       |     |      |        |
| 3       | <b>MAIN TO SUB-MAIN IN COPPER WIRE GRADE-I SURFACE (SINGLE PHASE TWO WIRES)</b>  |       |     |      |        |
|         | Wiring in looping system with PVC wire sheathed standard copper conductor/wires as per IS:694(1990) and Life shield- Halogen Free Flame Retardant flexible wire stranded copper running inside PVC Casing & capping (Grade-I) of all available sizes diameter fixed,surface on the wall/ceiling/floor as per convenience including junction box having required numbers of ways from Main to Sub-Main/DB/Sub-Main/DB to SDB/SDB/Switch boards/SDB to switch boards as required:- |       |     |      |        |
| a       | 2X 6 Sqmm copper conductor/cable + 1 x 6 Sqmm earthwire  | Meter | 36  |      |        |
| 4       | <b>SUPPLYING AND FIXING OF SWITCH BOARDS ( MODULAR TYPE )</b> grade-I Supplying and fixing of Modular switch board of the following sizes/modules on surface/recess including PVC/Steel boxes,modular plate and necessary switches,plug/socket, and fan regulators etc. with necessary painting if necessary   |       |     |      |        |
|         | <b>Two modules</b>   |       |     |      |        |
| a       | 1 S 2M   | Nos   | 6   |      |        |
| b       | 2 S  | Nos   | 3   |      |        |
|         | <b>Three modules</b>   |       |     |      |        |
| c       | 3S ( Cost for 1 SB )   | Nos   | 1   |      |        |
|         | <b>Four module</b>   |       |     |      |        |
| d       | 4S ( Cost for 1 SB )   | Nos   | 2   |      |        |
| e       | 1S (2M) + 1 SOC ( Cost for 1 SB )  | Nos   | 4   |      |        |
|         |  |       |     |      |        |
| 5       | <b>MCBs SP/SP&amp;N/DP/TP/TP&amp;N/FP:</b> Supplying, and fixing of 5 Amps' to 32 Amps' SP rating 240 volts, B-series, Miniature Circuit Breaker Single Poles (SP)of the following sizes in the existing MCB DB complete with connections, testing & commissioning etc, as required.   |       |     |      |        |
|         | 5 Amps' to 32 Amps' rating,SP, MCB B-series  | Each  | 7   |      |        |
|         |  |       |     |      |        |

| Sl. No. | Description  | Unit | Qty | Rate         | Amount |
|---------|--|------|-----|--------------|--------|
| 6       | <b>MCBs SP/SP&amp;N/DP/TP/TP&amp;N/FP:</b> Supplying, and fixing of 6-32 Amps' DP rating 240 volts, B-series, Miniature Circuit Breaker Double Pole (DP) of the following sizes in the existing MCB DB complete with connections testing & commissioning etc, as required.   |      |     |              |        |
|         | 6-32 Amps' rating, DP, MCB B- series   | Each | 6   |              |        |
|         |  |      |     |              |        |
| 7       | <b>MCB DISTRIBUTION BOARD</b> Supplying, fitting, & fixing of 8-Ways MCB DB single door in sheet steel, Phosphatised powder painted MCB DBs with Bus Bar, Neutral link, earth bar and din rail conforms to IS:13032, IS:8623, BS:5486 240 Volts 50 Hz, on surface/recess including inter-connection, painting etc, as required |      |     |              |        |
|         | 8-ways MCB DB SP&N Single Door   | Each | 2   |              |        |
| 8       | <b>ALLUMINIUM BUS BAR AND BUS BAR CHAMBER</b>  |      |     |              |        |
|         | Supplying, and fixing of Bus Bar Chamber with 4- strips bus bar of length 1200mm made of aluminium alloy or wrought aluminium suitable for 300 amps' capacity (where rating should not be more than one ampere per one Sqmm) complete with all accessories including connections, earthing the body etc, as required:-         |      |     |              |        |
|         |  | Each | 1   |              |        |
|         |  |      |     |              |        |
| 9       | Supplying, fitting and fixing of (Syska) SSK-T5T 18 watt LED tube surface type (ISI) certified company make completed with connection, etc. in completed.  |      |     |              |        |
|         |  | Each | 38  |              |        |
| 10      | Supplying, fitting and fixing of (Syska) SSK- 9 watt LED Bulb surface type (ISI) certified company make completed with connection, etc. in completed.  |      |     |              |        |
|         |  | Each | 2   |              |        |
|         |  |      |     | <b>TOTAL</b> |        |

**Name of works: INTERNAL ELECTRIFICATION FOR RECREATION CENTRE AT BABU TLANG.**

**GRID MAIN PANEL**

| Sl. No. | Description  | Unit     | Qty | Rate         | Amount |
|---------|--|----------|-----|--------------|--------|
| 1       | <b>Out door type Grid main panel:</b> Main panel with fitting of volt and ampere meter, 400A 3Ph aluminium bus bar, 400A,35KA FP MCCB as grid incomer and 4 nos of 250A, 25KA FP MCCB for each floor grid supply distributor | Lump Sum |     |              |        |
|         |  |          |     | <b>TOTAL</b> |        |