



## **TENDER PAPER**

**Name of Work: Development of Assam Bio-Resource Centre**  
**Work site: Assam Bio-Resource Centre, Madan Kamdev Baihata Chariali**

### **Sub-work No.1: Pathway Development**

**Item No.1. S.O.R. No.2.3(I) (A)**

Clearing and grubbing of road Land including uprooting rank vegetation, grass, bushes, shrubs, saplings and trees grith up to 300mm, removal of stumps of trees cut earier and disposal of unserviceable materials and stacking of serviceable materials including removal and disposal of top organic soil not exceeding 150mm thickness.

**Rate is to be quoted per ha. in % = As per schedule/ Above / Below**

**Item No. 2. S.O.R. No.4.9 A(II) (a) Water Bound Macadam**

Providing, laying, spreading and compacting stone aggregate of specific sizes to water bound macadam specification including spreading in uniform thickness, hand packing, rolling with vibratory roller 8-10 tonnes in stages to proper grade and camber, applying and brooming requisite type of screening/binding material to fillup the iterstices of coarse aggregate, watering and compacting to the required density.

**Rate is to be quoted per Cu. m. in % = As per schedule/ Above / Below**

**Item No.3. S.O.R. (Rural) No. 14.1.**

Providing and laying boulder apron for bed protection with stone boulder of minimum size and weight as per Table 1300.1. no fragment weighing less than 25 kg. laid dry complete as per technical specifications clause 13001.

**Rate is to be quoted per Cu. m. in % = As per schedule/ Above / Below**

**Item No.4. S.O.R.4.1.1.(a)(S.O.R. 2004-05)**

Providing brick soling in foundation and under floor with best quality picked jhama brick, sand packed and laid to level and in panel after preparing sub-grade as directed including all labour and materials and if necessary dewatering complete.

**Rate is to be quoted per Sq. m. in % = As per schedule/Above / Below**

**Item No.5. S.O.R.2.1.1.(a)(S.O.R 2004-05)**

Plain cement concrete works with coarse aggregate of size 13mm to 32mm in foundation bed as directed and specified including dewatering if necessary, and curing complete.

**Rate is to be quoted per Cu. m. in % = As per schedule/ Above / Below**

**Item No.6. S.O.R.2.2.1.(b)ii (S.O.R. 2004-05)**

Providing and laying reinforced cement concrete works in proportion 1:2:4 including dewatering if necessary, and curing complete.

**Rate is to be quoted per Cu. m. in % = As per schedule/ Above / Below**

**Item No.7. S.O.R.18.1.1(b)i(S.O.R 2004-05)**

Supplying, fitting and fixing in position reinforcement bars conforming to relevant I.S. Code for R.C.C. work including straightening, cleaning, cutting and bending to proper shapes and length as per details, supplying and binding with 20G annealed black wire and placing in position with proper blocks, supports, chairs, spacers etc. complete. 8 Tor

**Rate is to be quoted per Qtl. in % = As per schedule/Above / Below**

**Item No.8. S.O.R. 3.1.5(ii) (S.O.R. 2004-05)**

Providing form work of ordinary timber planking so as to give rough finish including centering, shuttering and propping etc. and removal of the same for in-situ reinforced concrete work. For slab.

**Rate is to be quoted per Sq. m. in % = As per schedule/Above / Below**

**Sub-work No.2: Construction of Lath House**

**Item No.1. S.O.R 1.1(b)**

Earth work in excavation for foundation trenches of wall, steps etc. including refilling the quantity as necessary after completion of work, breaking clods in return filling, dressing, watering and ramming etc. and removal of surplus earth with all lead and lifts as directed and specified in hard soil including bailing out water where necessary as directed and specified.

**Rate is to be quoted per Cu. m. in % = As per schedule/ Above/ Below**

**Item No.2. S.O.R. 1.3**

Earth filling in plinth in layers not more than 150mm thick including necessary carriage, watering, ramming etc. complete as directed and specified including payment of land compensation, forest royalty, sale tax and other duties and taxes as may be necessary.

**Rate is to be quoted per Cu. m. in % = As per schedule/ Above/ Below**

**Item No.3. S.O.R. 4.1.1.(a)**

Providing brick on flat soling in foundation and under floor with best quality picked jhama brick, sand packed and laid to level and in panel after preparing the subgrade as directed including all labour and materials and if necessary dewatering complete.

**Rate is to be quoted per Sq. m. in % =** **As per schedule/ Above/ Below**

**Item No.4. S.O.R. 4.1.4(a)**

Brick work in cement mortar with 1<sup>st</sup> class brick including racking out joints and dewatering if necessary, and curing complete as directed in sub- structure. In proportion 1:3.

**Rate is to be quoted per Cu. m. in % =** **As per schedule/ Above/ Below**

**Item No.5. S.O.R. 2.2.1 (b)(ii)**

Providing and laying reinforcement cement concrete works in proportion 1:2:4 including curing complete.

**Rate is to be quoted per Cu. m. in % =** **As per schedule/ Above/ Below**

**Item No.6. S.O.R. 3.1.1.3. (a)(ii)**

Providing form work of ordinary timber planking so as to give a rough finish including centering, shuttering, strutting and propping etc., and removal of the same for in situ reinforced concrete work.

**Rate is to be quoted per Sq. m. in % =** **As per schedule/ Above/ Below**

**Item No.7. S.O.R.18.3.1**

Providing, fitting, hoisting and fixing of roof truss including purlins fabricated out of M.S. black-tubes conforming to relevant I.S. Code, as per approved design and drawing including providing M.S. bolts and nuts and one coat of red oxide zinc chromate primer and two coats of approved enamel paints complete.

“A” 40mm x 40mm dia tube-

**Rate is to be quoted per Qtl. in % =** **As per schedule/ Above/ Below**

“B” 6mm M.S. flat-

**Rate is to be quoted per Qtl. in % =** **As per schedule/ Above/ Below**

**Item No.8. S.O.R. 17.10**

Supplying, fitting and fixing chain link fencing of 10 S.W.G, G.I. Wire 50mm x 50mm mesh fitted to M.S. black tube 1200mm apart of specification detailed, including supplying, fitting and fixing hooks, eye bolts with nuts, staples and bolts including horizontal lines of G.I. wire of 10 S.W.G. at longitudinal line of roof truss.

**Rate is to be quoted per Sq. m. in % =** **As per schedule/ Above/ Below**

**Item No.9. Market Price**

Supplying, fitting and fixing Agro Shed net over roof truss.

**Rate is to be quoted per Sq. m. in % =** **As per schedule/ Above/ Below**

**Sub-work No.3 Repairing of Orchidarium, Fernary and Cactus House**

**Item No.1. S.O.R. 13.7.(a)**

Removing old paint from steel and other material surface and making the surface even.

**Rate is to be quoted per man-day in % =** **As per schedule/ above/ Below**

**Item No.2. S.O.R. 13.7.5.(i)(b)**

Painting one coat on previously painted steel and other metal surface with enamel paint of approved brand and manufacture to give an even shade including cleaning the surface of all dirt, dust and other foreign matter.

For Orchidarium = 170.45 sq.m.  
For Fernary = 170.45 sq.m.  
For Cactus House = 170.45 sq.m.  
Total = 511.35 sq.m.

For painting posts, rafters, purlins, struts and like other metal surface

45% of total surface roofing = 511.35 x 40%  
= 230.11 sq.m.

**Rate is to be quoted per Sq.m. in % =** **As per schedule/ above/ Below**

**Item No.3. Market price**

Supplying, fitting and fixing Agro shed net over roof truss.

**Rate is to be quoted per Sq.m. in % =** **As per schedule/ above/ Below**

**Item No.4. Market price**

Supplying, fitting and fixing of U.V. film 200 micron, (Polythene sheet) over roof truss.

**Rate is to be quoted per Sq.m. in % =** **As per schedule/ above/ Below**

**Item No.5. S.O.R. 17.10**

Supplying, fitting and fixing chain link fencing of 10 S.W.G, G.I. wire Over roof truss and side of wall for convenience and straightening shading materials.

**Rate is to be quoted per R. m. in % = As per schedule/ above/ Below**

**Sub-work No.4: Extension of Herbarium and Museum**

**Item No.1. S.O.R. 1.1 (A) (b)**

Earth work in excavation for foundation trenches of walls, footings of post, steps etc. including refilling the quantity as necessary after completion of the work, breaking clods in return filling, dressing, watering and ramming etc. and removal of surplus earth with all leads and lifts as directed and specified in hard soils including bailing out water if necessary as directed and specified.

**Rate is to be quoted per Cu. m. in % = As per schedule/ Above/ Below**

**Item No.2. S.O.R. 4.1.1 (a)**

Providing brick soling in foundation and under floor with best quality picked jhama brick, sand packed and laid to level and in panel after preparing the subgrade as directed including all labour and materials and if necessary dewatering, complete.

**Rate is to be quoted per Sq. m. in % = As per schedule/ Above/ Below**

**Item No.3. S.O.R. 1.3 (A)**

Earth filling in plinth in layers not more than 150 mm thick including necessary carriage, watering, ramming etc. complete as directed and specified including payment of land compensation, forest royalty, sale tax and other duties and taxes as may be necessary.

**Rate is to be quoted per Cu. m. in % = As per schedule/ Above/ Below**

**Item No.4. S.O.R.4.1.4.(b)**

Brick work in cement mortar with 1<sup>st</sup> class brick including racking out joints and dewatering if necessary, and curing complete as directed. In prop. 1:4

“A” Sub structure :

**Rate is to be quoted per Cu. m. in % = As per schedule/ Above/ Below**

“B” Super structure :

**Rate is to be quoted per Cu. m. in % = As per schedule/ Above/ Below**

**Item No.5. S.O.R.2.1.1.(a)**

Plain cement concrete works with coarse aggregate of size 13mm to 32mm in foundation bed for footing of walls, brick works etc. as directed and specified including dewatering if necessary, and curing complete.

**Rate is to be quoted per Cu. m. in % = As per schedule/ Above/ Below**

**Item No.6. S.O.R. 5.1.2**

25 mm thick cement concrete topping 1 : 2 : 4 (1 cement : 2 coarse sand : 4 coarse aggregate of 12 mm nominal size) finished with a floating coat of neat cement finish to be laid in panels including curing complete as directed.

**Rate is to be quoted per Sq. m. in % = As per schedule/ Above/ Below**

**Item No.7. S.O.R.2.2.1.(b)**

Providing and laying reinforced cement concrete works in prop.1:1.5:3 including dewatering if necessary, and curing complete.

**Rate is to be quoted per Cu. m. in % = As per schedule/ Above/ Below**

**Item No.8. S.O.R.3.1.1.3.**

Providing form work of ordinary timber planking so as to give rough finish including centering, shuttering, strutting, and propping etc. and removal of the same for in-situ reinforced concrete and plain concrete work.

**Rate is to be quoted per Sq. m. in % = As per schedule/ Above/ Below**

**Item No.9. S.O.R.18.1.1.**

Supplying, fitting and fixing in position reinforcement bars conforming to relevant I.S. Code for R.C.C. work including straightening, cleaning, cutting and bending to proper shapes and length as per details, supplying and binding with 20G annealed black wire and placing in position with proper blocks, supports, chairs, spacers etc. complete.

**“A”S.O.R. 18.1.1 (b)  
12mm dia TATAS/Sail**

**Rate is to be quoted per Qtl. in % = As per schedule/ Above/ Below**

**“B” S.O.R. 18.1.1 ©**

6mm dia stirrups :

**Rate is to be quoted per Qtl. in % = As per schedule/ Above/ Below**

**Item No.10. S.O.R.2.1.3.**

Providing and laying 25mm thick damp proof course with cement concrete in prop. 1:1.5:3 with graded stone agg. Of 10mm down nominal size including providing approved damp proof admixture by the in proportion as recommended the manufacture as directed.

**Rate is to be quoted per Sq. m. in % = As per schedule/ Above/ Below**

**Item No.11. S.O.R. 6.2.1.(b)**

“A” 10mm thick cement plaster in single coat on fair side of brick walls including arises or rounded angles not exceeding 80mm grith and finished even and smooth including curing complete as directed. In cement mortar 1:3.

**Rate is to be quoted per Sq. m. in % = As per schedule/ Above/ Below**

**“B” S.O.R. 6.2.2 (b)**

15mm thick cement plaster on rough side of single brick wall including arises, internal rounded angles, not exceeding 80mm grith and finished even and smooth including curing complete as directed. In cement mortar 1:3.

**Rate is to be quoted per Sq. m. in % = As per schedule/ Above/ Below**

**Item No.12. S.O.R. 13.2.2(f)**

Distempering with dry distemper of approved brand and manufacture (two coats) and of required shade on new wall surface to give an even shade, over and including priming coat of white of white primer after thoroughly brushing the surface free from mortar droppings and other foreign matter and including preparing surface even and sand papered smooth.

**Rate is to be quoted per Sq. m. in % = As per schedule/ Above/ Below**

**Item No.13. S.O.R.9.1.1.(b)**

Providing wood work in frame of doors, windows, clestory windows and other similar works wrought, framed and fixed in position in contact with C.C. or brick masonry wall including supplying, fitting and fixing with M.S. hold fast as per design embedded in cement concrete block in proportion 1 : 2: 4 and with two coats of kiricide oiling to the timber faces in contact with C.C and masonry as directed and specified.

**Rate is to be quoted per Cu. m. in % = As per schedule/ Above/ Below**

**Item No.14 S.O.R.9.2.1 (b)**

Providing undressed wood work in roof truss, rafter, purlin, tie and the like including hoisting and fixing in position with necessary spikes, nails including M.S. straps with bolt and nuts etc. complete with kiricide oiling two coats to all timber members and two coats of anti corrosive paint to M.S. straps.

Tie beam, Rafter, Post plat, Purlin

**Rate is to be quoted per Cu. m. in % = As per schedule/ Above/ Below**

**Item No.15 S.O.R. 9.4.1.**

Providing barge board of size 200 x 20mm with 1<sup>st</sup> class local Hollock/Bonsum timber including fitting and fixing with necessary wood screws etc. complete.

**Rate is to be quoted per R. m. in % = As per schedule/ Above/ Below**

**Item No.16. S.O.R. 11.1.2 (a) (i)**

Providing, fitting and fixing anodized aluminium sliding windows and ventilators of standard sections without horizontal glazing bars, joints mitred and welded and providing and fixing handles, angle cleat, rubber gasket, roller device, locking arrangements, screws etc. as per required complete as specified and directed for all levels.

**Rate is to be quoted per Sq. m. in % = As per schedule/ Above/ Below**

**Item No.17. S.O.R. 9.9.2©(ii)**

Providing, fitting and fixing full paneled doors including oxidized M.S. butt hinges with necessary screws.

**Rate is to be quoted per Sq. m. in % = As per schedule/ Above/ Below**

**Item No.18. S.O.R. 7.2.1(b)**

Providing, fitting and fixing A.C. building board in ceiling with necessary nails, wood screws including 1<sup>st</sup> class local wood 50mm x 12mm beading including painting two coats to timbers complete as directed.

**Rate is to be quoted per Sq. m. in % = As per schedule/ Above/ Below**

**Item No.19. S.O.R. 8.1.2.(a)**

Providing corrugated galvd. Iron sheet roofing Of TATA Shaktee including fitting and fixing necessary galvd. J or L hooks, bolts and nuts 8mm dia with bitumen washer 25mm dia x 3mm mm thick and 1.6 mm thick limber washer complete excluding cost of roof truss, purlin etc.

**Rate is to be quoted per Sq. m. in % = As per schedule/ Above/ Below**

**Sub-work No.5: Extension of Boundary Wall**

**Item No. 1:** Jungle clearing including cutting weeds and trees below 500 mm grits and removing the same outside the limit as directed.

**Rate is to be quoted per Sq. m. in % = As per schedule/ Above/ Below**

**Item No. 2:** Earth work in excavation for foundation trenches of wall footings of post etc. including refilling the quantity as necessary as after completion of work, breaking clods in return filling, dressing, watering, ramming etc. and removal of surplus earth with all leads and lifts as directed and specified in hard/dense soil.

**Rate is to be quoted per Cu. m. in % =** **As per schedule/ Above/ Below**

**Item No. 3:** Providing brick soling in foundation with best quality picked Jhama brick, sand packed and laid to level and in panel as directed including all labour and materials and if necessary dewatering complete brick on edge soling.

**Rate is to be quoted per Sq. m. in % =** **As per schedule/ Above/ Below**

**Item No. 4:** Providing and laying reinforced cement concrete works in proportion 1:1½:3 including dewatering if necessary and curing complete, substructure for tie beam and post.

**Rate is to be quoted per Cu. m. in % =** **As per schedule/ Above/ Below**

**Item No. 5:** Providing form work of ordinary timber planking so as to give a rough finish including centering, shuttering, strutting, propping etc. and removal of the same for in-site reinforced concrete work in (25mm thick plank).

**Rate is to be quoted per Sq. m. in % =** **As per schedule/ Above/ Below**

**Item No. 6:** Supplying, fitting and fixing in position reinforcement bars conforming to relevant I.S. code for R.C.C work including straightening, cleaning, cutting and bending to proper shape and length as per details, supplying and binding with 20 G. annealed black wire and placing in position with proper blocks, supports, chairs, spacers etc. complete.

12 mm/Tata/Sail for Tie beam:

**Rate is to be quoted per Qtl. in % =** **As per schedule/ Above/ Below**

6 mm stirrups  
For Tie Beam:

**Rate is to be quoted per Qtl. in % =** **As per schedule/ Above/ Below**

**Item No. 7:** Brick work in cement mortar with first class brick including racking out joints and curing complete as directed in superstructure above plinth level in proportion 1:4.  
For Wall:

**Rate is to be quoted per Cu. m. in % =** **As per schedule/ Above/ Below**

**Item No. 8:** 15 mm thick cement plaster in single coat on both sides (fair & rough) of single brick wall for plastering and smooth including curing complete as directed in proportion 1:4.

For Wall:

**Rate is to be quoted per Sq. m. in % =** **As per schedule/ Above/ Below**

**Item No.9.** Supplying and fixing broken glass on top end of boundary wall embedded by cement slurry including smoothing the both side and pointed to upward.

**Rate is to be quoted per R. m. in % =** **As per schedule/ Above/ Below**

## **Sub-work No. 6. Fence around Herbarium & Museum**

### **Item No.1. S.O.R. 1.1**

Earth work in excavation for foundation trenches of walls, angle post etc. including refilling the quantity as necessary after completion of work, breaking clods in return filling, dressing, watering and ramming etc. and removal of surplus earth with all lead and lifts as directed and specified in hard soil.

**Rate is to be quoted per Cu. m. in % =** **As per schedule/ Above/ Below**

### **Item No.2. S.O.R. 4.1.1(a)**

Providing brick soling in foundation with best quality picked jhama brick and laid level and in panel . Brick flat soling

**Rate is to be quoted per Sq. m. in % =** **As per schedule/ Above/ Below**

### **Item No.3. S.O.R. 4.1.4**

Brick work in cement mortar with 1<sup>st</sup> class brick including racking out joints and dewatering if necessary and curing complete as directed. Proportion 1 : 4

**Rate is to be quoted per Cu. m. in % =** **As per schedule/ Above/ Below**

### **Item No.4. S.O.R.17.10**

Supplying, fitting and fixing chain link fencing of 10 S.W.G, G.I. wire 50mm x 50mm mesh fitted to M.S. angle iron post at 2000mm apart of specification detailed below including supplying, fitting and fixing hocks, eye bolts with nuts, staples and bolts including three horizontal lines of G.I. wire 10 S.W.G. at top, middle and bottom and with one vertical line to each fencing post for keeping the fencing tight and erect complete, including one coat of primer and one coat painting to angle iron post in base etc. with following.

- a) Corner and end posts with M.S. angle of size 50mm x 50mm x 5mm and length not less than 1600mm only duly slotted and bottom torqued with two numbers as stay posts.

- b) Intermediate post with M.S. angle of size 40mm x 40mm x 5mm and length not less than 1600mm only duly slotted and bottom torqued and splayed.
- c) Stay post with M.S. angle of size 35mm x 35mm x 5mm and length not less than 1600mm duly slotted and bottom torqued and splayed. All M.S. angle iron posts are to be fitted to P.C.C. base embedded not less than 600mm.

**Rate is to be quoted per Sq. m. in % =** **As per schedule/ Above/ Below**

**Sub-work No.7: Installation of water supply facility**

**Item No.1. S.O.R.1.1(b)**

Earth work in excavation for pipe laying etc. including refilling the quantity as necessary after completion of work, breaking clods in return filling, dressing, watering and ramming etc. and removal of surplus earth with all lead and lifts as directed and specified including bailing out water where necessary as directed and specified in hard/dense soil.

**Rate is to be quoted per Cu. m. in % =** **As per schedule/ Above/ Below**

**Item No.2. S.O.R. 3.1.1.f.**

Supplying, fitting and fixing of supreme brand P.V.C. high pressure pipes of 15mm diameter with all necessary approved P.V.C. fittings such as bend, elbow, reducers, nipple, long screws, clamps, etc. complete at all levels including below G.L. as directed and specified.

15 mm dia

**Rate is to be quoted per Run m. in % =** **As per schedule/ Above/ Below**

*Rate quoted by*

*Date:.....*

*Signature of contractor with seal*