BOSE INSTITUTE
Centenary Building
P-1/12, C.I.T. Scheme VII-M, Kankurgachi
Kolkata-700054.

Tender No:- BI/T/OVR/10/13 **Date:- 03.04.2013**

Sub:- Infrastructure Development at Shyamnagar Experimental Farm at Shyamnagar , 24 Parganas (North) in Connection with shifting of Atmospheric Radio Wave propagation laboratory from CAPSS to Shyamnagar Experimental Farm

" Modification and alteration plan of work at ongoing activity at Shyamnagar Experimental Farm"

Sealed tender is invited in prescribed form among the following list of contractors:-

- M/s. Sundaram
- M/s. Sawdeshi
- M/s. P.B. Construction
- M/s. Leesa Enterprise
- M/s. New Mordern Construction & Company
- M/s. Kar Construction

Super scribing tender No. & date on the top of the envelop.

The tenderer should have credential of similar nature of work value upto 60% of quoted amount in a single tender may down load the complete tender documents from our website.

Tender documents, complete in all respect with supporting credential, VAT registration copy, PAN card Xerox and P.T. clearance certificate with requisite earnest money @ 2% of quoted amount and tender fee of Rs. 1000/- separately in the form of demand Draft to be drawn in favour of Bose Institute, Kolkata will have to be submitted either in person or by registered post so as to reach the office of the Registrar at the above address on or before 12.04.2013 up to 2-30 P.M. (I.S.T 14.30 hrs) to be opened on the same day at 3.00 P.M. in-presence of tenderers. The Institute will not be responsible for postal delay, if any. Bid offer remains valid for 120 days from the date of opening. The Bose Institute Authority reserve the right to accept and/or reject any/all application at its discretion without assigning any reason whatsoever.

Registrar

GENERAL RULES AND DIRECTION
FOR THE GUIDANCE OF CONTRACTOR

1. Contractor tendering for the work should visit the site make himself thoroughly acquainted with the nature requirement of the case, facilities for access of materials source of water supply for boring purposes, removal of rubbish, working facilities, cost of carriage, freight and other charges necessary for the execution of work and shall take into consideration in their tender for any special difficulties they might encounter although these may not be mentioned in the specification, and no claim on any such accounts will be entertained.
2. Tenderer is to include in the rates quoted sales tax, all duties and or any other taxes or local charges payable and no separate claim on any such account can be considered.
3. Tenderer should invariably **quoted the rates both in figures and/in words.** Tenders which do not comply with this rule will be liable to rejection.
4. Tenderer should sign each and every page of the attached specifications, conditions and schedule of items.
5. The tendered rates for the work shall be taken to be firm. The contractor shall not be entitled to any price variation or escalation on any account whatsoever.
6. Sealed tender duly signed should be submitted in duplicate in a sealed cover, super-scribed with the name of the work and addressed to the Registrar, Bose Institute, P-1/12,C.I.T.Scheme-VII-M, Kankurgachi, Kolkata – 700 054.
7. The Institute reserves the right to reject any or all the tenders and is not bound to accept the lowest tender.
8. Tender documents, complete in all respect with supporting credential, VAT registration copy, PAN card Xerox and P.T. clearance certificate to submit along with the tender documents.

- : TENDER FOR THE WORK: -

I/We hereby tender for the execution for the Bose Institute of the work specified in the under-written memorandum within the time specified in such memorandum at the rate specified therein, and in accordance in all respects with the specification, designs, drawings and instruction in writing mentioned in the conditions of contract, and with such materials as are provided for, by and in all respects in accordance with such conditions so far as possible.

-: MEMORANDUM: -

(a)	General description of the work.	:	Infrastructure Development at Shyamnagar Experimental Farm at Shyamnagar, 24 Parganas (North) in Connection with shifting of Atmospheric Radio Wave propagation laboratory from CAPSS to Shyamnagar Experimental Farm. " Modification and alteration plan of work at ongoing activity at Shyamnagar Experimental Farm"
(b)	Estimated Cost	:	
(c)	Earnest Money	:	@ 2% of quoted amount.
(d)	Security Deposit	:	10% of Bill amount

The security deposit will be collected by deduction from the running bills of the contractor at the rates mentioned above and the earnest money will be treated as part of the security deposit.

(e) Time allowed for the work is to be complete within 06 (Six) weeks to be reckoned from the 3rd day from the date of receiving the Work Order.

The tender will remain open for acceptance for 3 (Three) months from date of receipt. Should this tender be accepted, in whole or in part, I/We hereby agree (i) to abide by and fulfill all the terms and provisions of the said conditions annexed hereto and all the terms and provisions in notice inviting tenders so far as applicable and/or in default thereof to forfeit and pay to the Institute the sum of money mentioned in the conditions. A sum of Rs. /- is hereby forwarded in the form of Demand draft/pay Order against the Earnest Money.

If I/We fail to commence the work specified in the above memorandum, I/We agree that the said Director without prejudice to any other right or remedy, be at liberty to forfeit the said earnest money or to execute all the work referred to in the tender documents upon the terms and conditions contained or referred to therein.

Dated :

Witness :

Signature

Address :

Occupation :

The above tender is hereby accepted by me on behalf of the Bose Institute.

Dated: the …….. Day of ……20 Signature

Bose Institute
P-1/12,C.I.T. Scheme VII-M, Kankurgachi
Kolkata – 700 054

-: SPECIFICATION AND CONDITIONS DEFINITIONS: -

1. INSTITUTE: the term "Institute" hereinafter referred to shall mean Bose Institute, P-1/12,C.I.T.Scheme VII-M, Kolkata – 700 054.

2. ENGINEER-IN-CHARGE: The Engineer-in-Charge shall mean the person employed by Institute for the purpose of superintending the works.

3. The "Contract" means the documents forming the tender and acceptance thereof together with the document referred to therein including these conditions, the specifications, designs, drawings, and instructions issued from time to time by the director, Bose Institute or his authorized representative or the Engineer-in-charge and all these documents taken together shall be deemed to form one contract.

4. The expression work shall be construed and taken to mean the work by or by virtue of the contract contracted to be executed whether temporary or permanent and whether original, altered, Substituted or additional.

5. The "Site" shall mean the land and/or other places on, into or through which work is to be executed.

6. The "Contractor shall mean the individual or firm or Company, whether incorporated or not, undertaking the works and shall include the legal personal representative or such individual or the successors of such firm or company.

Words imparting the singular number include the Plural number and vice verse.

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-: CLAUSES: -

1. The time allowed for carrying out the work shall be completed 06 (Six) weeks and shall be reckoned from the 3rd day of receiving the Work Order. The work shall throughout the stipulated period of the contract be processed with due diligence and the contractor shall pay or allow the institute to realize the sum equivalent to 1% of the total cost of work per week subject to a maximum limit of 10% of the Order value or final bill amount whichever is greater as agreed compensation for delay for the period during which the said work shall remain incomplete beyond the time of completion. Notwithstanding above, the director, Bose Institute may at his discretion reduce the amount of compensation and his decision in writing shall be final provide always that the entire amount of compensation to be paid under the provisions of this clause shall not exceed ten percent on the estimated cost of the works as shown in the tender.

2. The employer may without prejudice to his right against the contractor in respect of any delay or inferior workmanship or otherwise or to any claims or damage in respect of any breaches of the contract and without prejudice to any rights or remedies under any of the provisions of this contract or otherwise and whether the date of completion has or has not elapsed, by notice in writing absolutely determine the contract in the following cases: -

   (i) If the contractor having been given by the Engineer-in-charge a notice in writing to rectify reconstruct or replace any defective work or that the work is being performed in any inefficient or otherwise improper or un-workman –like manner shall omit to comply with the requirement of such notice for a period of 7 day thereafter or if the contractor shall delay or suspend the execution of the work so that either in the judgment of the employer (which shall be final and binding) he will be unable to secure completion of the work by the date of completion or he has already failed to complete the work by that date.

   (ii) If the contractor commits breach of the terms and conditions of this contract.

3. When the contractor has made himself liable for action under (2) above the employer shall have power: -

   (a) To determine or rescind the contract as aforesaid (of which termination or recession notice in writing to the contractor by the Institute shall be conclusive evidence). Upon such determination or rescission the security deposit of the contractor shall be liable to be forfeited and shall be absolutely at the disposal of the Institute, and

   (b) After giving notice to the contractor to measure up the work of the contractor and to take such part thereof as shall be unexecuted out of his hands and to give it to another contractor to complete in which case any expenses which may be incurred in excess of the sum which would have been paid to the original contractor if, the whole work had been executed by him (of the amount of which excess the certificate in writing of the Engineer-in-charge shall be final and conclusive) be deducted from any money due to him by the Institute under this contract.

   In the event of above course being adopted by the institute the contractor shall have no claim to compensation for any loss sustained by him by reason of his having purchased or procured any

materials or entered into any engagements or made any advances on account or with a view to the execution of the work or the performance of contract. And in case action is taken as aforesaid, the -

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Contractor shall not be entitled to recover or be paid any sum for any work there to or actually performed under this contract unless and until the Engineer-in-charge has certified in writing the performance of such work and the value payable in respect thereof and he shall only be entitled to be paid the value as certified.

4 If the contractor shall beside extension of time of completion of the work on the ground of his having been unavoidably hindered in its execution or on any other ground, he shall apply in writing to the Director, Bose institute within thirty days of the date of hindrance on account of which he desires such extension, the director shall if in his opinion (which shall be final) grounds are reasonable authorize such extension of time if any as may in his opinion be necessary and proper, without however involving any escalation of cost or compensation thereof.

5. Within one week of the completion of the work, the contractor shall give notice of such completion to the Engineer-in-Charge and within 10 days of the receipt of such notice the Engineer –in-Charge shall inspect the work and if there is no defect in the work shall furnish the contractor with a certificate of completion, otherwise a provisional certificate and/or (b) for which payment will be made at reduced rates, shall be issued but no certificate of completion, provisional or otherwise shall be issued, nor shall the work be considered to be complete until the contractor shall have removed from the premises on which the work shall be executed, where all scaffoldings, surplus materials, rubbish and all huts and sanitary arrangements required for his work people on the site in connection with the execution of the works as shall have erected for constructed by the contractor and cleaned off the dirt from all wood work, doors, windows, walls, floors or other parts of any building, in upon or about which the work is to be executed or of which he may have had possession for the execution thereof and not until the measurements of the work certified by the Engineer-in-Charge. If the contractor shall fail to comply with requirements of this clause on or before the date fixed for the completion of the contractor remove such scaffolding surplus materials rubbish etc. and dispose of the same as he thinks fit and the contractor shall have no claim in respect of any such scaffoldings or surplus, materials as aforesaid except for any sum actually realized by the sale thereof.

6. A bill shall be submitted by the contractor each month, duly supported by detailed measurements, which will be certified by the Engineer-in-charge and the bill adjusted as far as possible before the expiry of fifteen days from the presentation of the bill.

7. All intermediate payment shall be regarded as payments by way of advance against the final payment only and shall not preclude the requiring of bad, unsound and imperfect or unskilled work to be removed and taken away and reconstructed, or re-erected or be considered as an admission of the due performance of the contract, or any part thereof in any respect or the accruing of any claim not shall it conclude, determine, of affect in any way the powers of the Institute under these conditions or any of them as to the final settlement and adjustment of the accounts or in any other way very or affect the contract.

8. The final bill shall be submitted by the contractor within one month of the date of completion of the work or of the date of certificate of completion furnished by the Engineer-in-Charge and payment shall be made within 6 (Six) weeks of the date of certificate of completion furnished by the Engineer-in-Charge.

9. The contractor shall provide all materials and labour of every description except the materials shown in the attached schedule which will be supplied by the Institute at the rates mentioned therein and all tools, plants and transport necessary for the proper carrying on execution and completion of the work to the satisfaction of the Institution.

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10. For materials supplied by the Institute to the contractor, the cost thereof will be progressively deducted from the contractor's bill in accordance with the quantities consumed in the work and item or items relating to these being included in the bill.

11. All materials supplied to the contractor by the Institute shall remain the absolute property of the Institute, and shall not be removed on any account from, the site of the work land shall be at all times open to inspection by the Engineer –in-Charge.

12. The Contractor shall treat all materials obtained during dismantling a structure, excavation of the site for a work etc. as Institute's property and such materials shall be disposed of to the best advantage of the institute according to instruction issued in writing by the Registrar.

13. The Contractor shall give at least seven days notice in writing to the Engineer-in-Charge of the work before covering up or otherwise placing beyond the reach of measurement any work in order that the same may be measured and correct dimensions thereof recorded before the same is covered up or placed beyond the reach of measurement, and shall not cover up and place beyond the reach of measurement any work without the written consent of the Engineer-in-Charge. If any such work shall be covered up or placed beyond the reach of measurement without such notice and the Engineer-in charge's consent the same shall be uncovered at the contractor's expenses, or in default thereof no payment or allowances shall be made for such work or the materials with which the same laws executed.

14. The Engineer-in-Charge shall have power to make any alterations in omissions from additions to or substitution for the original specification, drawings, designs and instructions that may appear to him to be necessary during the progress of the work and the contractor shall carry out the work in accordance with any such instruction given to him, in writing by the Engineer –in-Charge. Such alterations, omissions, additions or substitutions will not invalidate the contract and shall be carried out by the contractor on the same conditions in all respects on which he agreed to do the main work. The rates for such additional, altered or substituted work under this claim shall be priced at the contract rates and for any such work which does not exactly agree with the description in the tender the contractor within seven days of receipt of the order to carry out such work inform the Engineer-in-Charge of the rate which it is his intention to charge, supported by analysis of the rate claimed and the Engineer-in-Charge, shall determine the rate on the basis of prevailing work market rates and pay the contractor accordingly.

15. The tender rates for the work shall be taken to be firm. The contractor shall not be entitled to any price variation or escalation of materials and labour on any account whatsoever.

16. The contractor shall not sublet or assign any portion of the work to others without written consent of the Institute.

17. The contractor shall, on the request of the Engineer-in-Charge immediately remove from the works any person employed there on by him, who may, in the opinion of the Engineer-in-Charge, be incompetent or misconducts himself.

18. The contractor shall, during the course of execution, be responsible for all damage to property and for any injury or loss caused to the work or workmen, to persons, animals, or things and also for any

damage caused by fire, burglary, theft, earthquake, civil connection and other extraneous causes, He shall effect any insurance necessary and indemnify the Institute against any damage to any building, road, road curb, fence, enclosure, water pipe, cable drains, electric or telephone post or lines, trees, grassland or cultivated ground, contiguous to the premises on which the work on any part of it is being executed.

19. The security deposit, mentioned in clause 1 of this contract, shall not be refunded after the expiry of 6 (Six) months after the issue of the certificate, final or otherwise, of completion of work.

20. The contractor will remain responsible for any defect arising out of defective or improper materials or workmanship in the work for a period of six months from the date of issue final certificate by the Engineer-in-Charge to contractor shall make the same good at his own expense or in default the Engineer-in-Charge may cause the same to be made good by other workman and deduct the expense from any sum that may be there or at any time thereafter may become due to the contractor or from security deposit.

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21. The contractor will have to confirm to the provisions of all local bye-laws acts relating to work and to the regulations and bye-laws etc. of the Govt. and local authorities and of any company with whose system the installations are proposed to be connected.

22. The contractor shall set out the work to the satisfaction of the Engineer-in-Charge and amount at his own cost to the satisfaction of the Engineer-in-Charge any errors which may arise through inaccurate setting out and in proper execution of the work.

23. The contractor shall keep a competent, responsible and approved foreman on the works, who shall be available at all times at the site of work and who will be responsible for carrying out the true meaning of the drawings and specifications schedule of quantities and any direction and instruction given to in writing by the Engineer-in-Charge.

24. The contractor shall make his own arrangements for storage for tools, materials etc. including accommodation for their labours. The Institute, if possible, will provide space for storage of tools and materials free of charge. The Institute, however, does not guarantee providing such space and if it is not possible to provide such space, the contractor will have to make his own arrange at his own cost. No space will be provide in the Institute area for accommodation of labour and the contractor will have to make his own arrangement at his own cost.

25. Except where otherwise provided in the contract all questions and disputes relating to the meaning of the specifications, designs, drawings, and instructions herein before mentioned and as to the quality of workmanship or materials used on the works or as to any other question, claim, right matter or thing whatsoever in any way arising out of or relating to the contract, designs, drawings, specifications, estimates, instructions, orders or these conditions or otherwise concerning the works or the execution or failure to execute the same weather arising during the progress of the work or after the completion or abandonment thereof shall be referred to the sole arbitration of the person appointed by the Director, Bose Institute. The arbitrator to whom the matter is originally referred being unable to act for any reason, the said director shall appoint another person to act as arbitrator in accordance with the terms of the contract. Such person shall be entitled to proceed with reference from the stage at which it was left by his predecessor.

26. The contractor will remain responsible for the sefty and security of his own materials procured/ stacked at site for execution of works. Institute will not be responsible for any loss or theft. No complain will be entertain in this respect.

It is also a term of the contract that if the contractor does not make any demand for arbitration in respect of any claim in writing within 60 (Sixty) days of receiving information from the Institute that the final bill is ready for payment, the claim of the contractor will be deemed to have been waive and absolutely barred and the Institute shall be discharged and released of all liabilities under the contractor in respect of these claims.

Bose Institute
Kolkata
Schedule for Shamnagar Experimental Farm

SL No	Description	Qty	Unit	Rate	Amount
1.	Earth work in excavation of foundation trenches or drains, in all sorts of soil (including mixed soil but excluding laterite or sandstone) including removing, spreading or stacking the spoils within a lead of 75 m. as directed. The item includes necessary trimming the sides of trenches, levelling, dressing and ramming the bottom, bailing out water as required complete. Depth of excavation not exceeding 1500 mm.	9.44	%Cum		
2.	Earth work in Filling in foundation trenches or Plinth with good earth , in layers not exceeding 150mm including watering and ramming etc	1.888	%Cum		
3.	Filling in foundation or plinth by silver sand in layers not exceeding 150 mm as directed and consolidating the same by thorough saturation with water, ramming complete including the cost of supply of sand. (payment to be made on measurement of finished quantity	54.13	%Cum		
4.	Single Brick Flat Soling of picked jhama bricks including ramming and dressing bed to proper level and filling joints with local sand.	57.53	Sqm		

5.	Supplying and laying polythene sheet(150gm / sq.m.) over damp proof course or below flooring or roof terracing or in foundation or in foundation trenches	57.53	Sqm		
6.	Cement Concrete with graded stone ballast (40 mm size) excluding shuttering. (a) Pakur Variety (b) 1:3:6 proportion In ground floor	5.09	Cum		
7.	Ordinary Cement Concrete (mix 1:1.5:3) with graded stone chips (20 mm nominal size) excluding shuttering and reinforcement, if any, in Ground Floor, as per relevant IS Codes. Pakur Varity In Ground Floor	16.67	Cum		

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SL No	**Description**	**Qty**	**Unit**	**Rate**	**Amount**
8.	Reinforcement for reinforced concrete work in all sorts of structures including distribution of bars, stirrups, binders etc. including supply of rods, initial strengthening and removal of loose rust (if necessary) cutting to requisite to length, hooking and bending to correct shape, placing in proper position and binding with 16 guage black annealed wire at every intersection, complete as per drawing and direction. (a) For works in foundation, basement and upto roof of Ground Floor / upto 4m. (i) Tor steel / Mild steel In Ground floor	2.617	M.T.		
9.	Hire and labour charges for shuttering with centering and necessary staging upto 4 m using approved stout props and thick hard wood planks of approved thickness with required bracing for concrete slabs, beams, columns, lintels, curved or straight including fitting, fixing and striking out after completion of works. (upto roof of ground floor). a) Steel shuttering or 9 to 12 mm thick ply board shuttering in any concrete work. In Ground Floor	93.44	Sqm		

12.	Brick work with 1st class bricks in cement mortar (1:6) a) In Ground Floor	17.13	Cum		
13.	125 mm thick brick work with 1st class bricks in cement mortar (1:4) in ground floor. In Ground Floor	11.07	Sqm		
14.	Supplying and laying true to line and level vitrified tiles of approved brand (size not less than 600mm x 600 mm x 10 mm thick) in floor , skirting etc	42.96	Sqm		

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SL No	**Description**	**Qty**	**Unit**	**Rate**	**Amount**
15	Supplying fitting and fixing aluminum sliding window with extruded and anodized rectangular aluminum section (63x38.10mm) fabricated in shape and alignment fully glazed (0.5mm thick clear sheet glass panes) with glazing chips as per required design properly lied up with window sill using neoprene EPDM gasket as per direction	2.70	Sqm		
16.	M.S. or W.I. Ornamental grill of approved design joints continuously welded with M.S., W.I. flats and bars for windows, railing etc. fitted and fixed with necessary screws and lugs in ground floor. (i) Grill weighing above 10 kg/Sq.M. and upto 16 kg/sq.M In Ground Floor	3.00	Qntl		
17.	Collapsible gate with 40 mm x 40 mm x 6 mm tee as top and bottom guide rail 20 mm x 10 mm x 12 mm vertical channels 100 mm apart in fully stretched position 20 mm x 5mm M.S. flats as collapsible bracings properly riveted and washered including 38 mm steel rollers including locking arrangements, fitted and fixed in position with lugs set in cement	4.20	Sqm		

	concrete and including cutting necessary holes, chasings etc. in walls, floors etc. and making good damages complete. In Ground Floor				
18	Plaster (to wall, floor, ceiling etc.) with sand and cement mortar including rounding off or chamfering corners as directed and raking out joints or roughening of concrete surface. Including throating, nosing and drip course, scaffolding/staging where necessary (ground floor) a) With 1:4 cement mortar 15 mm thick plaster: In Ground floor. b) With 1:4 cement mortar 10 mm thick plaster: In ground Floor.	135.48 42.50	Sqm Sqm		

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SL No	**Description**	**Qty**	**Unit**	**Rate**	**Amount**
19	Applying decorative cement based paint of approved quality after preparing the surface including scraping the same thoroughly (plastered or concrete surface) as per manufacturer's specification. In Ground floor Two coats: In ground floor	178	Sqm		
20	Priming one coat on timber, plastered surface with synthetic oil bound primer of approved quality including smoothening surfaces by sand preparing etc.	178	Sqm		
21	Priming one coat on steel or other metal surface with synthetic oil bound primer of approved quality including smoothening surfaces by sand preparing etc.	12.00	Sqm		
22.	Painting with best quality synthetic enamel paint of approved make and brand including smoothening surface by sand preparing etc. including using of approved putty etc. on the surface, if necessary. a) On steel or other metal surface: With	12.00	Sqm		

	super gloss (hi-gloss) – b) Two coats (with any shade except white)				
23.	Supply fitting and fixing imported quality Vertical Blind	2.70	Sqm		
24.	Wood work in door and window frame fitted and fixed in position complete including a protective coat of painting at the contact surface of the frame excluding cost of concrete, iron butt hinges and M.S. clamps. (The quantum should be correctedupto three decimals) Sal: Malayasian In Ground Floor	0.05	Sqm		
25.	Panel shutter of door and window , as per design each panel consisting of single plank without joint including fitting and fixing the same in position (ii) 40mm thick shutter with 19mm thick panel . (a) Sishu , gamar etc	2.88	Sqm		

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SL No	**Description**	**Qty**	**Unit**	**Rate**	**Amount**
26.	Supplying, fitting and fixing M.S. clamp for door and window frame, made of flat bent bar, end bifurcated with necessary screws etc. by cement concrete (1:2:4) as per direction. (Cost of concrete will be paid separately) a) 40 mm x 6 mm, 250 mm length	06 Nos	Each		
27	Iron butt hinges of approved quality fitted and fixed with steel screws, with ISI mark. With Oxidized Fittings (vii) 100mm x 58mm x 1.90mm	06 Nos	Each		
28.	Iron socket bolt of approved quality fitted and fixed complete. 300 mm long x 10 mm dia. bolt	01 Nos	Each		
29.	Anodized aluminum D-type handle of approved quality manufactured from extruded section conforming to I.S. specification (I.S.230/72) fitted and fixed complete:	01 Nos	Each		

	a) With continuous plate base (Hexagonal / round rod). 150 mm grip x 10mm dia. rod				
30.	Iron hasp bolt of approved quality fitted and fixed complete (oxidized) with 16 mm dia. Rod with centre bolt and round fitting 300 mm long	01 Nos	Each		
31.	Anodized aluminum barrel / tower / socket bolt (full covered) of approved manufactured from extruded section conforming to I.S. 204/74 fitted and fixed with cadmium platted screws: 150 mm long x 10 mm dia. bolt	02 Nos	Each		
32	Anodized aluminum butt hinges of approved quality manufactured from extruded section conforming to I.S. specification (I.S. 205/66) and fitted and fixed with cadmium plated screws. 75 x 45 x 2.5 mm	06 Nos	Each		
33.	125mm long wooden buffer block With Local Sal	01 Nos	Each		
34.	Hydraulic door closer (Heavy Type)	03 Nos	Each		
35.	Partly Glazed partly panelled or fully glazed single leaf aluminum swing door made of extruded and anodized alloy aluminum sections	4.00	Sqm		

SL No	**Description**	**Qty**	**Unit**	**Rate**	**Amount**
36.	Supplying, fitting and fixing G.I' Pipes of TATA make with all necessary accessories special viz. socket, bend, tee union, cross, elbow, Nipple. Long screw, ducing cutting tee, short piece etc. fitted with holder bats clamps, including cutting pipes, making threads, fitting, fixing etc. complete in all respect including cost of al necessary fittings as per required, joining material and two coats of painting with approved paints in any position above ground (payment will be made on the centre line measurements of total pipe line including all specials. no separate payment will be made for accessories specials). i) 15mm dia medium quality	10 15	M M		

	ii) 20mm dia medium quality iii) 25 mm dia medium quality iv) 32mm dia medium quality	15 20	M M		
37.	Supplying fitting and fixing gunmetal wheel valve of approved brand and make tested 21 Kg per sq.cm. i) 32mm ii) 20mm	 01 01	 Each Each		
38.	Supplying fitting and fixing C.P bib cock / stop cock of approved make and brand tested 21 kg per sq. cm. Delux (heavy type) 15mm	03 Nos	Each		
39.	Supplying , fitting and fixing vitreous china best quality approved make wash basin with C.I brackets on 75mm x 75mm wooden blocks , C.P waste fittings of 32mm dia a) 550mm x 400mm size	01 No	Each		
40	Anglo-Indian W.C in white glazed vitreous china ware of approved make supplied , fitted and fixed complete in position with necessary bolts,nuts etc (a) with 'P' trap (with vent)	01	Each		
41	Supplying , Fitting and fixing Closet seat of approved make with lid and C.P hinges rubber buffer and brass screw complete . EWC-i) Plastic (hallow type) black	01	Each		

SL No	**Description**	**Qty**	**Unit**	**Rate**	**Amount**
42	Flat back urinal (half stall in urinal) in white vitreous chinaware of approved make supplied fitted and fixed in position with brass screws on 75 mm X 75 mm X 75 mm wooden block completes 465 mm X 355 mm X 265 mm	01	Each		
43	Supplying fitting and fixing 10 ltr P.V.C. Low down cistern confirming to I.S. specification with P.V.C. fittings complete C.I. brackets including two coats of painting to backets etc.	01	Each		
44.	Supplying P.V.C water storage tank of approved quality with closed top with lid(black) - Multilayer c) 1000 lit capacity	01	Each		

45.	Labour for hoisting plastic water storage tank i) Upto 1500lit lit upto	01	Each		
46	Construction of Septic Tank of different capacities as per approved drawings with 1 st class bricks in cement mortar (1:4) (iii) For 30 user	01	Each		
47	Supplying , fitting and fixing in position C.I manhole/pit cover with rim. A) Round i) 450mm X 100mm X 25kg (Approx)	02	Each		
48	Supplying , fitting and fixing with cement jointing (3:1) salt glazed stoneware pipe including excavation of earth upto 1.50 metre depth in all sorts of soil both mixed or unmixed and refilling : 150 mm Dia	20	M		
49	Supplying , fitting and fixing with cement jointing (3:1) with jute gasket soaked in cement mortar . A) Stoneware bend iii) 150 mm	05	Each		

SL No	**Description**	**Qty**	**Unit**	**Rate**	**Amount**
50	B) Stoneware single T or Y junction iii) 150 mm	**05**	**Each**		
51	Construction of circular soakwell 2.5mtr deep in all types of sandy soils with dry brick work upto 1.60mtr from the bottom having 150mm intermediate cement brick work (1:4) band all round and cement brick work (1:4) upto 0.90mtr from top with 20mm thick cement plastering (1:4) to inside face .	**01**	**Each**		
52.	M.S structural works in column,beams				

	etc. with simple rolled structural members (eg. joist,angle,channel section conforming to IS:226, IS:808 & SP(6)-1964 connected to one other with bracket , gusset cleats as per direction of Engineer-In -Charge including cutting to requisite size fabrication with necessary mental arc welding conforming to IS:816-1956 & IS:9595 using electrodes of approved make brand conforming to IS:814-1957 , haulage,hoisting and erection all complete . the rates includes of rolled steel section , consumables such as electrodes gas and hire charges of all tools and plants and labour required . i) In Wall	0.57	MT		
53.	Supplying 1.5mm thick M.S Sheet fitted and fixed on one or both faces of M.S/W.I gate etc with point welding at not more than 150mm apart complete in all respect	15.75	Sqm		
54.	Supplying 10 mm thick M.S Sheet fitted and fixed on one or both faces of M.S/W.I gate etc with point welding at not more than 150mm apart complete in all respect	1.44	Sqm		
55.	Holding down bolt with nut including 100mm x 100 x 6mm plate washer at bottom fitted complete and packing the hole with cement concrete or cement grout as directed . (i) 16 mm dia bolt (a) 300 mm long	05 Nos	Each		

SL No	**Description**	**Qty**	**Unit**	**Rate**	**Amount**
56.	labour for hoisting and placing in proper position departmental R.S joist , channel , angles , including fitting and fixing same with bolts and nuts , if necessary (but by excluding the cost of such bolts and nuts)	**0.57**	**Qtl.**		
57.	Hire and Labour charges for high scaffolding all round (outside) body		L.S.		

	domes and finials etc.				
58	Priming one coat on steel or other metal surface with synthetic oil bound primer of approved quality including smoothening surfaces by sand preparing etc.	15.75	Sqm		
59.	Painting with best quality synthetic enamel paint of approved make and brand including smoothening surface by sand preparing etc. including using of approved putty etc. on the surface, if necessary.	15.75	Sqm		
	b) On steel or other metal surface: With super gloss (hi-gloss) - (i) Two coats (with any shade except white)				

SL No	Description	Qty	Unit	Rate	Amount
60.	Rolling the sub-grade by Power roller including cutting or filling earth as necessary, spreading the spoils properly over the flank/slope/berm to approximate	971.50	Sqm		

	grade and camber, including uprooting and removing plants and jungles when and where necessary as per direction of the Engineer-in-Charge complete including cost of labour involved hire and running charges of Power Roller				
61.	Filling in foundation or plinth by silver sand in layers not exceeding 150 mm as directed and consolidating the same by thorough saturation with water, ramming complete including the cost of supply of sand. (payment to be made on measurement of finished quantity)	371.77	%Cum		
62.	Brick on Edgeing with picked jhama bricks including cutting the channel .	1062.80	Sqm		
63.	Single Brick Flat Soling of picked jhama bricks including ramming and dressing bed to proper level and filling joints with local sand	900	Sqm		
64.	Supplying and laying polythene sheet (150gm / sq.m.) over damp proof course or below flooring or roof terracing or in foundation or in foundation trenches	900	Sqm		
65.	Ordinary Cement Concrete (mix 1:2:4) with graded stone chips (20 mm nominal size) excluding shuttering and reinforcement, if any, in Ground Floor, as per relevant IS Codes. Pakur Varity In Ground Floor	64.18	Cum		
66.	Cement Concrete with graded Jhamma Khoa (40 mm size) excluding shuttering. (A) Pakur Variety (a) 1:3:6 proportion In ground floor	20.80	Cum		

SL No	**Description**	**Qty**	**Unit**	**Rate**	**Amount**
67.	Construction of Embankment, Sub grade, Shoulder etc. with approved earth obtained from borrow pits with a lift up to 1.5	219.69	Cum		

	m, transporting to site, throwing the same in not more than 25 cm (loose) thick layers and compaction by Power Rollers each layer of soil up to 30 cm below the sub grade level at OMC to meet 97 % of SPD and the top 30 cm up to the sub grade level and shoulder at OMC to meet 100 % of SPD including breaking all clods thoroughly, watering, dressing, cambering etc. filling depressions making sufficient number of benches on existing embankment, bailing out water, dressing side slope and crest to proper profile in accordance with the procedure of work as detailed in Clauses 301.5 & 303.3 and tables 300.1, 300.2 of Specification of Rural Roads, MORD including cost for proper arrangement for stripping of the grass sods, weeds, quality control, scarifying existing ground and original ground up to a depth of 150 mm and rolling the existing ground as per specifications and direction of the Engineer-in-Charge including all taxes, royalties, cess etc as applicable from time to time including cost of lighting,				
68.	Cleaning Compound Premises of shurbs , plants , jungles etc. by cutting and removing as directed (Specific permission of engineer-In-Charge prior to execution will be necessary)	1105	Sqm		

SL No	**Description**	**Qty**	**Unit**	**Rate**	**Amount**
69.	Providing, spreading and consolidating				

	Jhama metal (obtained by breaking good quality jhama bats uniformly vitrified and heavy picked jhama bricks and colour should be copper red to black in proper places as directed) of specific size in hard crust to 75mm. compacted thickness (measured after compaction) including screening of jhama metal as necessary, hand packing, sweeping, watering and rolling in stages with power roller to proper line, grade and camber, lighting, guarding and barricading and making necessary earthen bundh of one meter wide on each side where necessary to protect edges and preparing the bed by necessary cutting or filling and rolling all complete including the cost and carriage of all materials including stacking and installation & operational charges and labour charges of all men and machineries complete as per specification and direction of The Engineer - In - Charge. Using Jhama metal of size 63mm to	15	Sqm		
70.	Providing, spreading and consolidating Stone metal of specific size in hard crust to 75mm. compacted thickness (measured after compaction) including screening of Stone metal as necessary, hand packing, sweeping, watering and rolling in stages with roller to proper line, grade and camber, lighting, guarding and barricading and making necessary earthen bundh of one meter wide on each side where necessary to protect edges and preparing the bed by necessary cutting or filling and rolling all complete including the cost and carriage of all materials including stacking and installation & operational charges and labour charges of all men and machineries complete as per specification and direction of The Engineer - In - Charge. Using coarse Agreegate of size range (53-22.4mm) for 75mm compacted thickness.using 0.091 cum of agreegates	51	Sqm		

	and 0.20 cum of type B (11.2mm) stone screening materials Grade II .				

SL No	Description	Qty	Unit	Rate	Amount
71	Providing and laying Bituminous Macadam of specified grade by Mobile Hot Mix Plant (Light Duty) using approved Pakur variety aggregates conforming to IRC specified grading grading (22.4mm @ 0.3538 m^3/ m^3, 11.2mm @ 0.3538 m^3/ m^3, 5.6mm @ 0.4953 m^3/ m^3 & stone dust @ 0.2123 m^3/ m^3) and using VG-30 (60/70) grade Bitumen (Bulk) @ 3.0% by weight of total mix on prepared surface, applying tack coat(mechanically) using Cationic Bitumen Emulsion MS (Packed) @ 3kg/10 m2 screening and cleaning the aggregates, pre-heating, preparing a uniform and quality mix, carrying the hot premixed materials by means of tipper truck, spreading the mixed materials at specified laying temperature over the prepared surface by means of a suitable paver finisher, tamping and finishing the mix to specified grade, line and camber, thorough rolling with suitable power roller for breakdown, inter-mediate and finished rolling as per Specification, hand packing and pinning to give an even	2.55	Cum		
72.	Providing & Laying 20 mm thick open graded Premixed Carpet by Mobile HOT MIX PLANT using 13.2 mm (@ 0.018 m3/m2) and 11.2 mm (@ 0.009 m3/m2) size stone aggregates (Pakur variety), including thorough cleaning of the surface, applying tack coat with cationic bitumen emulsion (M S Packed) @ 0.30kg / m^2 , screening cleaning and preheating stone chips and fully pre-coating the same with hot matrix of VG-30 (60/70) grade (Bulk) @ 54 kg/m3 of aggregate mix, carrying the mixture by tipper trucks or by any other suitable	51	Sqm		

	arrangements, laying the mixture uniformly over the surface at specified laying temperature , including manual operations as and when required for proper level, grade and camber, thoroughly rolling by roller, including the cost and carriage of stone materials, bitumen & bitumen emulsion, heating the matrix, preheating the aggregates to required temperature and including the installation & operational charges o				

SL No	Description	Qty	Unit	Rate	Amount
73.	Providing & Laying Premixed Seal Coat (Type B) with approved quality Pakur variety stone dust @ 0.6 m3/ 100 m2 and hot bitumen binder of VG-30 (60/70) Grade (Bulk) on thoroughly cleaned black top surface, including heating and mixing stone dust uniformly with hot matrix of VG-30 (60/70) grade (Bulk) @ 113.5 kg per m3 of stone dust in Mobile Hot Mix Plant (Light duty), laying and spreading the mix at an uniform rate by using suitable means on freshly laid surface, brushing the surface, if necessary, to ensure uniformity, followed by rolling with roller including the cost and carriage of matrix and aggregates, cost of heating the matrix and aggregates and all other incidental charges, cost of fuel and lubricants, including hire charges of machineries, tools & plants required for construction and quality control complete as per latest IRC specification and as per direction of the Engineer-in-Charge.	51	Sqm		