



TENDERDOCUMENT

FOR

THE WORK OF

Addition alteration and Minor repairs to Microwave building and staff Qtrs. in Microwave Complex at Mandi (HP).

BSNL CIVIL DIVISION SUNDERNAGAR



(A Govt. of India Enterprises) (CIVIL WING) O/o Executive Engineer (Civil), BSNL, Civil Division, Sunder Nagar(HP)

INDEX OF TENDER DOCUMENT

NAME OF WORK: Addition alteration and Minor repairs to Microwave building and staff Qtrs. in Microwave Complex at Mandi (HP).

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Executive Engineer [C] BSNL Civil Division Sunder Nagar(HP) The Executive Engineer, BSNL Civil DivisionSunder Nagar(HP),on behalf of theBharat Sanchar Nigam Limited (A Government of India Enterprise), invites online item rate bids from approved and eligible contractors of BSNL and non – BSNL registered contractors registered with other public works organizations like CPWD, State PWD (B&R), D.O.P., M.E.S. & Railways (in the appropriate class for tendering limit of equal to or more than the estimated cost) for following work:

S. No.	NIT No.	Name of Work & Location	Estimated Cost put to bid	Cost of e- tender	Earnest money	Period of Completion	Last Date & Time of online submission of bid	Period during which EMD, Bid cost, and other documents shall be submitted	Time & Date of Opening of bid
1	2	3	4	5	6	7	8	9	10
1	EE/BSNL/CD/SNR/01/2019 -20	Addition alteration and Minor repairs to Microwave building and staff Qtrs. in Microwave Complex at Mandi (HP).	Rs. 1142764.00	Rs.590.00	Rs.22855.00	03 (Three) months	18:00 Hrs on 31.05.2019	After last date and time of online submission of bid and up to 15:00 Hrs on 03.06.2019	11:00 Hrs on 07.06.2019

- 1. The intending bidder must read terms and conditions of BSNL W6 carefully. He should only submit his bid if he considers himself eligible and he is in possession of all the documents required.
- Information and instructions for bidders posted on website "www.tenderwizard.com/BSNL" shall form part of bid document.
- 3. The bid document consisting of plans, specifications, the schedule of quantities of various types of items to be executed and the set of terms and conditions of the contract to be complied with and other necessary documents can be seen and downloaded from website www.tenderwizard.com/BSNL or www.hp.bsnl.co.in/hpc.
- 4. But the bid can only be submitted after depositing processing fee in favour of ITI limited and uploading the mandatory scanned document such as Demand draft or Pay order or Banker's cheque or Deposit at call Receipt or Fixed deposit Receipt and Bank guarantee of any scheduled Bank towards cost of bid document and EMD in favour of Accounts Officer (Cash),O/o The GMTD BSNL mandi payable at Mandi (HP)and other documents as specified.
- 5. Those contractors not registered on the website mentioned above are required to get registered beforehand. If needed they can be imparted training on online bidding process as per details available on the website.
- 6. The intending bidder must have valid class III digital signature to submit the bid.
- On opening date the contractor can login and see the bid opening process. After opening of bids he will receive the competitor bid sheets.
- 8. Contractor can upload documents in the form of JPG format/ PDF format.
- 9. Contractor must ensure to quote rate of each item. If any cell is left blank and no rate is quoted by the bidder, rate of such item shall be treated as "0" Zero.
- 10. If a tenderer quotes nil rates against each item in item rate tender or does not quote any percentage above/below on the total amount of the tender or any section/sub head in percentage rate tender, the tender shall be treated as invalid and will not be considered as lowest tenderer
- 11. For e-Tendering, BSNL has engaged e-portal maintained by M/s ITI Ltd. The agency intending to participate in tendering process shall have to register with https://www.tenderwizard.com/BSNL by making online payment of required amount with registration particulars. For further details kindly visit website http://www.tenderwizard.com/BSNL or contact on ITI helpline nos. 01723953753, 08261033300 /09625033300 /08261922200.

- 12. The tenderer should read carefully & understand the tender document, procedure for e- tendering etc. completely before participating in the e-tender procedure. Participation in the e-tendering, presumes that the bidder (s) has/have gone through all the terms &conditions of the bid document and are fully agreeable to it.
- 13. List of Documents to be scanned and uploaded within the period of bid submission:
 - i) Enlistment Order of the contractor *.
 - ii) Near relative certificate as stipulated under clause 14 of Notice Inviting Tender (Annexure I)
 - iii) Copy of EPF& ESIC registration OR an undertaking as per Annexure II.
 - iv) Demand Draft/Pay order or Banker's Cheque/Deposit at Call Receipt/FDR of any Scheduled Bank against EMD
 - v) DemandDraft/PayorderorBanker'sChequeofanyScheduledBanktowardsCostof Bid Document
 - vi) Certificates of Work Experience (form on BSNL registered contractors)
 - vii) Copy of GST Registration issued by concerned Department of Govt. of HP / Govt. of India (can be submitted after acceptance of tender along with PG).
 - viii) Undertaking regarding physical submission of bid documents as per Annexure-III.

*If the bidder is a firm in partnership/Limited company or Corporation, then the hard copies of Form "A" and partnership deed/memorandum of articles of association and power of attorney /certificate of incorporation /authorization to the persons hosting the tender in case of companies etc shall also be uploaded/submitted along with other documents

- 14. Self certified copies of all uploaded documents under Para13 and Original financial payment instrument against EMD &TC shall be deposited within the period of physical form submission.
- 15. If the contractors do no submit the physical bid documents / Technical Bid consecutively three times after submission of online bids, action shall be taken to withdraw his / their enlistment & debar him/them from tendering in BSNL for the period of six months. An undertaking in this regard is to be submitted along with the tender by the tenderers as per Annexure

ANNEXURE-I

(To be submitted by the contractor regarding near relatives working in BSNL Civil Zone as per clause 14 of BSNL W-6)

CERTIFICATE FOR NEAR RELATIVES

"	S/o			Residen	t of
			here	by certif	y that
none of my relative(s) as defined in clause 14	of BSNL W-	6 is / are employed	d in BSNL HP Sout l	CivilZon	е.
In case, at any stage, it is found that the information	ation given by me	is false/ incorrect,	BSNL shall have the	absolute	right to
take any action as deemed fit without any prior int	imation to me".				
			SIGNATURE	OF CONTR	ACTOR

(Note: The certificate in case of Proprietorship Firm shall be given by the proprietor and for Partnership firm's certificate shall be given by all Partners and in case of Limited Company by all Directors of the company. However, Government of India / Financial Institutions nominees and independent non-official part-time Directors appointed by Govt. of India or the Governor of the State are excluded from the purview of submission of this certificate while submitting tenders by Limited Companies.)

Annexure-II

DECLARATION REGARDING EPF, ESIC & Labour licence

"I / We	do hereby solemnly declare that I
shall abide by all the rules / condition / provisions of 'T	he Employees Provident Funds Act / Scheme 1961' and
ESIC Act. I/We shall obtain and submit applicable EP	F, Labour license &ESIC within one month of award of
work. First payment shall be made to me/us only after submiss	on of applicable EPF, ESIC & labour license by me/us. In case
of any default, the sole responsibility shall be mine $\ensuremath{\textit{I}}\xspace$ us.	I/We shall also be liable for any pecuniary liability arising
on account of any violation by me/us of the provisions of	the said Acts".
This declaration shall become part of the Agreement.	
	SIGNATURE OF CONTRACTOR

Annexure-III

UNDERTAKING REGARDING SUBMISSION OF PHYSICAL BID DOCUMENTS

BHARAT SANCHAR NIGAM LIMITED

(A GOVERNMENT OF INDIA ENTERPRISE)

O/o Executive Engineer (Civil), BSNL Civil Division, Sunder Nagar (HP)

NOTICE INVITING e-TENDER

NIT No. EE/BSNL/CD/SNR/01/2019-20

Dt. 20.05.2019

1. Item rate e-tendersare invited by the Executive Engineer (C), BSNL Civil Division, Sunder Nagar(HP), on behalf of the "Bharat Sanchar Nigam Limited (A Government of India Enterprise)", from approved and eligible contractors of BSNL and non – BSNL registered contractors registered with other public works organizations like CPWD, State PWD(B&R), D.O.P., M.E.S. & Railways (in the appropriate class for tendering limit of equal to or more than the estimated cost) for the work of:

"Addition alteration and Minor repairs to Microwave building and staff Qtrs. in Microwave Complex at Mandi (HP)."

The enlistment of the contractors should be valid on the last date of submission of bids. In case the last date of submission of bid is extended, the enlistment of contractor should be valid on the original date of submission of bids.

- 1.1 The work is estimated to cost Rs. 1142764.00 (Rupees Eleven Lakh Forty Two Thousand Seven Hundred Sixty Four Only).
- The intending Tenderers have to upload the self attested scanned copy of their valid enlistment document with the appropriate authority and copies of certificates, testimonials and satisfactory completion certificates of works, from the department concerned, obtained from an officer not below the rank of Executive Engineer, in charge of work. He / they shall submit attested copies of GST registration Certificate issued by concerned Department of Govt. of HP / Govt. of India, on acceptance of tender along with Performance Guarantee. In the event of failure on the part of contractor (whose tender is accepted) to furnish the documents pertaining to GST registration Certificate along with Performance Guarantee within stipulated period, the earnest money will be forfeited and tender cancelled. The hard copies of attested uploaded documents should be submitted along with tender cost and EMD in the wax / adhesive tape sealed envelope, to the office of Executive Engineer(C), BSNL Civil Division, Hamirpur (HP) within the period mentioned in this NIT.
- 1.2.1 Eligibility criteria regardingWork Experience:
- 1.2.1.1 ForBSNL enlisted contractors for BUILDING WORKS in Appropriate class: NIL.

They shall upload letter for experience certificate that these documents are not required to be submitted by them. Uploading of this letter is mandatory otherwise system will not clear mandatory field.

1.2.2.2 Non – BSNL registered contractor in appropriate class (CPWD, State PWD(B&R), D.O.P., M.E.S. &Railways)-----

The applicant should have completed works as per details below during the last seven years ending last day of the month previous to the one in which the tenders are invited.

- a) Three similar completed works each costing not less than Rs. 458000.00
- b) Two similar completed works each costing not less than Rs.572000.00
- c) One similar completed works each costing not less than Rs.915000.00

Similar work **means "Building works"**. The value of executed works shall be brought to current costing level by enhancing the actual value of executed work at simple rate of 7% per annum; calculated from the date of completion to last date of receipt of applications for tenders and shall be rounded off to the nearest hundred rupees.

The experience certificate given by an officer not below the rank of Executive Engineer shall indicate clearly the nature of the work, agreement no. and satisfactory completion of the work along withactual value of work done and actual date of completion and shall be issued by authorized signatory/ authority and shall be in original / attested.

- 1.2.3 The contractor shall have to fully abide by the relevant provisions of the Employee's Provident Fund Act 1952, ESIC (wherever applicable) and Rules of The Employees provident Funds Act / Scheme 1961 (as applicable) framed therein from time to time and they have to obtain and produce EPF registration within one month of award of work.
- 1.3 The agency should fulfill the criteria of clause 14of BSNL form W-6 & should furnish a Certificate regarding near relatives as per Annexure I.
- 1.4 The agency/agencies, which are Blacklisted/Debarred/Ceased for Financial Transactions by BSNL and/or any Central/state Govt. Department/PSU are not eligible for tendering.
- Agreement shall be drawn with the successful bidders on prescribed Form No. BSNL W8 and General Conditions of Contract with
 up to date correction slips1 to 6 which are available as a BSNL Publication and also on BSNL website www.civil.bsnl.co.in/bsnl.co.in/bsnl.co.in/bsnl.co.in/bsnl.co.in/bpc.
 Bidders shall quote his rates as per various terms and conditions of the said form which will form part of the agreement.

- The time allowed for carrying out the work, will be 03 (Three) months from the 15th day after the date of issue of letter of award of
 work or from the first day of handing over of the site whichever is later, in accordance with phasing, if any, indicated in the Tender
 Document.
- 4. The site for the work shall be made available at the time of execution.
- 5. The bid document consisting of plans, Specifications, the schedule of quantities of various types of items to be executed and the set of terms and conditions of the contract to be complied with and other necessary documents including General Conditions of Contract Form including correction slips can be seen from website http://www.tenderwizard.com/BSNL&www.hp.bsnl.co.in/hpc.
 - (i) The last date of submission of bids online, will be 31.05.2019 by 18:00Hrs.
 - (ii) The date of submission of eligibility documents etc. and EMD, tender fee, (After last date and time of online submission of bid) will be 03.06.2019 by 15:00Hrs. and shall be opened on same day at 15:30Hrs.
 - (iii) The date of opening of e-tenders will be 07.06.2019 at 11:00 Hrs.
- After submission of the bid the contractor can re-submit revised bid any number of times but before last time and date of submission of bid as notified.

While submitting the revised bid, contractor can revise the rate of one or more items any numbers of times (he need not re-enter rate of all the items) but before last date and time of submission of bid as notified.

- 7. Interested contractors who wish to participate in the tender had to make following payments and submission as under:.
- 7.1 (i) Cost of Bid Document Non refundable in form of Demand Draft / pay orders amounting toRs. 590.00drawn in favour of Accounts Officer (Cash),O/o The GMTD BSNL mandi payable at Mandi (HP
 - (ii) Earnest Money of Rs 22855.00 as Banker's cheque /deposit at Call receipt of a scheduled bank/fixed deposit receipt of a scheduled bank /Demand draft of a scheduled bank issued in favour of Accounts Officer (Cash),O/o The GMTD BSNL mandi payable at Mandi (HP)When amount of earnest money is more than Rs. 5 lakhs, part of the earnest money is acceptable in the form of bank guarantee also. In such case, minimum 50% of earnest money (but not less than 5 lakhs) or Rs. 25 lakhs, whichever is less, will have to be deposited in the shape prescribed above. For balance amount of earnest money, bank guarantee will also be acceptable.
 - (iii) e-tender Processing Fee- An amount of An amount of as displayed Online while e submitting the tender (Non refundable) as processing fee to "I T I Limited" shall be paid through e-payment mode only through the website www.tenderwizard.com/BSNL.

Note: Money due to contractor in any other work or earnest money of the previous call of the same work shall not be adjusted towards earnest money. The Cost oftender, EMD, Processing feeshould besubmitted throughseparate instruments.

The scanned copy of above documents (demand Draft/Pay order or Banker's cheque/FDR/deposit at call receipt or bank guarantee) is to be uploaded to the e-Tendering web site within the period of online bid submission and original should be submitted along with self attested copies of eligibility documents in the wax / adhesive tape sealed envelope, to the office of Executive Engineer(C), BSNL Civil Division, Sunder Nagar (HP) within the period mentioned in this NIT.

The intending bidder has to fill all the details such as Banker's name, Demand draft/Fixed Deposit Receipt / Pay order/ Banker's cheque/ Bank Guarantee number, amount and the date in the e-tendering website.

7.2MODE OF SUBMISSION:-

- a) The copy of Earnest money, cost of Tender & E-tendering processing fee receipt, Copy of Enlistment Order, copy of GST registration, Near relative certificate (annexure I), copy of EPF, ESIC OR an undertaking as per Annexure II, copy of undertaking regarding submission of physical bid documents per Annexure III, copy of work experience & Power of Attorney, if applicable shall be scanned & uploaded to the e-tendering website within the period of tender submission.
- b) The self attested copies of enlistment order, certificate of work experience, and other documents as specified in the tender notice as well as demand Draft/Pay order or Banker's cheque/FDR/deposit at call receipt or bank guarantee in original for tender cost and EMD shall be submitted in the wax / adhesive tape sealed envelope, to the office of Executive Engineer(C), BSNL Civil Division, Sunder Nagar(HP), after last date & time of online submission of bid and up to by 15:00 Hrs on 30.05.2019 The documents submitted shall be opened at 15:30 Hrs on the same day in presence of contractors who may be present. The envelope shall be superscripted with name of work, name of tenderer, date and time of opening of bids.

Online bid documents submitted by intending bidders shall be opened only of those bidders, whose Earnest Money deposit, Cost of Bid Document and other documents placed in the envelope are found in order.

The financial bid submitted shall be opened at 11:00 Hrs on 03.06.2019

The bid submitted shall become invalid and cost of bid & e-Tender processing fee shall not be refunded if:

) The bidder is found ineligible.

- ii) Thebidderdoesnotuploadallthedocumentsasstipulated inthebiddocument.
 - iii) If any discrepancy is noticed between the details/ documents as uploaded at the time of submission of bid and hard copies as submitted physically in the office of tender opening authority.

iv)The bidder does not submit documents in physical form as specified in the bid document before specified date and time.

Note:Incasetheeligibilitycredentialsarenotfoundgenuineatanystagei.e.beforeawardof work or during execution of the work or after completion of the work, the contractorwillbedebarred from tenderingin BSNLforthreeyearsincludingany other actionunderthecontractorexistinglaw.

- 8. The description of the work is as follows: -
 - "Addition alteration and Minor repairs to Microwave building and staff Qtrs. in Microwave Complex at Mandi (HP)."
- 9. Copies of other drawings and documents pertaining to the work will be open for inspection by the tenderers at the office of the Executive Engineer (Civil) BSNL Civil Division, **Sunder Nagar (HP)**.
- Tenderers are advised to inspect and examine the site and its surroundings and satisfy themselves before submitting their tenders as to the nature of the ground and sub-soil (so far as is practicable), the form and nature of the site, the means of access to the site, the accommodation they may require and in general, shall themselves obtain all necessary information as to risks, contingencies and other circumstances which may influence or affect their tender. A tenderer shall be deemed to have full knowledge of the site whether he inspects it or not and no extra charges consequent on any misunderstanding or otherwise shall be allowed. The tenderer shall be responsible for arranging and maintaining at his own cost all materials, tools & plants, water, electricity, access, facilities for workers and all other services required for executing the work unless otherwise specifically provided for in the contract documents. Submission of tender by a tenderer implies that he has read this notice and all other contract documents and has made himself aware of the scope and specifications of the work to be done and of conditions and rates at which stores, tools and plant, etc. will be issued to him by the BSNL and local conditions and other factors having a bearing on the execution of the work.
- 11. The competent authority on behalf of the BSNL does not bind itself to accept the lowest or any other bid and reserves to itself the authority to reject any or all the bids received without assigning any reason. All bids in which any of the prescribed condition is not fulfilled or any condition including that of conditional rebate is put forth by the bidder shall be summarily rejected.
- 12. Canvassing whether directly or indirectly, in connection with bids is strictly prohibited and the bids submitted by the contractors who resort to canvassing will be liable to rejection.
- 13. The competent authority on behalf of BSNL reserves to himself the right of accepting the whole or any part of the bid and the bidder shall be bound to perform the same at the rate quoted.
- 14. The company or firm or any other person shall not be permitted to tender for works in BSNL Civil Zone, in which his near relative(s) (directly recruited or on deputation in BSNL is/are posted in any capacity either non-executive or executive employee. Near relative (s) for this purpose is/are defined as:
 - i) Member of Hindu Undivided family (HUF).
 - ii) They are Husband and Wife.
 - iii) The one is related to other in the manner as father, mother, son(s) & Son's wife (daughter-in-law), Daughter(s), Daughter's husband (son-in-law), brother(s), brother's wife, sister(s), sister's husband (brother-in-law).

The contractor shall also intimate the names of persons who are working with him in any capacity or are subsequently employed by him and who are near relative to any executive employee/gazetted officer in the BSNL or Department of Telecom or in the Ministry of Communications.

All the intending tenderers will have to give a certificate/ Declaration that none of his/her such near relative (s) as defined above is/are working in the concerned BSNL Civil Zone where he is going to apply for tender/work. The format of the certificate is as under:

"	S/oShri	
Resident of		hereby certify that none of my relative(s) as
defined above is/are emplo	yed in concerned BSNL Civil Zone. In case	at any stage, it is found that the information given by me
is false/incorrect, BSNL sha	all have the absolute right to take any action a	is deemed fit without any prior intimation to me."

The certificate in case of Proprietorship Firm shall be given by the proprietor, for Partnership Firm certificate shall be given by all partners and in case of Limited Company, by all Directors of the company. However, Government of India/ Financial Institutions nominees and independent non-official part-time Directors appointed by Govt. of India or the Governor of the State are excluded from the purview of submission of this certificate while submitting tenders by Limited Companies.

Any breach of these conditions by the Company or Firm or any other person, the tender/ work will be cancelled and Earnest Money/ Security Deposit will be forfeited at any stage, whenever it is so noticed. BSNL will not pay any damages to the company or Firm or the concerned person but damages arising on account of such cancellation to be borne by the contractor. The Company or Firm or the person will also be debarred for further participation in the tender in the concerned BSNL Civil Zone. Further, any breach of this condition by the tenderer would also render him liable to be removed from the approved list of

contractors of BSNL. If however the contractor is registered in any other Department he shall also be debarred from tendering in BSNL for any breach of this condition.

- 15. No Engineer of Gazetted rank or other Gazetted officer employed in Engineering or Administrative duties in an Engineering Department of the Government of India including State Government or PSU's (including BSNL) is allowed to work as a contractor for a period of two years after his retirement from Government service, without previous permission of the Government of India or BSNL in writing. This contract is liable to be cancelled if either the contractor or any of his employees is found any time to be such a person who had not obtained the permission of the Government of India /State Government or PSU's as aforesaid before submission of the tender or engagement in the contractor's service.
- 16. The bid for the works shall remain open for acceptance for a period of **60** (**Sixty)days** from the date of opening of Bids. If any bidder withdraws his bid before the said period or issue of letter of acceptance, whichever is earlier, or makes any modifications in the terms and conditions of the bid which are not acceptable to the department, then BSNL shall, without prejudice to any other right or remedy, be at liberty to forfeit 50% of the said earnest money as aforesaid. **Further the bidder shall not be allowed to participate in the re-bidding process of the work**.
- 17. In case of works having estimated cost below Rs.15,00,000/-, the successful tenderer shall be required to execute an agreement with the Engineer-in-charge in the Proforma annexed to the tender document, within 15 days of the issue of letter of award by the BSNL. In the event of failure on the part of the successful tenderer to sign the agreement, the earnest money will be forfeited and tender cancelled. In case of works of estimated to cost Rs.15, 00,000/- and above, the successful tenderer shall, upon issue of letter of acceptance of Tender, shall be required to furnish performance guarantee at rate of 5% of the tendered value in the form of irrevocable Bank Guarantee of requisite amount to the Engineer-in-charge in the Proforma annexed to the tender document, within 15 days of the issue of letter of acceptance of Tender by the BSNL. In the event of failure on the part of the successful tenderer to furnish the Bank Guarantee within 15 days, the earnest money will be forfeited and tender cancelled.
- 18. This Notice Inviting Tender (BSNL W-6) shall form a part of the contract document. In accordance with clause 1 of the contract, the letter of acceptance shall be issued first in favor of the successful tenderer/ contractor. After submission of the performance guarantee, the letter of award shall be issued. The contract shall be deemed to have come into effect on issue of letter of acceptance of the tender. On issue of letter of award, the successful Tenderer/Contractor shall, within 30 days from such date, formally sign the agreement consisting of:
 - a) The notice inviting tender, all the documents including additional conditions, specifications and drawings, if any, forming part of the tender, and, as issued at the time of invitation of tender and acceptance thereof together with any correspondence leading thereto
 - b) Standard BSNL W8 as on Website www.hp.bsnl.co.in/hpc and www.civil.bsnl.co.in.
 - c) Agreement signed on non-judicial stamp paper as per Proforma annexed to the tender document.
- 19. Payment to the contractors shall be made through e-payment system like ECS/EFT/RTGS as detailed below:-
 - (a) In cities/areas where ECS/EFT/RTGS facility is provided by Banks, the tenderer must have Account in such ECS/EFT/RTGS facility providing Banks and that Bank A/c Number shall be quoted in the tender by the tenderer.
 - (b) The cost of ECS/EFT/RTGS will be borne by BSNL in all cases where the payment to contractor is made in a local Branch i.e. tenderer is having bank account in the same place from where the payment is made by BSNL unit.
 - (c) In case payment is made to outside branch i.e. tenderer is having bank account not in the same place form where the payment is made by BSNL unit, the crediting cost will have to be borne by the tenderer only.
 - (d) The payments to contractors will compulsorily be made through ECS/EFT/RTGS in respect of all contracts where the value of the contract is more than Rs. 10 lakhs.
- 20. First running account bill shall be paid only after
 - (a) Signing of the Agreement/Contract by both the parties, and
 - (b) Progress chart has been prepared as required under Clause 5 and approved by the competent authority.
- 21. If a contractor after purchasing the tender does not quote consecutively on three occasions, the contractor may be debarred for further purchase of tenders for a period of Six months.
- 22. General conditions of works in BHARAT SANCHAR NIGAM LTD and all correction slips are available on website www.hp.bsnl.co.in/hpcas well as in the Divisional/ Sub divisional Office.
- 23. The Contractor will submit computerized measurement books and bill in duplicate for all running and final bills and nothing extra shall bepaid on this account.

24. Condition for EPF/ESI/GST

(a)The bidder must comply with the Provisions of EPF & Misc. Provisions Act, 1952 and Employees Provident Fund Scheme 1952, in respect of labourers/employees engaged by the bidder for carrying out works and they have to obtain and produce EPF registration within one month of award of work. First payment shall be made to the contractor only when he submits his valid/applicable EPF registration.

- b) The claim bill of contractor must accompany the list showing the details of labourers/ employees engaged, duration of their engagement, amount of wages paid to such labours/ employees, & authenticated documents showing amount of EPF contributions (both employer's & employees contribution), paid to the EPF Authorities. Non compliance of above provision will be treated as breach of contract and necessary action against the bidder will be taken.
- (c) The contractor shall be required to comply the provision of ESIC (wherever applicable), payment of wages act, contractor labour regulation act, payment of bonus act, payment of gratuity act and GST regulations. Non compliance of above provisions will be treated as breach of contract and necessary action against the bidder will be taken.
- d) The rates shall be quoted inclusive of all taxes including GST to the extent mentioned in schedule F under clause 37(i) and all other taxes of Central / HP State Governmentwith loading, unloading and transportation etc. The rates shall be firm and final. Nothing extra shall be paid on any account & BSNL shall not entertain any claim in this respect. The invoices raised by the contractor shall indicate GST as a separate component of the gross bill raised. The payment of GST by BSNL to the contractor shall be governed by the rule of the government made in this regard and applicable to BSNL and further as per the rules framed by BSNL in this regard. BSNL shall claim ITC credit for the GST as per rules of BSNL in vogue.

The contractor shall be solely responsible for timely payment of GST to the concerned department. Any penalty /interest orlate submission etc. arising thereupon and as demanded by the concerned department shall be sole responsibility of the contractor and BSNL shall have absolutely noliability whats over on this account.

- 25. Tenderers are advised to acquaint themselves regarding Office Infrastructure to be provided under section 5 of "Special Conditions" and quote their rates accordingly. The rates quoted by agency shouldinclude charges for OfficeInfrastructure mentioned therein and nothing extra shall be paid on thisaccount.
- For e-Tendering, BSNL has engaged e-portal maintained by M/s ITI, New Delhi. The agency intending to participate in tendering process shall have to register with M/s ITI, New Delhi. The ITI helpline nos. are 01723953753, 08261033300 /09625033300 /08261922200.
- 27. If any terms and conditions under General Rules and Directions is in contravention to terms and conditions as above, the terms and conditions as above shall prevail.
- 28. If there happens to be holiday on any dates mentioned above, then the transactions will be made on next working day.

Signature:
Name: Sh. Vijay kumar Sharma
Executive Engineer (Civil)
BSNL Civil Division
Sunder Nagar
For & on behalf of Bharat Sanchar Nigam Limited (A Government of India Enterprise)

IMPORTANT INSTRUCTIONS TO ALL TENDERERS

All tenderers should read the following important instructions carefully before actually quoting rates:-

- 1. The tenderer should read carefully & understand Tender form BSNL W-8, Bharat Sanchar Nigam Limited "General Conditions of Contract for Civil Works (2006) with up to date correction slips no. 1 to 6 (available on website www.hp.bsnl.co.in/hpc), schedule of quantity etc. before quoting for the work.
- 2. The schedule of items, estimated cost etc in this contract are based on **CPWD DSR2016** and CPWD specifications 2009, Volume I & II with up to date correction slips.
- 3. All the eligibility credentials submitted by the intending tenderers must be duly self attested.

BHARAT SANCHAR NIGAM LIMITED

(A Government of India Enterprise)

STATE: Himachal Pradesh CIRCLE: BSNL Civil Circle-II, Shimla ZONE: H.P Civil Zone (South) DIVISION: BSNL Civil Division, Sunder Nagar SUB DIVISION: BSNL Civil Sub Division-II, Sunder Nagar

Item rate Bid for the work of: "Addition alteration and Minor repairs to Microwave building and staff Qtrs. in Microwave Complex at Mandi (HP)."

- (i) To be submitted online on the website "www.tenderwizard.com/BSNL" by 18:00 hours on 31.05.2019Documents which are to be submitted by the bidders to the Executive Engineer (Civil) BSNL Civil Division, Sunder Nagar (HP)after last date & time of submission of online bid and up to 15:00 Hrs on 03.06.2019, will be opened in the presence of bidders who may be present at 15:30 Hrs on the same day i.e. 03.06.2019
- (ii) Thefinancial bid shall be opened online at 11:00 hours on 07.06.2019 in the office of Executive Engineer (C), BSNL Civil Division, Sunder Nagar (HP).

TENDER

I/We have read and examined Notice Inviting Tender, Schedules A, B, C, D, E & F, Specifications applicable, Drawings & Design, General Rules and Directions, Conditions of Contract, Special conditions, Schedule of Rate & other document & Rules referred to in the Conditions of contract and all other contents in the Tender Document for the work.

I / we hereby tender for the execution of work specified for the Bharat Sanchar Nigam Limited within the time specified in schedule 'F' viz., schedule of quantities and in accordance in all respects with the specifications, designs, drawings and instructions in writing referred to in Rule-1 of General Rules and Directions (Civil and Electrical) and in Clause 11 of the Conditions of the contract and with such materials as are provided for, by and in respect in accordance with, such conditions so far as applicable.

I/We agree to keep the tender open for **60** (**Sixty)days** from the due date of submission thereof and not to make any modifications in its terms and conditions. If I/we withdraw my/our tender before the said period or issue of letter of acceptance/intent, whichever is earlier, or, makes any modifications in the terms and conditions of the tender which are not acceptable to the BSNL, then the BSNL shall, without prejudice to any other right or remedy, be at liberty to forfeit 50% of the said earnest money as aforesaid.

A sum of Rs22855.00 (Rupees Twenty Two Thousand Eight Hundred Fifty Five Only) has been deposited in prescribed manner as earnest money. If I/We fail to commence the work specified I/We agree that the said Bharat Sanchar Nigam Limited shall without prejudice to any other right or remedy, be at liberty to forfeit the said earnest money absolutely otherwise the said earnest money shall be retained by competent authority on behalf of the Bharat Sanchar Nigam Limited towards Security Deposit to execute all the works referred to in the tender documents upon the terms and conditions contained or referred to therein and carry out such deviations as may be ordered, upto maximum of the percentage mentioned in Schedule 'F' and those in excess of that limit at the rates to be determined in accordance with the provision contained in Clause 12.2 and 12.3 of the tender form.

I/We agree that, in case of works of estimated cost exceeding Rs.15,00,000/-, to deposit an amount equal to 5% of Tendered value of the work as performance guarantee in the form of bond of any Scheduled Bank of India in accordance with the Proforma prescribed or in the form of Fixed Deposit Receipt etc., within 15 days of the issue of letter of acceptance of Tender by the BSNL. I/We am/are aware that in the event of failure on my/our part to furnish the Bank Guarantee within 15 days, the earnest money will be forfeited and tender cancelled. Further, I / We agree that in case of forfeiture of earnest money or both Earnest Money & Performance Guarantee as aforesaid, I / We shall be debarred for participation in the rebidding process of the work.

"I/WE undertake and confirm that eligible similar work(s) has/have not been got executed through another contractor on back to back basis. Further that, if such a violation comes to the notice of Department, then I/We shall be debarred for bidding in BSNL in future forever. Also, if such a violation comes to the notice of Department before date of start of work, the Engineer-in-Charge shall be free to forfeit the entire amount of Earnest Money Deposit/Performance Guarantee."

I/we hereby intimate that for receiving payments I/we have an account in	Bank with account No.
where the ECS/EFT/RTGS facility of e-payment is available.	

I/We hereby declare that I/we shall treat the tender documents, drawings and other records connected with the work as secret/confidential documents and shall not communicate information derived there-from to any person other than a person to whom I/we am/are authorized to communicate the same or use the information in any manner prejudicial to the safety of the State.

I / We agree that should I / we fail to commence the work specified in the above memorandum, an amount equal to the amount of the earnest money mentioned in the form of invitation of tender shall be absolutely forfeited to the Bharat Sanchar Nigam Limited and the same may at the option of the competent authority on behalf of the Bharat Sanchar Nigam Limited be recovered without prejudice to any right or remedy available in law out of the deposit in so far as the same may extend in terms of the said bond and in the event of deficiency out of any other money due to me / us under this contract or otherwise.

The information in respect of works in hand is as per Proforma enclosed.

I/We agree that this contract is subject to jurisdiction of court at Sunder Nagar (HP) only.

Name of Work	Name and Particulars of Division where work is being executed	Value of Work	Position of Work in progress	Remarks
1	2	3	4	5

Dated																
Witness:																
Address: Occupation Postal Add											Sign	ature of Contra	ector			
						į	ACC E P T	AN	<u>C E</u>							
The above	e tender	[as	modif	fied by y	ou (Contra	ctor) and	d as provi	ded i	n the letters m	entic	ned he	ereunder] is a	ccept	ed b	y me	for
and on	behalf	of	the	Bharat	Sanchar	Nigam	Limited	(A	Government	of	India	Enterprise),	for	а	sum	of
Rs					(Rupee	S										
)											
The letters	referred	to be	elow s	hall form	part of this	Contract .	Agreemen	t:								
(a)																
(b)						•••••										
Datad											(harat Sancha Government o	_			
Dated		•••••							Signature: N a			signation:	.x			

PROFORMA OF SCHEDULES (Operative Schedules to be supplied separately to each of the intending tenderer) SCHEDULE - "A" Schedule of Quantities (Civil Work): As per Extra Excel Work Sheet SCHEDULE - "B" Schedule of Materials to be issued to the contractor S. **Description of Item** Quantity Rates in figures & words at which the materials will Place of be charged from the contractor No. issue 3 1 4 5 NIL SCHEDULE - "C" Tools and Plants to be hired to the contractor Place of issue S. No. **Description of Item** Hire charges per dayDELETED SCHEDULE - "D" Extra schedule for specific requirements/documents for the work. (a) Performaof Agreement (b) Form of Performance Guarantee (c) Specifications and conditions including conditions for procurement of steel reinforcement and cement (d) Additional conditions and additional specifications (e) Performa of Guarantee Bond (f) Special conditions (g) Important instructions to all tenderers (h) Correction slips and Amendments (i) List of Preferred makes. SCHEDULE - "E" Schedule of component of Materials, Labour etc. for escalation. CLAUSE 10: Component of Materials expressed as percent of Total Value of Work "X" 75% Component of Labour expressed as percent of Total Value of Work "Y" 25% Component of POL expressed as percent of Total value of Work "Z" 0% SCHEDULE - "F" Reference to General Condition Addition alteration and Minor repairs to Microwave building and staff Qtrs. in Microwave Name of Work Complex at Mandi (HP). Estimated cost of Work Rs. 1142764.00(Rupees Eleven Lakh Forty Two Thousand Seven Hundred Sixty Four Only) Rs. 22855.00 (Rupees Twenty Two Thousand Eight Hundred Fifty Five Only) **Earnest Money**

	ce Guarantee	
	tendered value in the form of Bank Guarantee from Scheduled Bank of works with estimated cost put to tender exceeding Rs. 15.00Lakhs)	Not Applicable
Security D (10% of th Rs. 15.00 L	e tendered value for works with estimated cost put to tender up to	Rs (Rupees)
GENERAL	RULES AND DIRECTIONS	
Officer Invit	ting tender	Executive Engineer (C), BSNL Civil Division, Sunder Nagar (HP)
	percentage for quantity of items of work to be executed beyond which be determined in accordance with Clause 12.2 & 12.3	50% (Fifty Percent)
Definitions	s:	
2 (v)	Engineer-in-charge	Executive Engineer (C), BSNL Civil Division, Sunder Nagar (HP)
2 (viii)	Accepting Authority	Superintending Engineer (C), BSNLCivil Circle- II,Shimla.
2 (x)	Percentage on cost of materials and labour to cover all overheads and profit	10 %
2 (xi)	Standard Schedule of Rates	CPWD DSR-2016with upto date corrections as on the date of opening of tenders
9 (ii)	Standard BSNL Contract Form	Form BSNLW – 8 with upto date correction slipsas on the date of opening of tenders
Clause 2		
	Authority for fixing compensation under Clause -2	Superintending Engineer (C), BSNLCivil Circle- II,Shimla.
Clause 2A		I
	Whether Clause 2A shall be applicable	No
Clause 3A		
	Whether Clause 3A shall be applicable	Yes
Clause 5	1	
i)	Time allowed for execution of work	03 (Three) months
ii)	Authority to give fair and reasonable extension of time for completion of work.	Superintending Engineer (C), BSNLCivil Circle- II, Shimla.
Clause 6A		1
	Whether Clause 6A shall be applicable	Yes
Clause 7		
	Gross value of work to be done together with net payment / adjustment of advances for materials collected, if any, since the last such payment for being eligible to interim payment.	Rs. 400000.00
	1	1

	se 10							
		Reinforcement procured as be		used in the work shall have	e to be		be procured from henu/Jai Bharat/A	n Secondary Producers only mba)
Claus	se 11							
		Specification to	be followe	ed for execution of work.		CPWD Spec correction sli		ume: I & II, with upto date
Claus	se 12							
12.2 &12.3	3	Limit for value sub clauses (i shall apply	of any ite) to (ii) sha	m of any individual trade all not apply and clauses	beyond which 12.2 and 12.3	50%		
Claus	se 16							
		Competent aut	hority for d	eciding reduced rates		Superintendi (South),Shin		SSNL Civil Circle-II
Gene	se 36(i eral gui ollowin	ideline for fixing	j requirem	ents of technical staff an	d rate of recove	ery in case of	non compliance	for a work, shall be as per
S		Minimum alification of	Discip	Designation	Minimum	Number	from conti	recovery shall be made actor in event of non
S No	Qua	alification of Technical	Discip line	Designation	Minimum Experience	Number	from cont	ractor in event of non leployment
	Qua rep Grad	alification of		Designation Principal Technical Representative [Project Planning / Site / billing Engineer]		Number 1 No.	from conti	actor in event of non
No 1	Qua rep Grad	alification of Technical presentative duate Engineer Or loma Engineer	line	Principal Technical Representative [Project Planning / Site	Experience 2 Years Or		Figures Rs. 15,000/-	ractor in event of non leployment words Rs. Fifteen thousand per
1 Clau	Qua rep Grace Dipl se-37 (alification of Technical presentative duate Engineer Or loma Engineer	line Civil	Principal Technical Representative [Project Planning / Site	2 Years Or 5 Years 100% [Rat of detailed	1 No. es shall be in a guidelines / nt (BSNL), the	Figures Rs. 15,000/- per month nclusive of 100% rules, if a portion	ractor in event of non leployment words Rs. Fifteen thousand per
No 1 Clau Exter	Pui Grad Dipl se-37 (at of G uilding	alification of Technical presentative duate Engineer Or loma Engineer (i)	line Civil	Principal Technical Representative [Project Planning / Site / billing Engineer]	2 Years Or 5 Years 100% [Rat of detailed departmer	1 No. es shall be in a guidelines / nt (BSNL), the	Figures Rs. 15,000/- per month nclusive of 100% rules, if a portion	Rs. Fifteen thousand per month GST. However, after issue on of GST is to be paid by
1 Clau Exter	Purify Grade Diplose-37 (and of Guilding see 42)	alification of Technical presentative duate Engineer Or loma Engineer (i) SST (Goods and g and construction	Civil Services Ton works.	Principal Technical Representative [Project Planning / Site / billing Engineer]	2 Years Or 5 Years 100% [Rat of detailed departmer contractor	1 No. es shall be in a guidelines / ot (BSNL), the estable of the control of the	Figures Rs. 15,000/- per month nclusive of 100% rules, if a portic	ractor in event of non deployment words Rs. Fifteen thousand per month GST. However, after issue on of GST is to be paid by covered from the bill of the
1 Clau Exter for bu	Purify Grade Diplose-37 (and of Guilding see 42)	alification of Technical presentative duate Engineer Or loma Engineer (i) SST (Goods and and construction Schedule / st cement.	Civil services Ton works.	Principal Technical Representative [Project Planning / Site / billing Engineer] Fax) payable by contract	2 Years Or 5 Years 100% [Rat of detailed departmer contractor	1 No. es shall be in a guidelines / ot (BSNL), the estable of the control of the	Figures Rs. 15,000/- per month Inclusive of 100% I rules, if a portion same shall be re- rinted by CPWD w	ractor in event of non deployment words Rs. Fifteen thousand per month GST. However, after issue on of GST is to be paid by covered from the bill of the
1 Clau Exter for bu	Purify Grade Diplose-37 (and of Guilding see 42)	alification of Technical presentative duate Engineer Or Ioma Engineer (i) SST (Goods and g and construction Schedule / st cement.	Civil services Ton works.	Principal Technical Representative [Project Planning / Site / billing Engineer] Fax) payable by contract or determining theoretical	2 Years Or 5 Years 100% [Rat of detailed department contractor I quantities of	1 No. es shall be in a guidelines / ot (BSNL), the estable of the control of the	Figures Rs. 15,000/- per month Inclusive of 100% I rules, if a portion same shall be re- rinted by CPWD w	ractor in event of non deployment words Rs. Fifteen thousand per month GST. However, after issue on of GST is to be paid by covered from the bill of the
1 Clau Exter	Purify Grade Diplose-37 (and of Guilding see 42)	alification of Technical presentative duate Engineer Or Ioma Engineer (i) SST (Goods and g and construction Schedule / st cement.	civil services on works. atement for the missible or the missi	Principal Technical Representative [Project Planning / Site / billing Engineer] Fax) payable by contract or determining theoretical at theoretical quantities timated cost put to tender:	2 Years Or 5 Years 100% [Rat of detailed department contractor I quantities of	1 No. es shall be in a guidelines / ot (BSNL), the estable of the control of the	Figures Rs. 15,000/- per month Inclusive of 100% I rules, if a portion same shall be re- rinted by CPWD w	Rs. Fifteen thousand per month GST. However, after issue on of GST is to be paid by covered from the bill of the

b)	Steel reinforcement and structural steel sections for each diameter, section and category.	2 % minus
Star price	es to be considered for Escalation and Recoveries:	
S. No.	Material	Star Price (Rate in Figures and Words)
1	For Cement (OPC 43 grade only)	6,988/-=(Rs. Six Thousand Nine Hundred Eighty Eight only) per Metric Tonne
2 (a)	For Mild steel	Not Applicable
2 (b)	For Reinforcement Steel conforming to BIS1786 (Fe 415 Grade)	Not Applicable
2 (c)	For Reinforcement Steel TMT bars (Secondary Producer)	Rs.42,725/-=(Rs Forty Two Thousand Seven Hundred twenty five only) per Metric Tonne
2(d)	For Galvanized steel	Not Applicable

^{***} The base rates of the material to be taken for MRJ is to be stipulated as star prices above under Clause-10CA.

Executive Engineer (Civil) BSNL Civil Division Sunder Nagar

Amendments to Clause 37 & 38 of GCC 2006

Sr. No.	Existing Provision	Modified Provision		
1	Page 12 of GCC (item 15 of General Rules & Directions) 15.Sales tax, purchase tax, turnover tax or any other tax on material in respect of the contract shall be payable by the contractor and government will not entertain any claim whatsoever in respect of the same.	Page 12 of GCC (item 15 of General Rules & Directions) 15.GST [up to the extent mentioned in Schedule-F under Clause-37(i)], Sales Tax/VAT, purchase tax, turnover tax or any other tax on material in respect of the contract shall be payable by the contractor and BSNL will not entertain any claim whatsoever in respect of the same.		
2	Clause 37	Clause 37		
	Levy / Taxes payable by contractor (i) Sales Tax/VAT [including Service Tax up to the extent mentioned in Schedule-F under Clause-37(i)], Building and other construction workers Welfare Cess or any other tax or cess in respect of this contract shall be payable by the contractor and BSNL shall not entertain any claim whatsoever in this respect.	Levy / Taxes payable by contractor (i) Sales Tax/VAT [including GST up to the extent mentioned in Schedule-F under Clause-37(i)], Building and other construction workers Welfare Cess or any other tax or cess in respect of this contract shall be payable by the contractor and BSNL shall not entertain any claim whatsoever in this respect.		
3	Clause 38	Clause 38		
	Conditions for reimbursement of levy/taxes if levied after receipt of tenders (i) All tendered rates shall be inclusive of all taxes and levies [including Service tax up to the extent mentioned in schedule-F under Clause-37(i)] payable under respective statutes. However, if any further tax or levy or cess is imposed by statute, after the last stipulated date for the receipt of tender including extensions, if any, and the contractor thereupon necessarily and properly pays such taxes/levies, the contractor shall be reimbursed the amount so paid, provided such payments, if any, is not in the opinion of the Superintending Engineer (whose decision shall be final and binding on the contractor) attributable to delay in execution of work within the control of the contractor.	Conditions for reimbursement of levy/taxes of levied after receipt of tenders (i) All tendered rates shall be inclusive of all taxes and levies [including GST up to the extent mentioned in schedule-F under Clause-37(i)] payable under respective statutes. However, if any further tax or levy or cess is imposed by statute, after the last stipulated date for the receipt of tender including extensions, if any, and the contractor thereupon necessarily and properly pays such taxes/levies, the contractor shall be reimbursed the amount so paid, provided such payments, if any, is not in the opinion of the Superintending Engineer (whose decision shall be final and binding on the contractor) attributable to delay in execution of work within the control of the contractor.		

SH: CIVIL WORK

SPECIAL CONDITIONS

1.0 General:

- 1.1. The eligible tenderers of civil component will quote rates for various items of electrical components of work also. The lowest tender shall be decided after adding quotes for Civil work component (Part B) and Electrical component (Part C). The quoted rates for various items in the tender shall be inclusive of all terms and conditions such as additional conditions, special conditions, particular specifications etc. and for adherence to all terms, conditions and specifications mentioned in the tender document. No extra payment shall be made to the contractor on account of this. Any infringement and/or breach of these specification and condition(s) etc. shall render the contractor liable for action(s) under various clauses of the contract and such action stipulated in conditions therein.
- 1.2 GST [up to the extent mentioned in Schedule F under clause 37(i)], Sales tax / VAT, purchase tax, turnover tax or any other tax on materials in respect of this contract shall be payable by the Contractor and BSNL will not entertain any claim whatsoever in respect of the same.
- 1.3. The Contractor shall make his own arrangements for electricity required for the execution of the work. Necessary payment shall be made by the Contractor directly to the department concerned. In case the statutory authority fails to sanction the electric connection or delays the sanction of electric connection, the Contractor shall make his own arrangements by providing diesel generators of adequate capacity at his own cost. No delay on this account shall be accepted. Nothing extra shall be paid on this account.
- 1.4. The Contractor shall make his own arrangement for backup power at his own cost. No interruption of work shall be accepted due to power failure. Nothing extra shall be paid on this account.
- 1.5. No walls or terraces shall be cut for making any opening after water proofing has been done without written approval of Engineer-in-Charge. When permitted cutting of water proofing work shall be done very carefully so that other portion of water proofing is not damaged. On completion of work at such place the water proofing work shall be made good and ensured that the opening / cutting is made fully water proof as per contract specifications/ directions of Engineer-in-Charge. Nothing extra shall be payable on this account.
- No structural member shall be chased or cut without the written permission of the Engineer-in-Charge.
- 1.7. The order or preference in case of any discrepancy as indicated in condition No.8.1 under "Conditions of Contract" given in the General Conditions of Contract for BSNL **2006** form may be read as the following:
 - (i) Nomenclature of items as per schedule of quantities.
 - (ii) Particular specifications, special and additional conditions etc., as stipulated in tender document.
 - (iii) Contract clauses of Standard BSNL Contract form 2006 as corrected and modified up to last date of receipt of tenders.
 - (iv) CPWD Specifications.
 - (v) Architectural Drawings.
 - (vi) Indian Standard Specifications.
 - (vii) Sound Engineering Practice.
 - (viii) Manufacture Specifications.
 - (ix) Decision of Engineer-in-Charge shall be final and binding.

A references made to any Indian Standard Specifications in these documents, shall imply to the latest version of that standard, including such revisions / amendments as issued by the Bureau of Indian Standards up to last date of receipt of tenders. The contractor shall keep at his own cost all such publications of relevant Indian Standard applicable to the work at site.

- 1.8. The Contractor shall be bound to follow the instructions and restrictions imposed by the Local Administration / Police authorities on the working and /or movement of labour, materials etc. and or due to less/ restricted working hours or any detours in movement of vehicles. Nothing extra shall be payable on this account.
- 1.9. The Contractor shall take all precautions to avoid accidents by exhibiting necessary caution boards such as day and night boards, speed limit boards and flags, red lights and providing barriers, etc. He shall be responsible for all damages and accidents caused due to negligence on his part. No hindrance shall be caused to traffic during the execution of work. Nothing extra shall be payable on this account.
- 1.10. All material shall only be brought at site as per programme finalized with the respective Engineer- Charge. Any pre-delivery of the material, not required for immediate consumption shall not be accepted and thus not paid for.
- 1.11. Large scale details and manufacture's dimensions for material to be incorporated shall take precedence over small scale drawings.
- 1.12. No foreign exchange shall be made available by the BSNL for the purchase of equipments, plants, machinery, material of any kind or other items required to be carried out in execution of work.
- 1.13. Construction spoils, including bituminous material and other hazardous materials, must not be allowed to contaminate watercourses and the dump sites for such material must be secured so that they should not leach into the ground water. Nothing extra shall be payable on this account.

- 1.14. In accordance with requirements of the pollution control board, the DG sets installed during construction activity must be provided with necessary acoustic measures and exhaust pipe above the height of nearest tall building. The vehicles must possess necessary Pollution certificate. Nothing extra shall be payable on this account.
- 1.15 In accordance with requirements of the pollution control board, the diesel generator sets to be used during construction phase shall be low sulphur diesel type and shall conform to E(P) Rules prescribed for air and noise emission standards. Nothing extra shall be payable on this account.
- 1.16. In accordance with requirements of the pollution control board, the safety equipments like boots, helmets, safety belts, gloves etc. must be provided for the workers and best and safe engineering practices must be adopted. Nothing extra shall be payable on this account.
- 1.17 In accordance with requirements of the pollution control board, the stipulations under the provisions of Water (Prevention and Control of Pollution) Act, 1974, the Air (Prevention and control of Pollution) Act 1981, the Environment (Protection) Act, 1986, the Public Liability (Insurance) Act, 1991 and EIA Notification, 2006 shall be ensured. Nothing extra shall be payable on this account.
- 1.18. If, any levy / fine is imposed by the regulatory authorities / inspecting authorities on account of violation of the above specified norms, the same shall be recovered from the contractor.
- 1.19 Except for the items, for which Particular Specifications are given or where it is specifically mentioned otherwise in the description of the items in the schedule of quantities, the work shall generally be carried out in accordance with the "CPWD Specifications" (Refer Schedule F) and as per instructions of Engineer-in-Charge. Wherever CPWD Specifications are silent, the latest IS Codes / Specifications shall be followed and the rates should be all inclusive.
- 1.20 Any reference made to any Indian Standard Specifications, shall imply to the latest version of that standard, including such revisions / amendments as issued by the Bureau of Indian Standards up to last date of receipt of tenders. The Contractor shall keep at his own cost all such publications including relevant Indian Standard applicable to the work at site.
- 1.21 The work shall be executed and measured as per metric dimensions given in the Schedule of Quantities, drawings etc. (FPS units wherever indicated are for guidelines only).
- 1.22 The work should be planned in a systematic manner so that chase cuttings in the walls, ceilings and floors is minimized. Wherever absolutely essential, the chase shall be cut using chase cutting machines. Chases will not be allowed to be cut using hammer / chisel. The electrical boxes should be fixed in walls simultaneously while raising the brick work. The contractor shall ensure proper co-ordination of various disciplines viz. sanitary & water supply, horticulture & electrical etc.
- 1.23 All the hidden items such as water supply lines, drainage pipes, conduits, sewers etc. are to be properly tested before covering.
- 1.24 Samples including brand / quality of materials and fittings to be used in the work shall be got approved from the Engineer-in-Charge, well in advance of actual execution and shall be preserved till the completion of the work.
- 1.25 Equipment like concrete pump excavators/Transit mixer etc. shall be allowed to be moved away from the site when, in written opinion of Engineer-in-Charge, the same are no longer required at site of work.
- 1.26 The contractor, his agents / representative, workman etc. shall strictly observe orders pertaining to fire precautions prevailing in the area.
- 1.27 Contractor(s) shall study the soil investigation report for the site, available in the office of the Engineer-in-Charge and satisfy himself about complete characteristics of soil and other parameters at site. However, no claim on the alleged inadequacy or incorrectness of the soil data supplied by the department shall be entertained.
- 1.28 The tenderer shall see the approaches to the site. In case any approach from main road is required at site or existing approach is to be improved and maintained for cartage of materials by the contractor, the same shall be provided, improved and maintained by the contractor at his own cost.
- 1.29 Contractor shall take all precautionary measures to avoid any damage to adjoining property. All necessary arrangement shall be made at his own cost.
- 1.30 The contractor shall take all precautions to avoid accidents by exhibiting necessary caution boards day and night, speed limit boards, red flags, red lights and providing barriers. He shall be responsible for all damages and accidents caused to work due to negligence on his part. No hindrances shall be caused to traffic, during the execution of the work.
- 1.31 The contractor shall take instructions from the Engineer-in-Charge regarding collection and stacking of materials at any place. No excavated earth or building rubbish shall be stacked on areas where other buildings, roads, compound wall, services etc are to be constructed.

- 1.32 The contractor shall provide at his own cost suitable weighing, surveying and levelling and measuring arrangements as may be necessary at site for checking. All such equipments shall be got calibrated in advance from laboratory, approved by the Engineer-in-Charge. Nothing extra shall be payable on this account.
- 1.33 Contractor shall provide permanent bench marks, flag tops and other reference points for the proper execution of work and these shall be preserved till the end of work. All such reference points shall be in relation to the levels and locations, given in the Architectural and plumbing drawings.
- 1.34 Water tanks, taps, sanitary, water supply and drainage pipes, fittings and accessories should conform to byelaws and municipal body / corporation where CPWD Specifications are not applicable. The contractor should get the materials (fixtures/fittings) tested by the Municipal Body / Corporation authorities wherever required at his own cost.
- 1.35 The work shall be carried out in accordance with the Architectural drawings and Structural drawings, to be issued from time to time, by the Engineer-in-Charge. Before commencement of any item of work, the contractor shall correlate all the relevant architectural and structural drawings issued for the work, nomenclature of items, specifications etc. and satisfy himself that the information available there from is complete and unambiguous. The figures & the written dimensions of the drawing shall supersede the measurement by scale. The discrepancy, if any, shall be brought to the notice of the Engineer-in-Charge for immediate decision before execution of the work. The contractor alone shall be responsible for any loss or damage occurring by the commencement of work on the basis of any erroneous and/ or incomplete information and no claim, whatsoever shall be entertained on this account.
- 1.36 The Architectural drawings other than those indicated in nomenclature of items are only indicative of the nature of the work and materials/fittings involved unless and otherwise specifically mentioned.
- 1.37 The contractor should submit the shop drawing of staging and shuttering for approval of Engineer-in-Charge before actually commencing the execution of work under the item. Nothing extra shall be payable on this account.
- 1.38 Other agencies may also simultaneously execute and install the works and the contractor shall afford necessary facilities for the same. The contractor shall leave such recesses, holes, openings, trenches etc. as may be required for such related works (for which inserts, sleeves, brackets, conduits, base plates, clamps etc. shall be available as specified elsewhere in the contract) and the contractor shall fix the same at the time of casting of concrete, stone work and brick work, if required, and nothing extra shall be payable on this account.
- 1.39 The contractor shall conduct his work, so as not to interfere with or hinder the progress or completion of the work being performed by other contractor(s) or by the Engineer-in-Charge and shall as far as possible arrange his work and shall place and dispose off the materials being used or removed so as not to interfere with the operations of other contractor or he shall arrange his work with that of the others in an acceptable and coordinated manner and shall perform it in proper sequence to the complete satisfaction of others.
- 1.40 All material shall only be brought at site as per program finalized with the Engineer-in-Charge. Any pre-delivery of the material not required for immediate consumption shall not be accepted and thus not paid for.
- 1.41 The contractor shall procure the required materials in advance so that there is sufficient time for testing of the materials and approval of the same before use in the work.
- 1.42 Existing drains, pipes, cables, over-head wires, sewer lines, water lines and similar services encountered in the course of the execution of work shall be protected against the damage by the contractor at his own expense. The contractor shall not store materials or otherwise occupy any part of the site in a manner likely to hinder the operation of such services. In case temporary supporting/shifting of such services is required to facilitate the work, the same shall be done by the contractor at no extra cost.
 - In case the existing services are to be shifted permanently, then before dismantling the existing services, alternate/diversion of service lines has to be laid by the contractor so that there is no interruption in use of existing services. The contractor has to plan the alternate suitable route for diversion/shifting of service lines and get the same approved from the Engineer-in-Charge before starting shifting of services. Nothing extra shall be paid except the payment of dismantling and laying of new service lines as per conditions of contract.
- 1.43 The contractor shall be responsible for the watch and ward / guard of the buildings, safety of all fittings and fixtures including sanitary and water supply fittings and fixtures provided by him against pilferage and breakage during the period of installations and thereafter till the building is physically handed over to the department. No extra payment shall be made on this account.
- 1.44 The contractor shall be fully responsible for the safe custody of materials brought by him/ issued to him even though the materials may be under double lock key system.
- 1.45 For construction works which are likely to generate malba / rubbish to the tune of more than a tempo / truck load, contractor shall dispose of malba, rubbish & other unserviceable materials and wastes at his own cost to the notified /specified dumping ground and under no circumstances these shall be stacked / dumped even temporarily, outside the construction premises.
- Surplus excavated earth which is beyond the requirement of the B.S.N.L. /Client Department shall have to be disposed of the contractor at his own cost beyond the municipal limits or at places identified by the local bodies or as directed by the Engineer-in-Charge after obtaining written permission of the Engineer-in-Charge and no payment will be made by the Department for such disposal of this surplus excavated earth.

- 1.47 With each Running Bill, the details of test carried out shall be submitted by the contractor as per perform given in the document.
- 1.48 On completion of work, the contractor shall submit at his own cost four prints of "as built" drawings to the Engineer-in-Charge. These drawings shall have the following information.
 - a) Run off of all piping and their diameters including soil, waste pipes and vertical stacks.
 - b) Ground and invert level of all drainage pipes together with locations of all manholes and connections, up to out fall.
 - c) Run off of all water supply lines with diameters, location of control valves, access panels etc. In case the contractor fails to supply "as built drawing" aforesaid within 30 days of the date of completion, then the recovery @ Rs.10, 000/- each for such set of drawings shall be made from the contractor's final bill.
- 1.49 In the item of providing and fixing precast reinforced cement concrete in shelves the cost of cutting chases and making good the same shall be inclusive in the item and nothing extra shall be paid on this account.
- 1.50 In the item of finishing walls with exterior paint, only the plain/flat area shall be measured for payment and nothing extra shall be paid on account of pointed wall surface.

2.0 Rates:

Unless otherwise specified in the schedule of quantities, the rates for respective items shall be all inclusive and apply to the following: -

- (i) All lifts & all heights, floors including terrace, leads and depths.
- (ii) All labour, material, tools and plants and other inputs involved in the execution of the item.
- (iii) Any of the conditions and specifications mentioned in the tender documents.
- (iv) Pumping / bailing out surface water / rain water / sub soil water, if necessary for any reason.
- (v) Providing sunk flooring in bath-rooms, kitchen, etc.
- (vi) Any legal or financial implications resulting out of disposal of earth, unserviceable building materials, debris, malba, if any.
- (vii) Payment of Royalty at the prevailing rates, if any, on the boulders, metal, shingle, sand and bajri etc. or any other material collected by him for the work direct to revenue authorities.
- (viii) Performance test of the entire installation(s) before the work is finally accepted.
- (ix) Any cement slurry added over base surface (or) for continuation of concreting for better bond is deemed to have been built in the items.
- (x) All incidental charges for cartage, storage and safe custody of materials brought to site.

3.0 SECRECY

- 3.1 The contractor shall take all steps necessary that all persons employed on any work in connection with the contract have notice that the Indian Official Secrets Act 1923 applies to them & will continue so to apply even after the execution of such works under the contract.
- 3.2 The contract in confidential and must be strictly confirmed to the contractor's own use (except so far as confidential disclosure to sub-contractors or suppliers as necessary) and to the purpose of the contract.
- 3.3 All documents, copies thereof & extracts there from furnished to the contractor shall be returned to the Engineer-in-Charge on the completion of the work / works or the earlier determination of the contract.

4.0 <u>LABOUR AND SECURITY</u>

- 4.1 The contractor shall employ only Indian Nationals after verifying their antecedents and loyalty. The contractor shall, on demand submit list of his agents, employees and work people concerned & shall satisfy as to the bona fides of such people.
- 4.2 The contractor & his work people shall observe all relevant rules regarding security promulgated in which work is to be carried out by the Controlling Administrative Authority of the Client Department (hereinafter referred to as "Administrator").
- 4.3 The contractor, his representative, workman shall be allowed to enter through specified gates & timing as laid down by the controlling authority. They shall be issued an identity card or an individual pass in accordance with the standing rules & regulations & they should possess the same while working. The contractor shall be responsible for the conduct & actions of his workman, agents / representatives.

4.4 Normally contractor shall be allowed to carryout work between 7 AM to 6 PM. However, he may also be allowed to carryout the work beyond 6 PM & up to 7 AM if the site conditions / circumstances so demand with prior written permission from the "Administrator". However, if the work is carried out in more than one shift or at night, no claim on this account shall be entertained.

5.0 OFFICE INFRASTRUCTURE:

The agency shall setup quality assurance lab for testing of material at site office including engagement of necessary personnel and infrastructure for the same. For quality assurance lab necessary equipment for testing of cubes, bricks, arrangement of silt test, bulkiness of sand, moisture content test, slump test on concrete. Instruments like electronic weighing machine, verniercalliper, sieves sets, cement concrete moulds 15x15x15cm (Two set of 6 Nos.) slump test apparatus, depth gauge 20cm, rubber hammer, steel foot plate etc shall be available at lab.

6.0 PROGRAM CHART: -

- 6.1 The Contractor shall prepare an integrated program chart for the execution of work, showing clearly all activities from the start of work to completion, with details of manpower, equipment and machinery required for the fulfillment of the program within the stipulated period or earlier and submit the same for approval of the Engineer-in-Charge within 15 days of the issue of letter of acceptance for the contract.
- The work has to be completed in stages as indicated in the Milestones under clause 5 and the program should be prepared in such a manner to achieve these Milestones as indicated therein or even earlier.
- 6.3 The program chart should include the following:
 - a) Descriptive note explaining sequence of various activities.
 - b) Network (PERT / CPM / BAR CHART) which will indicate resources in financial terms, manpower and specialized equipment for every important stage.
 - c) Program for procurement of materials by the contractor.
 - d) Program of procurement of machinery / equipments having adequate capacity, commensurate with the quantum of work to be done within the stipulated period, by the contractor.
- If at any time, it appears to the Engineer-in-Charge that the actual progress of work does not conform to the approved program referred above, the contractor shall produce a revised program showing the modifications to the approved program by additional inputs to ensure completion of the work within the stipulated time.
- The submission of revised program or approval by the Engineer-in-Charge of such program or the furnishing of such particulars shall not relieve the contractor of any of his duties or responsibilities under the contract. This is without prejudice to the right of Engineer-in-Charge to take action against the contractor as per terms and conditions of the agreement.

 Notwithstanding the fact that the contractor will have to pay to the labourers and other staff engaged directly or indirectly on the work according to the provisions of the labour regulations and the agreement entered upon and/or extra amounts for any other reason.

7.0 PROGRESS AND MONITORING OF WORK:

Contractor shall give the Engineer-in-Charge on the 10th day of each month, progress report of the work done during the previous month. Such progress report will include the project progress summary, work progress (planned v/s. actual), PERT chart, milestone status, financial progress status, manpower deployment status, important materials consumed, materials at site at the beginning of the month, materials consumed during the month and the balance quantities at the end of month and progress of the work stating the reasons for shortfall, if any including the steps and measures to be taken for making good the shortfall in the succeeding period. Non submission of aforesaid progress report shall make contractor liable for action under breach of contract conditions.

8.0 **SAMPLE OF MATERIALS:-**

All materials and fittings brought by the contractor to the site for use shall conform to the samples approved by the Engineer-in-Charge which shall be preserved till the completion of the work. If a particular brand of material is specified in the item of work in Schedule of Quantity, the same shall be used after getting the same approved from Engineer-in-Charge. Wherever brand / quality of material is not specified in the item of work, the contractor shall submit the samples as per List of Preferred Makes stated in the document for approval of Engineer-in-Charge. For all items, ISI Marked materials and fittings shall be used with the approval of Engineer-in-Charge. Wherever ISI Marked material / fittings are not available, the contractor shall submit samples of materials / fittings manufactured by firms of repute conforming to relevant Specifications or IS codes for the approval of Engineer-in-Charge.

- 8.2 To avoid delay, contractor should submit samples as stated above well in advance so as to give timely orders for procurement. If any material, even though approved by Engineer-in-Charge is found defective or not conforming to specifications shall be replaced / removed by the contractor at his own risk & cost.
- 8.3. BIS marked materials, except otherwise specified, shall also be subjected to quality test besides testing of other materials as per the specifications described for the item/material. Wherever BIS marked materials are brought to the site of work, the contractor shall, furnish manufacturer's test certificate or test certificate from approved testing laboratory to establish that the material procured by the contractor for incorporation in the work satisfies the provisions of specifications relevant to the material and / or the work done.

BIS marked items (except cement & steel for which separate provisions have been made in para 10.0) required on the work shall be got tested, for only important tests, which govern the quality of the product, as decided by the Engineer-in-Charge. For mandatory test, frequency shall be as specified in CPWD Specifications.

8.4 For certain items, if frequency of tests is neither mentioned in the CPWD Specifications & BIS, then tests shall be carried out as per decision of Engineer-in-Charge.

9.0 CEMENT & STEEL REINFORCEMENT

9.1 Contractor has to produce manufacturers test certificate for each lot of Cement & Steel Reinforcement procured at site.

9.2 **CEMENT:-**

- 9.2.1 The contractor shall procure 43 Grade Ordinary Portland Cement required in the work from reputed manufacturers of cement as per the approved make in 50 kg bags bearing manufacturer's name and ISI marking, along with manufacturers test certificate for each lot.
- 9.2.2 OPC bags shall be stored in godown to be constructed by the contractor at his own cost as per sketches given in C.P.W.D Specifications having weather-proof roofs and walls. The size of the cement godown is indicated in the sketches for guidance. The actual size of godown shall be as per site requirements and nothing extra shall be paid for the same.
- 9.2.3 If the quantity of cement actually used in the work is found to be more than the theoretical quantity of cement including authorized variation, nothing extra shall be payable to the contractor on this account. In the event of it being discovered that after the completion of the work, the quantity of cement used is less than the quantity ascertained as herein before provided (allowing variation on the minus side as stipulated in Clause 42), the cost of quantity of cement not so used shall be recovered from the contractor as specified in schedule. Decision of the Engineer-in-Charge in regard to theoretical quantity of cement which should have been actually used as per the schedule and recovered at the rate specified, shall be final and binding on the contractor.

For non-scheduled items, the decision of the Superintending Engineer regarding theoretical quantity of the cement, which should have been actually used, shall be final and binding on the contractor.

9.2.4 In case the contractor brings surplus quantity of cement the same shall be removed from the site after completion of work by the contractor at his own cost after approval of the Engineer-in-Charge.

9.3STEEL REINFORCEMENT: -

- 9.3.1 The contractor shall procure Thermo Mechanical Treated (TMT) Steel Reinforcement bars (of Fe 500 grade) as per IS 1786 from approvedPrimary / Secondary producers by ministry of steel.
 - The contractor shall obtain Original Vouchers and Test Certificates and furnish the same to the Engineer-in-Charge in respect of all the lots of steel brought by him from approved supplier to the site of work. The original vouchers and test certificates shall be kept on record in the site office by the Site staff.
- 9.3.2 The steel reinforcement shall be brought in bulk supply of 20tonne or more or as decided by the Engineer-in-Charge along with manufacturer test certificate for each lot.
- 9.3.3 The steel reinforcement shall be stored by the contractor at site of work about 30cm. to 45 cm. above ground. A coat of cement wash shall be given to steel bars when stored at site for long duration so as to prevent corrosion. Nothing extra shall be paid on these accounts. Bars of different sizes and lengths shall be stored separately to facilitate easy counting and checking.
- 9.3.4 In case the contractor bring surplus quantity of steel, the same after completion of the work will be removed from the site by the contractor at his own cost after approval of the Engineer-in- Charge. Nothing shall be paid on this account.
- 9.3.5 Reinforcement including authorized spacer bars and lap pages shall be measured in length of different diameters as actually (not more than as specified in the drawings) used in the work nearest to a centimeter. **Wastage and unauthorized overlaps shall not be measured.**

10.0 ENGAGING SPECIALISED AGENCIES FOR WORKS: -

- 10.1 The Contractor shall engage specialized agency unless otherwise approved by any Government Department having adequate technical capability and experience of having executed at least one work of similar items of 80% or more magnitude or two works of similar items of minimum 60% magnitude or three works of similar items of minimum 40% magnitude individually for executing the following items of the work and/or any other items of work where specialized firm is required to be engaged as per contract conditions. For determining the required magnitude, the value of the work executed may be suitably enhanced with the prevailing approved cost index.
 - i) Water proofing treatment work of all types.
 - ii) Fabrication and erection of Skylights with necessary fittings
 - iii) Pile work
 - iv) Stainless steel railing
 - v) False ceiling and wall paneling
 - vi) Glass partitions
- 10.2 The Specialized agency for the work shall be got approved from the Engineer-in-Charge well before actual commencement of the item of work. The contractor shall submit the list of specialized agencies, proposed to be engaged by him along with necessary performance certificates, within 15 days from the date of issue of acceptance letter to substantiate technical capability and experience of the agency for prior approval of the Engineer-in-Charge.
- 10.3 The conditions of approval of specialized agency shall be final and binding on the contractor and he shall comply with such conditions of approval.

11.0 QUALITY ASSURANCE & QUALITY CONTROL

- 11.1. The work shall be subjected to a strict quality assurance and quality control as prescribed in the tender documents and as may be further required by the Engineer-in-charge.
- 11.2. The Contractor shall be required to carry out all mandatory tests as per the CPWD specifications and other tests prescribed in this tender document. In addition, the Engineer-in-charge may at his discretion, order carrying out additional tests, as may be felt necessary by him.
- 11.3. Tests shall be carried out from one of the following laboratories/test houses as shall be decided by the Engineer in- charge.
 - i. National Test House. Delhi
 - ii. Shri Ram Institute for Industrial Research, New Delhi
 - iii. CBRI, Roorkee
 - iv. PEC, Chandigarh.
 - v. Indian Institute of Technology, Roorkee/Delhi
 - vi. NABL accredited labs.
 - vii. Any other labs approved by O/o CE (C), BSNL Chandigarh/Shimla. BSNL
- 11.4 The agency shall essentially deploy equipment & machinery (owned or hired) as per the list given the document, in addition to any other T & P required to achieve the Milestone(s) at his own cost

List of Preferred Makes for Civil & Public Health Works

SN	Name of Materials	Preferred Makes
1	Ordinary Portland cement/ Pozzolona Cement (Grey) - 43 Grade	ACC, Ultratech, Gujarat Ambuja, Vikram, Birla, JK Cement, JP Rewa & Shree.
2	RMC	Ultratech, Lafarge, ACC
3	White Cement	Birla White / J. K. White
4	Reinforcement Steel	Secondary Producers: Rathi, Kamdhenu, Jai Bharat, Amba
5	Veneered Particle Board	Novapan, Kitply & Greenply
6	Laminated Particle Board	Sunmica, Century, Greenply, Novapan & Kitply
7	uPVC sections material & fittings	Veka, Encraft
8	Pressed Steel Frames	Synergy Thrislington.
9	Water Proofing Compound	Fosroc, Cico, Pidilite. Impermo by M/s Snowcem & Sika.
10	PVC Pipe & Fittings	Supreme, Finolex& Prince.
11	Acrylic Distemper / Plastic Paint / OBD	ICI & Asian Paints (Tractor Acrylic)
12	Synthetic Enamel Paint	ICI (Dulux Gloss) & Asian Paint (Premium Apcolite Gloss)
13	Steel Primer	ICI & Asian Paints
14	Wood Primer	ICI & Asian Paints
15	Mosaic Glass Tiles	Coral, Mridul, Italia &Bisaza

Nuis / Bolis & Screws GKW & AuJ	16	Dash / Anchoring Fasteners	HILTI / Fischer		
Viking & Prayeg.	17	Nuts / Bolts & Screws	GKW & Atul		
Admixtures Fosroc& Sika 1 Vifeous China Sanitary Ware Paryware, Hindware&Cera 2 Plastic Seat Cover of W.C. (ISI Mark only) Commander, Hindware, Admiral, Parryware&Cera 3 CP Fittings / Mixer Pillar taps Washers ESSCO/ESS ESS continental series or equivalent 4 CP Accessories ESSCO/ESS ESS continental series or equivalent 5 Centrifugally Cast (Spun) Iron Pipes (Class LA) Electro Steel, Kesoram& Jindal. 6 Centrifugally Cast (Spun) Iron Pipes (Class LA) Electro Steel, Kesoram& Jindal. 7 G.I. Pipes Jinda (Hissar) & TATA 8 G.I. Fittings Unik& UU 9 Gun metal Valves Leader, Zoloto& Sant 10 Stone Ware Pipes & Gully Traps Prefect, Hind, Crystal or ISI marked S.W.Pipes. 31 Mirror Glass Atul, Modi Guard & Saint Gobain 32 Grouting Compound Bal endura&Latticrete 33 Aluminium Sections Hindslor, Jindal 4 Aluminium Fittings Ebco, Dorma, Ozone, Classic &Everite 34 Aluminium Fittings Ebco, Dorma, Ozone, Classic &Everite 35 Hydraulic Door Closer Dorset, Dorma, Ozone, Hardwyn&Everite 36 Filor Springs Ebco, Dorma, Ozone 37 Exterior Paint Asian, Nerolac, Berger &Snowcem India 38 Friction Hings Zipco, AKS, Dorma & Earl Bihari 39 Reflective Sun Control Film Garware 40 6 mm / 12 mm thick Ply Century, Duro& Green 41 Telescopic Drawer Channel Earl Bihari & Hettich 42 Ceramic Glazed Tiles (Matt Finish) Nitco, Johnson, Naveen, Marbito, Orient bell, Asian & Kajaria 44 Glazed Vitrified Tiles Rectified (Pure Matt Finish) Nitco, Johnson, Naveen, Marbito, Orient bell & Asian, Restile 45 Glass including high performance thermal glass Saint Gobain, Modi Guard & AIS 46 Brass Locks Dorse, Crust, Kich& Godrej 47 12 mm Particle Board Novapan, Kitply, greenply, Euro 48 19 mm Block Board Century, Green Ply &Archid 49 Poly Carbonate Sheet GE 50 Acoustical Wall Paneling Armstrong / Armstrong / Arnutone 51 Silicon Sealant Down Corning, GE & 3M	18	Stainless Steel Sink (Out of Salem Steel only)	DIAMOND, NIRALI, Neelkant& Jayna		
21 Vitreous China Sanitary Ware Parryware, Hindware, Admiral, Perrywere&Cera 22 Plasifs Seat Cover of W.C. (ISI Mark only) Commander, Hindware, Admiral, Perrywere&Cera 23 CP Fittings / Mixer Pillar taps Washers ESSCO/ESS ESS continental series or equivalent 24 CP Accessories ESSCO/ESS ESS continental series or equivalent 25 Centrifugally Cast (Spun) Iron Pipes NECO, or any other B.I.S marked Product & Fittings 26 Centrifugally Cast (Spun) Iron Pipes (Class LA) Electro Steel, Kescram& Jindal. 27 G.I. Pitings Jindal (Hissar) & TATA 28 G.I. Fittings Unlik& UU 29 Gun metal Valves Leader, Zoloto& Sant 30 Stone Ware Pipes & Gully Traps Prefect, Hind, Crystal or ISI marked S.W.Pipes. 31 Mirror Glass Atul, Modi Guard & Saint Gobain 32 Grouting Compound Bal endura& Latticrete 33 Aluminium Fittings Ebco, Doma, Ozone, Classic & Everite 34 Aluminium Fittings Ebco, Doma, Ozone, Hardwyn& Everite 35 Hydraulic Door Closer Dorset, Doma, Ozone, Hardwyn& Everite 36	19	Float Valve	Viking &Prayag.		
Plastic Seat Cover of W.C. (ISI Mark only) Commander, Hindware, Admiral, Parryware&Cera	20		Fosroc& Sika		
23 CP Fittings / Mixer Pillar taps Washers ESSCO/ESS ESS continental series or equivalent 24 CP Accessories ESSCO/ESS ESS continental series or equivalent 25 Centrifugally Cast (Spun) Iron Pipes (Class LA) IElectro Steel, Kesoramă, Jindal. 26 Centrifugally Cast (Spun) Iron Pipes (Class LA) IElectro Steel, Kesoramă, Jindal. 27 G.I. Pipes Jindal (Hissar) & TATA 28 G.I. Fittings Unikă, UU 29 Gun metal Valves Leader, Zoloto& Sant 30 Stone Ware Pipes & Gully Traps Prefect, Hind, Crystal or ISI marked S.W.Pipes. 31 Mirror Glass Atul, Modi Guard & Saint Gobain 32 Grouting Compound Bal endura&Latticrete 33 Aluminium Sections Hindalco, Jindal 34 Aluminium Fittings Ebco, Dorma, Ozone, Classic &Everite 35 Hydraulic Door Closer Dorset, Dorma, Ozone, Hardwyn&Everite 36 Floor Springs Ebco, Dorma, Ozone, Bain, Nerolac, Berger &Snowcem India 38 Friction Hinges Zipco, AKS, Dorma & Earl Bihari 39 Reflective Sun Control Film Garware 40 6 mm / 12 mm thick Ply Century, Duro& Green 41 Telescopic Drawer Channel Earl Bihari & Hettich 42 Ceramic Glazed Tiles (Matt Finish) Nitco, Johnson, Naveen, Marbito, Orient bell, Asian, Restile 44 Glazed Vitrified Tiles Rectified (Pure Matt Finish) Nitco, Johnson, Naveen, Marbito, Orient bell & Asian, Restile 46 Brass Locks Dorset, Crust, Kich& Godrej 47 12 mm Particle Board Novapan, Kitply, greenply, Euro 48 19 mm Block Board Century, Green Ply &Archid 49 Poly Carbonate Sheet 50 Acoustical Wall Paneling Armstrong / Anutone 51 Silicon Sealant Dow Corning, GE & 3M	21	Vitreous China Sanitary Ware	Parryware, Hindware&Cera		
ESSCO/ESS ESS continental series or equivalent 25 Centrifugally Cast (Spun) Iron Pipes RECO, or any other B.I.S marked Product & Fittings 26 Centrifugally Cast (Spun) Iron Pipes (Class LA) Electro Steel, Kesoram& Jindal. 27 G.I. Pipes Jindal (Hissar) & TATA 28 G.I. Fittings Unik& UU 29 Gun metal Valves Leader, Zoloto& Sant 30 Stone Ware Pipes & Gully Traps Prefect, Hind, Crystal or ISI marked S.W.Pipes. 31 Mirror Glass Atul, Modi Guard & Saint Gobain 32 Grouting Compound Bal endura&Latticrete 33 Aluminium Sections Hindalco, Jindal 34 Aluminium Fittings Ebco, Dorma, Ozone, Classic &Everite Dorset, Dorma, Ozone, Classic &Everite Dorset, Dorma, Ozone, Hardwyn&Everite Ebco, Dorma, Ozone Exterior Paint Asian, Nerolac, Berger &Snowcem India Friction Hinges Zipco, AKS, Dorma & Earl Bihari Reflective Sun Control Film Garware Garware Gentury, Duro& Green Telescopic Drawer Channel Earl Bihari & Hettich Century, Duro& Green Telescopic Drawer Channel Earl Bihari & Hettich Gravarie Glazed Tiles (Matt Finish) Nitco, Johnson, Naveen, Marbito, Orient bell & Asian, Restile Glazed Vitrified Tiles Rectified (Pure Matt Finish) Nitco, Johnson, Naveen, Orient bell & Asian, Restile Glazed Vitrified Tiles Rectified (Satin Finish) Nitco, Johnson, Naveen, Orient bell & Asian, 46 Brass Locks Dorset, Crust, Kich& Godrej Novapan, Kitply, greenply, Euro Century, Green Ply &Archid Poly Carbonate Sheet GE O Acoustical Wall Paneling Armstrong / Anutone	22	Plastic Seat Cover of W.C. (ISI Mark only)	Commander, Hindware, Admiral, Parryware&Cera		
NECO, or any other B.I.S marked Product & Fritings	23	CP Fittings / Mixer Pillar taps Washers	ESSCO/ESS ESS continental series or equivalent		
26 Centrifugally Cast (Spun) Iron Pipes (Class LA) Electro Steel, Kesoram& Jindal. 27 G.I. Pipes Jindal (Hissar) & TATA 28 G.I. Fittings Unik& UU 29 Gun metal Valves Leader, Zoloto& Sant 30 Stone Ware Pipes & Gully Traps Prefect, Hind, Crystal or ISI marked S.W.Pipes. 31 Mirror Glass Atul, Modi Guard & Saint Gobain 32 Grouting Compound Bal endura&Latticrete 33 Aluminium Sections Hindalco, Jindal 34 Aluminium Fittings Ebco, Dorma, Ozone, Classic &Everite 35 Hydraulic Door Closer Dorset, Dorma, Ozone, Hardwyn&Everite 36 Floor Springs Ebco, Dorma, Ozone 37 Exterior Paint Asian, Nerolac, Berger &Snowcem India 38 Friction Hinges Zipco, AKS, Dorma & Earl Bihari 39 Reflective Sun Control Film Garware 40 6 mm / 12 mm thick Ply Century, Duro& Green 41 Telescopic Drawer Channel Earl Bihari & Hettich 42 Ceramic Glazed Tiles (Matt Finish) Nitco, Johnson, Naveen, Marbito, Orient bell, Asian &Kejaria 43 Glazed Vitrified Tiles Rectified (Satin Finish) Nitco, Johnson, Naveen, Orient bell & Asian, Restile 44 Glazed Vitrified Tiles Rectified (Satin Finish) Nitco, Johnson, Naveen, Orient bell & Asian, Restile 45 Glass including high performance thermal glass Saint Gobain, Modi Guard & AlS 46 Brass Locks Dorset, Crust, Kich& Godrej 47 12 mm Particle Board Novapan, Kitply, greenply, Euro 48 19 mm Bilock Board Century, Green Ply &Archid 49 Poly Carbonate Sheet GE 50 Acoustical Wall Paneling Armstrong / Anutone 51 Silicon Sealant Dow Corning, GE & 3M	24	CP Accessories	ESSCO/ESS ESS continental series or equivalent		
G.I. Pipes Jindal (Hissar) & TATA G.I. Fittings Unik& UU Gun metal Valves Leader, Zoloto& Sant Stone Ware Pipes & Gully Traps Prefect, Hind, Crystal or ISI marked S.W.Pipes. Atul, Modi Guard & Saint Gobain Atul, Modi Guard & Saint Gobain Crouting Compound Bal endura&Latticrete Atul, Modi Guard & Saint Gobain Aluminium Sections Hindalco, Jindal Aluminium Fittings Eboo, Dorma, Ozone, Classic & Everite Floor Springs Eboo, Dorma, Ozone, Classic & Everite Floor Springs Eboo, Dorma, Ozone, Hardwyn& Everite Floor Springs Eboo, Dorma, Ozone Asian, Nerolac, Berger & Snowcem India Friction Hinges Zipco, AKS, Dorma & Earl Bihari Reflective Sun Control Film Garware Germary Germary Germary Lum thick Ply Century, Duro& Green Telescopic Drawer Channel Earl Bihari & Hettich Ceramic Glazed Tiles (Matt Finish) Nitco, Johnson, Naveen, Marbito, Orient bell, Asian & Kajaria Aluminian Rectified (Pure Matt Finish) Nitco, Johnson, Naveen, Marbito, Orient bell & Asian, Restile Glazed Vitrified Tiles Rectified (Satin Finish) Nitco, Johnson, Naveen, Marbito, Orient bell & Asian, Restile Glazed Vitrified Tiles Rectified (Satin Finish) Nitco, Johnson, Naveen, Marbito, Orient bell & Asian, Saint Gobain, Modi Guard & AIS Glass including high performance thermal glass Saint Gobain, Modi Guard & AIS Aluminium Fittings Saint Gobain, Modi Guard & AIS Atul, Modi Guard & AIS Century, Green Ply, & Archid Poly Carbonate Sheet GE Acoustical Wall Paneling Armstrong / Anutone	25	Centrifugally Cast (Spun) Iron Pipes	NECO, or any other B.I.S marked Product & Fittings		
Unik& UU	26	Centrifugally Cast (Spun) Iron Pipes (Class LA)	Electro Steel, Kesoram& Jindal.		
Sun metal Valves Leader, Zoloto& Sant Stone Ware Pipes & Gully Traps Prefect, Hind, Crystal or ISI marked S.W.Pipes. Atul, Modi Guard & Saint Gobain Grouting Compound Bal endura&Latticrete Aluminium Sections Hindalco, Jindal Aluminium Fittings Ebco, Dorma, Ozone, Classic &Everite Floor Springs Ebco, Dorma, Ozone, Classic &Everite Ebco, Dorma, Ozone, Hardwyn&Everite Floor Springs Ebco, Dorma, Ozone, Hardwyn&Everite Floor Springs Ebco, Dorma, Ozone, Barger &Snowcem India Friction Hinges Zipco, AKS, Dorma & Earl Bihari Reflective Sun Control Film Garware Garware	27	G.I. Pipes	Jindal (Hissar) & TATA		
Stone Ware Pipes & Gully Traps Prefect, Hind, Crystal or ISI marked S.W.Pipes. Atul, Modi Guard & Saint Gobain Grouting Compound Bal endura&Latticrete Aluminium Sections Hindalco, Jindal Hydraulic Door Closer Dorset, Dorma, Ozone, Classic &Everite Floor Springs Ebco, Dorma, Ozone, Hardwyn&Everite Exterior Paint Asian, Nerolac, Berger &Snowcem India Friction Hinges Zipco, AKS, Dorma & Earl Bihari Friction Hinges Century, Duro& Green Garware Gem / 12 mm thick Ply Century, Duro& Green Earl Bihari & Hettich Ceramic Glazed Tiles (Matt Finish) Nitco, Johnson, Naveen, Marbito, Orient bell, Asian &Kajaria Glazed Vitrified Tiles Rectified (Pure Matt Finish) Nitco, Johnson, Naveen, Marbito, Orient bell & Asian, Restile Glazed Vitrified Tiles Rectified (Satin Finish) Nitco, Johnson, Naveen, Orient bell & Asian, Restile Glazed Vitrified Tiles Rectified (Satin Finish) Nitco, Johnson, Naveen, Orient bell & Asian, Restile Glazed Imperiormance thermal glass Saint Gobain, Modi Guard & AIS Frass Locks Dorset, Crust, Kich& Godrej Novapan, Kitply, greenply, Euro Century, Green Ply &Archid Poly Carbonate Sheet GE Acoustical Wall Paneling Armstrong / Anutone Silicon Sealant Dow Coming, GE & 3M	28	G.I. Fittings	Unik& UU		
Atul, Modi Guard & Saint Gobain 32 Grouting Compound Bal endura&Latticrete 33 Aluminium Sections Hindalco, Jindal 34 Aluminium Fittings Ebco, Dorma, Ozone, Classic &Everite 35 Hydraulic Door Closer Dorset, Dorma, Ozone, Hardwyn&Everite 36 Floor Springs Ebco, Dorma, Ozone 37 Exterior Paint Asian, Nerolac, Berger &Snowcem India 38 Friction Hinges Zipco, AKS, Dorma & Earl Bihari 39 Reflective Sun Control Film Garware 40 6 mm / 12 mm thick Ply Century, Duro& Green 41 Telescopic Drawer Channel Earl Bihari & Hettich 42 Ceramic Glazed Tiles (Matt Finish) Nitco, Johnson, Naveen, Marbito, Orient bell, Asian &Kajaria 43 Glazed Vitrified Tiles Rectified (Pure Matt Finish) Nitco, Johnson, Naveen, Marbito, Orient bell & Asian, Restile 44 Glazed Vitrified Tiles Rectified (Satin Finish) Nitco, Johnson, Naveen, Orient bell & Asian, Restile 45 Glass including high performance thermal glass Saint Gobain, Modi Guard & AIS 46 Brass Locks Dorset, Crust, Kich& Godrej 47 12 mm Particle Board Novapan, Kitply, greenply, Euro 48 19 mm Block Board Century, Green Ply &Archid 49 Poly Carbonate Sheet GE 50 Acoustical Wall Paneling Armstrong / Anutone 51 Silicon Sealant Dow Corning, GE & 3M	29	Gun metal Valves	Leader, Zoloto& Sant		
Bal endura&Latticrete 32	30	Stone Ware Pipes & Gully Traps	Prefect, Hind, Crystal or ISI marked S.W.Pipes.		
Aluminium Sections Hindalco, Jindal Aluminium Fittings Eboo, Dorma, Ozone, Classic &Everite Hydraulic Door Closer Dorset, Dorma, Ozone, Hardwyn&Everite Floor Springs Ebco, Dorma, Ozone Exterior Paint Asian, Nerolac, Berger &Snowcem India Friction Hinges Zipco, AKS, Dorma & Earl Bihari Reflective Sun Control Film Garware Garware Century, Duro& Green Telescopic Drawer Channel Earl Bihari & Hettich Ceramic Glazed Tiles (Matt Finish) Nitco, Johnson, Naveen, Marbito, Orient bell, Asian &Kajaria Glazed Vitrified Tiles Rectified (Pure Matt Finish) Nitco, Johnson, Naveen, Marbito, Orient bell & Asian, Restile Glazed Vitrified Tiles Rectified (Satin Finish) Nitco, Johnson, Naveen, Orient bell & Asian, Glass including high performance thermal glass Saint Gobain, Modi Guard & AIS Glass Including high performance thermal glass Saint Gobain, Modi Guard & AIS Horse, Crust, Kich& Godrej Novapan, Kitply, greenply,Euro Reflective Sun Control Film Century, Green Ply &Archid Poly Carbonate Sheet GE Marstrong / Anutone Silicon Sealant Dow Corning, GE & 3M	31	Mirror Glass	Atul, Modi Guard & Saint Gobain		
Aluminium Fittings Ebco, Dorma, Ozone, Classic & Everite Hydraulic Door Closer Dorset, Dorma, Ozone, Hardwyn& Everite Floor Springs Ebco, Dorma, Ozone Exterior Paint Asian, Nerolac, Berger & Snowcem India Friction Hinges Zipco, AKS, Dorma & Earl Bihari Reflective Sun Control Film Garware Mare Century, Duro& Green Telescopic Drawer Channel Earl Bihari & Hettich Ceramic Glazed Tiles (Matt Finish) Nitco, Johnson, Naveen, Marbito, Orient bell, Asian & Kajaria Glazed Vitrified Tiles Rectified (Pure Matt Finish) Nitco, Johnson, Naveen, Marbito, Orient bell & Asian, Restile Glazed Vitrified Tiles Rectified (Satin Finish) Nitco, Johnson, Naveen, Orient bell & Asian, Glass including high performance thermal glass Saint Gobain, Modi Guard & AIS Glass Locks Dorset, Crust, Kich& Godrej Tum Particle Board Novapan, Kitply, greenply, Euro Restrong / Poly Carbonate Sheet GE Acoustical Wall Paneling Armstrong / Anutone Silicon Sealant Dow Corning, GE & 3M	32	Grouting Compound	Bal endura&Latticrete		
Hydraulic Door Closer Dorset, Dorma, Ozone, Hardwyn&Everite	33	Aluminium Sections	Hindalco, Jindal		
Floor Springs Ebco, Dorma, Ozone Exterior Paint Asian, Nerolac, Berger & Snowcem India Friction Hinges Zipco, AKS, Dorma & Earl Bihari Reflective Sun Control Film Garware Gentury, Duro& Green Telescopic Drawer Channel Earl Bihari & Hettich Ceramic Glazed Tiles (Matt Finish) Nitco, Johnson, Naveen, Marbito, Orient bell, Asian & Kajaria Glazed Vitrified Tiles Rectified (Pure Matt Finish) Nitco, Johnson, Naveen, Marbito, Orient bell & Asian, Restile Glazed Vitrified Tiles Rectified (Satin Finish) Nitco, Johnson, Naveen, Orient bell & Asian, Glazed Vitrified Tiles Rectified (Satin Finish) Nitco, Johnson, Naveen, Orient bell & Asian, Glazed Vitrified Tiles Rectified (Satin Finish) Nitco, Johnson, Naveen, Orient bell & Asian, Glazed Vitrified Tiles Rectified (Satin Finish) Nitco, Johnson, Naveen, Orient bell & Asian, Glazed Vitrified Tiles Rectified (Satin Finish) Nitco, Johnson, Naveen, Orient bell & Asian, Friction Hinges Saint Gobain, Modi Guard & AIS Dorset, Crust, Kich& Godrej Novapan, Kitply, greenply, Euro Reflective Sun Control Film Armstrong / Anutone Silicon Sealant Dow Corning, GE & 3M	34	Aluminium Fittings	Ebco, Dorma, Ozone, Classic &Everite		
Asian, Nerolac, Berger & Snowcem India Zipco, AKS, Dorma & Earl Bihari Reflective Sun Control Film Garware Century, Duro& Green Century, Duro& Green Century, Duro& Green Earl Bihari & Hettich Ceramic Glazed Tiles (Matt Finish) Nitco, Johnson, Naveen, Marbito, Orient bell, Asian & Kajaria Glazed Vitrified Tiles Rectified (Pure Matt Finish) Nitco, Johnson, Naveen, Marbito, Orient bell & Asian, Restile Glazed Vitrified Tiles Rectified (Satin Finish) Nitco, Johnson, Naveen, Orient bell & Asian, Glazed Vitrified Tiles Rectified (Satin Finish) Nitco, Johnson, Naveen, Orient bell & Asian, Saint Gobain, Modi Guard & AIS Glass including high performance thermal glass Saint Gobain, Modi Guard & AIS Asian, Nerolac, Berger & Snowcem India Nitco, ASIA Server Naveen, Orient bell, Asian & Kajaria Nitco, Johnson, Naveen, Orient bell & Asian, Saint Gobain, Modi Guard & AIS Century, Green, Ply & Archid Poly Carbonate Sheet GE Acoustical Wall Paneling Armstrong / Anutone Silicon Sealant Dow Corning, GE & 3M	35	Hydraulic Door Closer	Dorset, Dorma, Ozone, Hardwyn&Everite		
38 Friction Hinges Zipco, AKS, Dorma & Earl Bihari 39 Reflective Sun Control Film Garware 40 6 mm / 12 mm thick Ply Century, Duro& Green 41 Telescopic Drawer Channel Earl Bihari & Hettich 42 Ceramic Glazed Tiles (Matt Finish) Nitco, Johnson, Naveen, Marbito, Orient bell, Asian & Kajaria 43 Glazed Vitrified Tiles Rectified (Pure Matt Finish) Nitco, Johnson, Naveen, Marbito, Orient bell & Asian, Restile 44 Glazed Vitrified Tiles Rectified (Satin Finish) Nitco, Johnson, Naveen, Orient bell & Asian, 45 Glass including high performance thermal glass Saint Gobain, Modi Guard & AIS 46 Brass Locks Dorset, Crust, Kich& Godrej 47 12 mm Particle Board Novapan, Kitply, greenply, Euro 48 19 mm Block Board Century, Green Ply & Archid 49 Poly Carbonate Sheet GE 50 Acoustical Wall Paneling Armstrong / Anutone 51 Silicon Sealant Dow Coming, GE & 3M	36	Floor Springs	Ebco, Dorma, Ozone		
39 Reflective Sun Control Film Garware 40 6 mm / 12 mm thick Ply Century, Duro& Green 41 Telescopic Drawer Channel Earl Bihari & Hettich 42 Ceramic Glazed Tiles (Matt Finish) Nitco, Johnson, Naveen, Marbito, Orient bell, Asian & Kajaria 43 Glazed Vitrified Tiles Rectified (Pure Matt Finish) Nitco, Johnson, Naveen, Marbito, Orient bell & Asian, Restile 44 Glazed Vitrified Tiles Rectified (Satin Finish) Nitco, Johnson, Naveen, Orient bell & Asian, 45 Glass including high performance thermal glass Saint Gobain, Modi Guard & AIS 46 Brass Locks Dorset, Crust, Kich& Godrej 47 12 mm Particle Board Novapan, Kitply, greenply, Euro 48 19 mm Block Board Century, Green Ply & Archid 49 Poly Carbonate Sheet GE 50 Acoustical Wall Paneling Armstrong / Anutone 51 Silicon Sealant Dow Coming, GE & 3M	37	Exterior Paint	Asian, Nerolac, Berger &Snowcem India		
40 6 mm / 12 mm thick Ply Century, Duro& Green 41 Telescopic Drawer Channel Earl Bihari & Hettich 42 Ceramic Glazed Tiles (Matt Finish) Nitco, Johnson, Naveen, Marbito, Orient bell, Asian & Kajaria 43 Glazed Vitrified Tiles Rectified (Pure Matt Finish) Nitco, Johnson, Naveen, Marbito, Orient bell & Asian, Restile 44 Glazed Vitrified Tiles Rectified (Satin Finish) Nitco, Johnson, Naveen, Orient bell & Asian, 45 Glass including high performance thermal glass Saint Gobain, Modi Guard & AIS 46 Brass Locks Dorset, Crust, Kich& Godrej 47 12 mm Particle Board Novapan, Kitply, greenply, Euro 48 19 mm Block Board Century, Green Ply & Archid 49 Poly Carbonate Sheet GE 50 Acoustical Wall Paneling Armstrong / Anutone 51 Silicon Sealant Dow Corning, GE & 3M	38	Friction Hinges	Zipco, AKS, Dorma & Earl Bihari		
41 Telescopic Drawer Channel Earl Bihari & Hettich 42 Ceramic Glazed Tiles (Matt Finish) Nitco, Johnson, Naveen, Marbito, Orient bell, Asian & Kajaria 43 Glazed Vitrified Tiles Rectified (Pure Matt Finish) Nitco, Johnson, Naveen, Marbito, Orient bell & Asian, Restile 44 Glazed Vitrified Tiles Rectified (Satin Finish) Nitco, Johnson, Naveen, Orient bell & Asian, 45 Glass including high performance thermal glass Saint Gobain, Modi Guard & AIS 46 Brass Locks Dorset, Crust, Kich& Godrej 47 12 mm Particle Board Novapan, Kitply, greenply, Euro 48 19 mm Block Board Century, Green Ply & Archid 49 Poly Carbonate Sheet GE 50 Acoustical Wall Paneling Armstrong / Anutone 51 Silicon Sealant Dow Corning, GE & 3M	39	Reflective Sun Control Film	Garware		
42Ceramic Glazed Tiles (Matt Finish)Nitco, Johnson, Naveen, Marbito, Orient bell, Asian & Kajaria43Glazed Vitrified Tiles Rectified (Pure Matt Finish)Nitco, Johnson, Naveen, Marbito, Orient bell & Asian, Restile44Glazed Vitrified Tiles Rectified (Satin Finish)Nitco, Johnson, Naveen, Orient bell & Asian,45Glass including high performance thermal glassSaint Gobain, Modi Guard & AIS46Brass LocksDorset, Crust, Kich& Godrej4712 mm Particle BoardNovapan, Kitply, greenply, Euro4819 mm Block BoardCentury, Green Ply & Archid49Poly Carbonate SheetGE50Acoustical Wall PanelingArmstrong / Anutone51Silicon SealantDow Corning, GE & 3M	40	6 mm / 12 mm thick Ply	Century, Duro& Green		
Glazed Vitrified Tiles Rectified (Pure Matt Finish) Nitco, Johnson, Naveen, Marbito, Orient bell & Asian, Restile Glazed Vitrified Tiles Rectified (Satin Finish) Nitco, Johnson, Naveen, Orient bell & Asian, Glass including high performance thermal glass Saint Gobain, Modi Guard & AIS Brass Locks Dorset, Crust, Kich& Godrej Novapan, Kitply, greenply,Euro 19 mm Block Board Century, Green Ply & Archid Poly Carbonate Sheet GE Acoustical Wall Paneling Armstrong / Anutone Dow Corning, GE & 3M	41	Telescopic Drawer Channel	Earl Bihari & Hettich		
44 Glazed Vitrified Tiles Rectified (Satin Finish) Nitco, Johnson, Naveen, Orient bell& Asian, 45 Glass including high performance thermal glass Saint Gobain, Modi Guard & AIS 46 Brass Locks Dorset, Crust, Kich& Godrej 47 12 mm Particle Board Novapan, Kitply, greenply, Euro 48 19 mm Block Board Century, Green Ply & Archid 49 Poly Carbonate Sheet GE 50 Acoustical Wall Paneling Armstrong / Anutone 51 Silicon Sealant Dow Coming, GE & 3M	42	Ceramic Glazed Tiles (Matt Finish)	Nitco, Johnson, Naveen, Marbito, Orient bell, Asian &Kajaria		
45 Glass including high performance thermal glass Saint Gobain, Modi Guard & AIS 46 Brass Locks Dorset, Crust, Kich& Godrej 47 12 mm Particle Board Novapan, Kitply, greenply,Euro 48 19 mm Block Board Century, Green Ply &Archid 49 Poly Carbonate Sheet GE 50 Acoustical Wall Paneling Armstrong / Anutone 51 Silicon Sealant Dow Coming, GE & 3M	43	Glazed Vitrified Tiles Rectified (Pure Matt Finish)	Nitco, Johnson, Naveen, Marbito, Orient bell & Asian, Restile		
46 Brass Locks Dorset, Crust, Kich& Godrej 47 12 mm Particle Board Novapan, Kitply, greenply,Euro 48 19 mm Block Board Century, Green Ply &Archid 49 Poly Carbonate Sheet GE 50 Acoustical Wall Paneling Armstrong / Anutone 51 Silicon Sealant Dow Coming, GE & 3M	44	Glazed Vitrified Tiles Rectified (Satin Finish)	Nitco, Johnson, Naveen, Orient bell& Asian,		
47 12 mm Particle Board Novapan, Kitply, greenply,Euro 48 19 mm Block Board Century, Green Ply &Archid 49 Poly Carbonate Sheet GE 50 Acoustical Wall Paneling Armstrong / Anutone 51 Silicon Sealant Dow Coming, GE & 3M	45	Glass including high performance thermal glass	Saint Gobain, Modi Guard & AIS		
48 19 mm Block Board Century, Green Ply &Archid 49 Poly Carbonate Sheet GE 50 Acoustical Wall Paneling Armstrong / Anutone 51 Silicon Sealant Dow Coming, GE & 3M	46	Brass Locks	Dorset, Crust, Kich& Godrej		
49 Poly Carbonate Sheet GE 50 Acoustical Wall Paneling Armstrong / Anutone 51 Silicon Sealant Dow Coming, GE & 3M	47	12 mm Particle Board	Novapan, Kitply, greenply,Euro		
50 Acoustical Wall Paneling Armstrong / Anutone 51 Silicon Sealant Dow Corning, GE & 3M	48	19 mm Block Board	Century, Green Ply &Archid		
51 Silicon Sealant Dow Corning, GE & 3M	49	Poly Carbonate Sheet	GE		
	50	Acoustical Wall Paneling	Armstrong / Anutone		
52 Glass Wool Twiga, Rockwool	51	Silicon Sealant	Dow Corning, GE & 3M		
	52	Glass Wool	Twiga, Rockwool		

53	Stainless Steel Hand Rail System	Kich , Dorset, Crust, & Dorma			
54	Stainless Steel Pull Handle	Kich, Dorset, Crust, & Dorma			
55	Wall Putty	Birla Care & JK White			
56	Ceramic Wall Tiles for Dado	Nitco, Johnson, Naveen, Orient, Asian &Kajaria			
57	W.C., EWC, Wash Basin, Urinal & Urinal Division Plates	Hindware, Parryware& Jaguar			
58	Health Shower, Taps, Jet Spray	Jaguar, Moen & Marc			
59	Hand Drier cum Paper Dispenser Unit	Hindware, Parryware& Jaguar			
60	Flush Door Shutters	KitplyIndustries , Century , Greenlam& Samrat Laminates			

It is certified that I have gone through the above list of preferred make of materials and the rates has been quoted accordingly.

(Signature of Contractor)

PARTICULAR SPECIFICATIONS OF WORK

1.0 R.C.C. WORK:-

1.1 Construction Joint:

- 1.1.1 Concreting shall be carried out continuously upto the construction joints, the position and details of which shall be as shown in structural drawing or as indicated in Fig. 26 of CPWD Specification or as directed by Engineer-in-charge. Number of such joints shall be kept to minimum. These shall be straight and shall be at right angles to the direction of main reinforcement. Construction joints should comply with IS: 11817.
- 1.1.2 In case of columns the joints shall be horizontal and 10 to 15 cm below the bottom of the beam running into the column head. The portion of the column between the stepping off level and the top of the slab shall be concreted with the beam.
- 1.1.3 When stopping the concrete on a vertical plane in slabs and beams, an approved stop-board (see Fig. 26 C of CPWD Specification) shall be placed with necessary slots for reinforcement bars or any other obstruction to pass the bars freely without bending. The construction joints shall be keyed by providing a triangular or trapezoidal fillet nailed on the stop-board. Inclined or feather joints shall not be permitted. Any concrete flowing through the joints of stop-board shall be removed soon after the initial set. When concrete is stopped on a horizontal plane, the surface shall be roughened and cleaned after the initial set.
- 1.1.4 When the concrete is to be resumed, the joint shall be thoroughly cleaned with wire brush and loose particles removed. A coat of neat cement slurry at the rate of 2.75 kg of cement per square meter shall then be applied on the roughened surface before fresh concrete is laid.

1.2 **Compaction**:

- 1.1.1 Concrete shall be thoroughly compacted and fully worked around embedded fixtures and into corners of the form work. Compaction shall be done by mechanical vibrator of appropriate type till a dense concrete is obtained. The Mechanical vibrators shall conform to IS 2505, IS:2506, IS:2514, and IS:4656.To prevent segregation, over vibration shall be avoided.
- 1.1.2 Compaction shall be completed before the initial setting starts. For the items where mechanical vibrators are not possible to be used, the contractor shall take permission of the Engineer-in-charge in writing before the start of the work. After compaction, the top surface shall be finished even and smooth with wooden trowel before the concrete begins to set.
- 1.2.3 Concrete shall be compacted into dense mass immediately after placing by means of mechanical vibrators designed for continuous operations. The Engineer-in-Charge may however relax this conditions at his discretion for certain items, depending on the thickness of the members and feasibility of vibrating the same and permit hand compaction instead. Hand compaction shall be done with the help of tamping rods so that concrete is thoroughly compacted and completely worked around the reinforcement, embedded fixtures, and into corners of the form. The layers of concrete shall be so placed that the bottom layer does not finally set before the top layer is placed. The vibrators shall maintain the whole of concrete under treatment in an adequate state of agitation, such that de-aeration and effective compaction is attained at a rate commensurate with the supply of concrete. The vibration shall continue during the whole period occupied by placing of concrete, the vibrators being adjusted so that the centre of vibrations approximates to the centre of the mass being compacted at the time of placing.
- 1.2.4 Concrete shall be judged to be properly compacted, when the mortar fills the spaces between the coarse aggregate and begins to cream up to form an even surface. When this condition has been attained, the vibrator shall be stopped in case of vibrating tables and external vibrators. Needle vibrators / internal vibrators shall be withdrawn slowly so as to prevent formation of loose pockets. In case both internal and external vibrators are being used, the internal vibrator shall be first withdrawn slowly after which the external vibrators shall be stopped so that no loose pocket is left in the body of the concrete. The specific Contractor instructions of the makers of the particular type of vibrator used shall be strictly complied with. Shaking of reinforcement for the purpose of compaction should be avoided. Compaction shall be completed before the initial setting starts or extended initial setting time in case where retarder is used.

1.2 Curing:

- 1.3.1 As soon as concrete is compacted and leveled, the exposed surface shall be covered with polythene sheet for initial two to three hours after laying of the concrete so that moisture loss from the concrete can be prevented.
- 1.3.2 When the concrete begins to harden i.e. two to three hours after compaction, the exposed surfaces shall be kept damp with moist gunny bags, sand or any other material approved by the Engineer-in-charge. 24 hours after compaction, the exposed surface shall be kept continuously in damp or wet conditions by ponding or by covering with a layer of sacking, canvass Hessian or similar absorbent materials and kept constantly wet for atleast 10 days from the date of placing of concrete.
- 1.3.4 Approved curing compounds may be used in lieu of moist curing with the written permission of the Engineer-in-Charge. Such compounds shall be applied to all exposed surfaces of the concrete as soon as possible after the concrete has set.
- 1.3.4 Freshly laid concrete shall be protected from rain by suitable covering.
- 1.3.5 Over the foundation concrete, the masonry work may be started after 48 hours of its compaction but the curing of exposed surfaces of cement concrete shall be continued along with the masonry work for at least 10 days. And where cement

concrete is used as base concrete for flooring, the flooring may be commenced before the curing period of base concrete is over but the curing of base concrete shall be continued along with top layer of flooring for a minimum, period of 10 days.

1.4 Finishing:

- 1.4.1 In case of roof slabs the top surface shall be finished even and smooth with wooden trowel, before the concrete begins to set.
- 1.4.2 Immediately on removal of forms, the RCC work shall be examined by the Engineer-in-Charge, before any honey combs / defects are made good.
- 1.4.3 Surface defects of a minor nature may be accepted. On acceptance of such a work by the Engineer-in-Charge, the same shall be rectified as follows:
 - a) Surface defects which require repair when forms are removed, usually consist of bulges due to movement of forms, ridges at form joints, honey combed areas, damage resulting from the stripping of forms and bolt holes, bulges and ridges are removed by careful chipping or tooling and the surface is then rubbed with a grinding stone. Honey-combed and other defective areas shall be chipped out, the edges being cut as straight as possible and perpendicular to the surface, or preferably slightly undercut to provide a key at the edge of the patch. Patch.LAR SPECIFICATION BSNL
 - b) Shallow patches shall first treated with a coat of thin grout composed of one part of cement and one part of fine sand and then filled with mortar similar to that used in the concrete. The mortar is placed in layers not more than 10 mm thick and each layer is given a scratch finish to secure bond with the succeeding layer. The last layer is finished to match the surrounding concrete by floating, rubbing or tooling on formed surfaces by pressing the form material against the patch while the mortar is still plastic.
 - c) Large and deep patches require filling up with concrete held in place by forms. Such patches are reinforced and carefully dowelled to the hardened concrete.
 - d) Holes left by bolts are filled with mortar carefully packed into places in small amounts. The mortar is mixed as dry as possible, with just enough water so that it will be tightly compacted when forced into place.
 - e) Tiered holes extending right through the concrete may be filled with mortar with a pressure gun similar to the gun used for greasing motor cars.
 - f) Normally, patches appear darker than the surrounding concrete, possibly owing to the presence on their surface of less cement laitance. Where uniform surface colour is important, this defect shall be remedied by adding10 to 20 percent of white Portland cement to the patching mortar. The exact quantity being determined by trial.
 - g) The same amount of care to cure the material in the patches should be taken as with the whole structure, Curing must be started as soon as possible, after the patch is finished to prevent early drying. Damp Hessian may be used but in some locations it may be difficult to hold it in place. A membrane curing compound in these cases will be most convenient.
- 1.4.4 The surface which is to receive plaster or where it is to be joined with brick masonry wall, shall be properly roughened immediately after the shuttering is removed, taking care to remove the laitance completely without disturbing the concrete. The roughening shall be done by hacking. Before the surface is plastered, it shall be cleaned and wetted so as to give bond between concrete and plaster. RCC work shall be done carefully so that the thickness of plaster required for finishing the surface is not more than 6 mm.
- 1.4.5 The surface of RCC slab on which the flooring with cement base is to be laid shall be roughened with brushes while the concrete is green. This shall be done without disturbing the concrete.

1.5 FORM WORK:

- 1.5.1 The work shall be done in general as per CPWD Specifications.
- 1.5.2 Only M.S. centering / shuttering and scaffolding material unless & otherwise specified shall be used for all R.C.C. work to give an even finish of concrete surface.
- 1.5.3 In order to keep the floor finish as per architectural drawings and to provide required thickness of the flooring as per specifications, the level of top surface of R.C.C. shall be accordingly adjusted at the time of its centering, shuttering and casting for which nothing extra shall be paid to the Contractor.
 - As per general engineering practice, level of floors in toilet / bath, balconies, shall be kept 12 to 20mm or as required, lower than general floors shuttering should be adjusted accordingly. Nothing extra is payable on this account.
- 1.5.4 Steel shuttering as approved by the Engineer-in-Charge shall be used by the contractor. Minimum size of shuttering plates shall be 600mm x 900mm except for the case when closing pieces are required to complete the shuttering panels. Dented, broken, cracked, twisted or rusted shuttering plates shall not be allowed to be used on the work. The shuttering plates shall be cleaned properly with electrically driven sanders to remove any cement slurry or cement mortar or rust. Proper shuttering oil or de-bonding compound shall be applied on the surface of the shuttering plates in the requisite quantity before assembly of steel reinforcement.

1.6 REINFORCEMENT:

The reinforcement shall be done as per CPWD Specifications.

- 1.6.1 The rate of item of reinforcement of RCC work includes all operations including straightening, cutting, bending, welding, binding with annealed steel or welding and placing in position at all the floors with all leads and lift complete as per CPWD Specifications.
- The contractor shall provide approved type of support for maintaining the bars in position and ensuring required spacing and correct cover of concrete to reinforcement as called for in the drawings, spacer blocks of required shape and size. Chairs and spacer bars shall be used in order to ensure accurate positioning of reinforcement. Spacer blocks shall be cast well in advance with approved proprietary pre-packed free flowing mortars (Conbextra as manufactured by M/S Fosroc Chemicals India Ltd. or approved equivalent) of high early strength and same colour as surrounding concrete, Pre-cast cement mortar/concrete blocks/blocks of polymer shall not be used as spacer blocks unless specially approved by the Engineer-in-charge, rate of RCC items is inclusive of cost of such cover blocks.

2.0 PRE-CAST RCC WORK

- 2.1 The work shall be done in accordance with CPWD Specifications.
- 2.2 Pre-cast reinforced concrete units shall be of grade or mix as specified. Provision shall be made in the mould to accommodate fixing devices such as hooks etc. and forming of notches and holes. Each unit shall be cast in one operation. A sample of the unit shall be got approved from Engineer-in-charge before taking up the work.
- 2.3 Pre-cast units shall be clearly marked to indicate the top of member and its location.
- 2.4 Pre-cast units shall be stored, transported and placed in position in such a manner that these are not damaged.
- 2.5 The compaction of the concrete shall be done by vibrating, table or external vibrator, as approved by Engineer-in-charge. The rate quoted for the item shall include the element for framework and mechanical vibration.
- 2.6 Rate for item includes cost of all materials. Labour, and all operations involved. Cost of M.S. frames, lugs including their welding, lifting hooks is also included.

3.0 BRICK WORK:-

- 3.1 The brickwork shall be carried out with good quality well burnt FPS bricks of class designation 75 as per CPWD Specifications or as specified in the item.
- 3.2 The rate shall also include for leaving chases / notches for dowels / cramps for all kinds of cladding to come over brick work.
- 3.3 Brick work provided around shaft or lift walls or around slab cut outs shall be measured in the brick for corresponding floor level. Nothing extra shall be paid on this account.

4.0 WOOD WORK:-

- 4.1 The wood work in general shall be carried out as per CPWD Specifications.
- 4.2 The sample of timber to be used shall be deposited by the contractor with Engineer-in-charge before commencement of work.
- 4.3 The shape and size of beading shall be as per drawings. The joints of beading shall be mitered.
- 4.4 Timber shall be of specified species, good quality, kiln seasoned and preservative treated. It shall have uniform colour, reasonably straight grains and shall be free from knots, cracks, shakes and sapwood. It shall be close grained. The contractor shall deposit the samples of species of timber to be used with the Engineer-in-Charge for testing before commencement of the work.
- 4.5 Wood work shall not be painted, oiled or otherwise treated before it has been approved by the Engineer-in-charge. All portion of timber including architrave abutting against masonry, concrete, stone or embedded in ground shall be painted with approved wood preservative or with boiling coal tar.
- 4.6 The contractor(s) shall produce cash voucher and certificates from approved Kiln Seasoning Plants about the timber used on the work having been kiln seasoned and chemically treated by them, falling which it would not be so accepted as kiln seasoned and/or chemically treated.
- 4.7 The shutters should be fabricated in factories & fabrication should conform to CPWD Specifications 2009.
- 4.8 The contractor shall propose well in advance to Engineer-in-Charge, the names and address of the factory where from the contractor intends to get the shutters manufactured along with the credential of the firm. The contractor shall place the order for manufacturing of shutters only after obtaining approval of the Engineer in Charge whose decision in this case shall be final & binding. In case the firm is not found suitable he shall propose another factory. The factory may also be inspected by a group of officers before granting approval; shutters shall however he accepted only if these meet the specified test.
- 4.9 Contractor will arrange stage wise inspection of the shutters at factory by the Engineer-in-Charge or his authorized representative. The contractor will have no claim if the shutters brought at site in part or full lot are rejected by the Engineer-in-Charge due to bad workmanship / quality. Such defective shutters will not be measured and paid. The contractor shall

remove the same from the site of work with in 7 days after the written instruction in this regard are issued by the Engineer-in-Charge.

5.0 STEEL WORK:-

- 5.1 The work shall be carried out as per CPWD Specifications.
- 5.2 **Pressed Steel Frame / T Iron Frames**: The work shall be done as per CPWD Specifications 2009 and IS 4351. The frames shall be fabricated in approved workshops as mentioned in the List of preferred makes.

6.0 FLOORING:

- 6.1 All work in general, shall be carried out as per CPWD Specifications. Only machine cut stone slabs of Marble, Granite, Kota, etc. shall be used for flooring work.
- Whenever flooring is to be done in patterns of tiles and stones, the contractor shall get samples of each pattern laid and approved by the Engineer-in-charge before final laying of such flooring. Nothing extra shall be payable on this account.
- 6.3 Different stones / tiles used in pattern flooring shall be measured separately as defined in the nomenclature of the item and nothing extra for laying pattern flooring shall be paid over and above the quoted rate. No additional wastage, if any, shall be accounted for any extra payment.
- Samples of flooring stones (Kota/ Marble/ Granite etc.) shall be deposited well in advance with the Engineer-in-Charge for approval. Approved samples should be kept at site with the Engineer-in-Charge and the same shall not be removed except with the written permission of Engineer-in-Charge. No payment whatsoever shall be made for these samples.
- 6.5 The Marble/ Kota/ Granite or any other stone shall be fully supported by the details establishing the quarry and its location.
- Whenever the Kota stone/marble stone flooring are to be provided in treads of staircase it should be provided in one piecewith pre finished nosing and pre polished exposed surfaces and edges. Kota stone flooring or granite stone flooring to be provided on top of cooking platform shall be pre polished with pre finished nosing.

7.0 **FINISHING**:

- 7.1 The work shall be done in accordance with CPWD Specifications.
- 7.2 All painting material of approved brand and manufacturer shall be brought to the site of work in the original sealed containers. The material brought to the site of work shall be sufficient for at least 30 days of work. The material shall be kept under the joint custody of contractor and representative of the Engineer-in-charge. The empty containers shall not be removed from the site till the completion of the work without permission of the Engineer-in-charge.

8.0 SANITARY INSTALLATIONS /WATER SUPPLY / DRAINAGE:-

- 8.1 The work in general shall be carried out as per CPWD Specifications.
- 8.2 The tendered rates shall include the cost of cutting holes in walls, floors, RCC slabs etc. wherever required and making good the same for which nothing extra shall be paid.
- 8.3 The Centrifugally spun cast iron pipe IS: 3989-1984, wherever necessary, shall be fixed to RCC columns, beams etc. with rawl plugs of approved quality and nothing extra shall be paid for on this account. In case the pipe is to be imbedded in the brick wall/RCC/CC, the same shall be got done as per direction of Engineer-in-charge and nothing extra shall be paid on account of this.

9.0 Aluminium doors, windows, ventilators etc. glazing specifications

- 9.1 The work shall be carried out through an approved specialized Agency, who shall furnish all material, labour, accessories, equipment, tool and plants and incidentals required for providing and installing Polyester powder coated aluminum doors, windows, claddings, louvers and other items as called for on the drawings. The drawings and specifications cover the major requirements only. The supplying of additional fastenings, accessories, fixtures and other items not mentioned specifically herein, but which are necessary to make a complete installation shall be a part of this contract.
- 9.2 <u>General:</u> Aluminium doors, windows etc. shall be of sizes, section details as shown on the Architectural drawings. The details shown on the drawings indicate generally the sizes of the component parts and general standards. These may be varied slightly to suit the standard adopted by the manufacturers. Before proceeding with any manufacturing, the contractor shall prepare and submit complete manufacturing and installation drawings for approval of the Engineer-in-Charge and no work shall be performed until the approval of these drawings is obtained.

- 9.3 Shop Drawings: -The contractor shall submit the shop drawings of doors, windows, louvers, cladding and other aluminum work, based on the architectural drawings to the Engineer-in-Charge for his approval. The shop drawing shall show full size sections of doors, windows etc. thickness of metal (i.e. wall thickness) details of construction, sub frame/rough ground profile, anchoring details hardware as well as connection of windows, doors and other metal work to adjacent work. Samples of all joints and methods of fastening and joining shall be submitted to the Engineer-in-Charge for approval well in advance of commencing the work.
- 9.4. <u>Samples:</u> -Samples of doors, windows louvers etc. shall be fabricated, assembled and submitted to Engineer-in-Charge for his approval. They shall be of sizes, types etc. as decided by Engineer-in-Charge. All samples shall be provided at the cost of the contractor and nothing shall be paid on account of these.
- 9.5. <u>Sections:</u> -Aluminum doors and windows shall be fabricated from approved sections of profiles as detailed on drawings. The sections shall be approved by the Engineer-in-Charge. The aluminum sections shall conform to BIS designation IIE/IIV 9 WP alloy, with chemical composition technical properties, as per IS: 733 and IS: 1285. The permissible tolerance of the sections shall be such as not to impair the proper and smooth function/ operations and appearance of doors and windows.
- 9.6 Fabrication: Doors, windows etc. shall be fabricated to sizes at factory and shall be of section, sizes, combinations and details as shown on the drawings. All doors, windows etc. shall have mechanical joints. The joints shall be designed to withstand a wind load of 150 Kg. per sqm. The design shall also incur that the maximum deflection of any member shall not exceed 1/175 of the span of the member. All members shall be accurately machined and fitted to form hairline joints prior to assembly. The joints accessories such as cleats, brackets etc. shall be of such material as not to cause any bimetallic action. The design of the joints and accessories shall be such that the accessories are fully concealed. The fabrication of doors, windows, etc. shall be done in suitable sections to facilitate easy transportation, handling and installation. Adequate provision shall be made in the door and window members for anchoring to support and fixing of hardware and other fixture as approved by the Architect.
- 9.7 Polythene tape protection shall be applied on the aluminum section before they are brought to site. All care shall be taken to ensure surface protection during transportation, storage at site and installation. The tape protection shall be removed on installation. The sample will be tested in the approved laboratory and cost of samples; cost of testing etc. shall be borne by the contractor.
- 9.8 Protection of finish: All aluminum members shall be wrapped with approved self-adhesive non-staining. PVC tapes and nothing extra shall be paid on this account.

9.9 Handing and Stacking: -

- 9.9.1 Fabricated materials shall be carried in an approved manner to protect the material against any damage during transportation. The loading and unloading shall be carried out with utmost care. On receipt of material at site, it shall be carefully examined to detect any damaged pieces. Arrangements shall be made for expeditious replacement of damaged pieces/ parts. Materials found to be acceptable on inspections shall be repacked in crates and stored safely.
- 9.9.2 In the case of composite windows and doors, the different units are to be assembled first. The assembled composite units should be checked for line, level and plumb before final fixing is done.

 Units may be serial numbered and identified as out how to be assembled in their final locations if situation so warrants.
- 9.9.3 The contractor shall be responsible for assembling composite, bedding and filling the grove with polysulphide sealant inside and outside, at transoms and mullions placing the doors, windows etc. in their respective openings. After the doors/ windows have been fixed in their correct assigned position, the open hollow sections abutting masonry concrete shall be fitted with approved polysulphide sealant densely packed and finished neat.
- 9.9.4 The contractor shall be responsible for doors, windows, etc. being set straight, plumb, level and for their satisfactory operation after fixing is complete.

10.0 Installation:

- Just prior to installation the doors, windows, etc. shall be uncreated and stacked on edge on level bearers and supported evenly. The frame shall be fixed into position true to line and level using adequate number of expansion machine bolts, anchor fasteners, of approved size and manufacture and in an approved manner. The holes in concrete/masonry members for housing anchor bolts shall be drilled with an electric drill.
- The door/ windows assembled as shown on drawings shall be placed in correct final position on the opening and marks made on concrete members at jambs, sills and heads against the holes provided in frames for anchoring. The frame shall then be removed from the opening and laid aside. Neat holes with parallel sides of appropriate size shall then be drilled in the concrete members with an electric drill at the marking to house the expansion blots. The expansion bolts shall then be inserted in the holes, struck with a light hammer till the nut is forced into the anchor shell. The frame shall then be placed in final position in the opening and anchored to the support thought cadmium plated machine screws of required size and anchored to the support through cadmium plated machine screws of required size threaded to expansion bolts. The frame shall be set in the opening by using wooden wedges at supports and be plumbed in position. The wedges shall invariably be placed at the meeting at points of glazing bars and frame.

- 10.3 Neoprene gaskets: The contractor shall provide and install Neoprene gaskets of approved size and profile at all locations as shown and as called for to render the doors, windows etc. absolutely air tight and weather tight. The contractor shall produce samples of the gaskets for approval and shall procure the same only after approval of the product.
- The gaps between aluminium frames and adjacent RCC/Brick work/ Stone work etc. and also any gaps in the door and windows sections shall be raked out as directed and filled with approved sealant as per direction of Engineer-in-charge.

10.5 Details of Test: -

- 10.5.1 The various tests on aluminium sections shall be conducted in accordance with the relevant CPWD specifications/IS codes. The samples of major member of each unit of doors/ windows shall be selected at random by Engineer-in-Charge as such that all the aluminium section shall be got tested.
- Acceptance Criteria: The aluminium work shall carry one year of guarantee after completion of work against unsound material, workmanship and defective coating as per guarantee bond. Guarantee in prescribed Performa given in the document , must be given by the specified firm, which shall be counter signed by the contractor, in token of his overall responsibility. If any defect is noticed during the guarantee period, the contractor should rectify it within seven days and if not attended to the same will be got done from another agency at the risk and cost of contractor and shall be recovered from Security deposit.

10.5.3 Rates: -

The rates of the item shall include the cost of materials, labour etc. Including all incidental charges in all the above operations as specified in CPWD specifications. The rate also includes the cost of hinges/pivots.

Correction Slip No6

(To GCC for civil works-2006)

Clause No.	Present Provision	Proposed Provision
Clause 7	No payment shall be made for work, rates as decided by Engineer-in-Charge.	No change.
	The amount admissible will as far as possible be paid by 10th working day after the day of presentation of the bill by the contractor to the Engineer-in-Charge or his Asstt. Engineer together with the account of the material issued by the BSNL or dismantled materials, if any. In the case of works outside the headquarter of the Engineer-in-Charge, the period of ten working days will be extended to fifteen working days.	The amount admissible will as far as possible be paid by 30th working day after the day of presentation of the bill by the contractor to the Engineer-in-Charge or his Asstt. Engineer together with the account of the material issued by the BSNL or dismantled materials, if any. In the case of works outside the headquarter of the Engineer-in-Charge, the period of thirty working days will be extended to forty five working days.
	All such interim payment detailed measurement thereof.	No change.

PROFORMA FOR AGREEMENT (ON NONJUDICIAL STAMP PAPER OF APPROPRIATE VALUE)

CONTR	ACT AGREEMENT FOR THE WORK OF DATED Between M/s (refer note) in the town of hereinafter called the contractor (which term shall unless excluded by
Nigam	gnant to be subject or context include its successors and permitted assigns) of the one part and the Bharat Sanchar Limited hereinafter called the BSNL (which term shall unless excluded by or repugnant to the subject or context include essess and assigns) of the other part.
WHERE	EAS
a.	The BSNL is desirous that the construction of at should be executed as mentioned, enumerated or referred to in the tender including Press Notice Inviting Tender, General Conditions of the Contract, Special Conditions of the Contract, Specifications, Drawings, Plans, Time Schedule of completion of jobs, Schedule of Quantities and Rates, Agreed Variations, other documents, has called for Tender.
b.	The contractor has inspected the site and surroundings of the work specified in the tender documents and has satisfied himself by carefully examination before submitting his tender as to the nature of the surface, strata, soil, subsoil and grounds, the form and nature of the site and local conditions the quantities, nature and magnitude of the work the availability of labour and materials necessary for the execution of work, the means of access to site, the supply of power and water thereto and the accommodation he may require and has made local and independent enquiries and obtained complete information as to the matters and things referred to or implied in the tender documents or having any connection therewith, and has considered the nature and extent of all the probable and possible situations, delays, hindrances or interferences to or with the execution and completion of the work to be carried out under the contract, and has examined and considered all other matters, conditions and things and probable and possible contingencies, and generally all matters incidental thereto and ancillary thereof affecting the execution and completion of the work and which might have influenced him in making his tender.
C.	The tender documents including the BSNL's Press Notice Inviting Tender, General conditions of contract, Special Conditions of Contract, Schedule of Quantities and rates, General obligations, Specifications, Drawings, plan, time schedule for completion of work. Letter of Acceptance of tender and any statement of agreed variations with its enclosures copies of which are hereto annexed form part of this contract though separately set out herein and are included in the expression Contract wherever herein used.
AND W	HEREAS
	SNL accepted the tender of M/s (refer note) (Contractor) for the construction of
	atand conveyed vide letter Nodatedat the rates stated in the Schedule of quantities for the work and accepted by the BSNL (hereinafter called the Schedule of upon the terms and subject to the conditions of the contract.
·	
	NOW THIS AGREEMENT WITNESSTH & IT IS HEREBY AGREED AND DECLARED AS FOLLOWS.
1.	In consideration of the payment to be made to the contract for the work to be executed by him, the contractor hereby convenient with the BSNL that the contractor shall and will duly provide, execute, complete and maintain the said work and shall do and perform all other acts and things in the contract mentioned or described or which are to be implied and therefrom or may be reasonably necessary for the completion of the said works and at the said times and in the manner and subject to the terms and conditions or stipulations mentioned in the contract, AND
2.	In consideration of the due provisions execution, completion and maintenance of the said work, the BSNL does hereby agree with the contractor that the BSNL will pay to contractor the respective amounts for the work actually done by him and approved by the BSNL at the Schedule or Rates and such other sum payable to the contractor under provision of the contract, such payment to be made at such time in such manner as prescribed for in the contract. It is specifically and distinctly understood and agreed between the BSNL and the contractor that the contractor shall have no right, title or interest in the site made available by the BSNL for execution of the works or in the building, structures or works executed on the said site by the contractor or in the goods, articles, materials, etc. brought on the said site (unless the same specifically belongs to the contractor) and the contractor shall not have or deemed to have any lien whatsoever charge for unpaid bills will not be entitled to assume or retain possession or control of the site or structures and the BSNL shall have an absolute and unfettered right to take full possession of site and to remove the contractor, their servants, agents and materials belonging to the contractor and lying on the site.
3.	"The contract is subject to the jurisdiction of Court at Sunder Nagar (HP) only." (Where the e-NIT/Tender has been issued).
	In Witness whereof the parties hereto have hereinto set their respective hands and seals in the day and the year first above written.

Signed and delivered for and on behalf of BSNL	Signature and delivered for and on behalf of the contractor
(BHARAT SANCHAR NIGAM LIMITED) OFFICIAL ADDRESS	(Contractor)
Date Place	Date Place
IN PRESENCE OF TWO WITNESSES	
SIGNATURE NAME SIGNATURE NAME	SIGNATURE NAME SIGNATURE NAME
For Proprietary Concern	
Shris/or/o	
For Partnership Concern	
M/s	se include his heirs, executors, administrators and legal
For Companies	
M/sa company duly incorporated under the Inc	

APPENDIX-XV

Notice for appointment of Arbitrator (Refer clause 25)

То

The Chief Engineer, BSNL H.P. South Civil Zone Shimla.

Dear Sir,

In item of clause 25 of the agreement, particulars of which are given below, I/we hereby give notice to you to appoint an Arbitrator for settlement of disputes mentioned below.

- Name of applicant.
- Whether applicant is individual/Prop. Firm/Partnership Firm/Ltd Co. 2.
- Full address of the applicant.
- 4. Name of the work and contract number in which arbitration sought.
- 5. Name of the division which entered into contract.
- 6. Contract amount in the work.
- 7. Date of contract.
- 8. Date of contract date of initiation of work.
- Stipulated date of completion of work.
- 10. Actual date of completion of work (if completed).
- 11. Total number of claims made.12. Total amount claimed.
- 13. Date of intimation of final bill(if work is completed)
- 14. Date of payment of final bill (if work is completed).
- 15. Amount of final bill (if work is completed).
- 16. Date of request made to SE for decision.17. Date of receipt of SE's decision.
- 18. Date of approval to you.
- 19. Date of receipt of your decision.

Specimen signatures of the applicant (Only the person/authority who signed the contract should sign)

I/We certify that the information given above is true to the best of my/our knowledge. I/We enclose following documents.

1. Statement of claims with amount of claims.

Yours faithfully,

(Signatures)

Copy in duplicate to:

The Executive Engineer, **BSNL Civil Division** Sunder Nagar (HP)

SCHEDULE OF QUANTITIES

Name of Work:-Addition alteration and Special repairs to Microwave building and staff Qtrs. in Microwave Complex at Mandi [HP].

I.No.	Description of Item		Quantity		Unit	Amount (Rs)
	Sub-Head : Earth Work					(1.10)
1	Surface dressing of the ground including removing vegetation and inequalities not exceeding 15 cm deep and disposal of rubbish, lead up to 50 m and lift upto1.5 m.					
a)	All kinds of soil.	600.00	Sqm		One Square Metre	
	Sub-Head : Concrete Work					
2	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level :					
a)	1:5:10 (1 cement : 5 coarse sand(zone-III) : 10 graded stone aggregate 40 mm nominal size)	5.00	Cum		One Cubic Metre	
3	Providing and laying cement concrete in retaining walls, return walls, walls (any thickness) including attached pilasters, columns, piers, abutments, pillars, posts, struts, buttresses, string or lacing courses, parapets, coping, bed blocks, anchor blocks, plain window sills, fillets, sunken floor, etc., up to floor five level, excluding the cost of centering, shuttering and finishing:					
a)	1:5:10 (1 cement : 5 coarse sand : 10 graded brick aggregate 40mm nominal size.	5.00	Cum		One Cubic Metre	
4	Making plinth protection 50mm thick of cement concrete 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size) over 75mm thick bed of dry brick ballast 40 mm nominal size, well rammed and consolidated and grouted with fine sand, including necessary excavation leveling and dressing and finishing the top smooth.	60.00	Sqm		One Square Metre	
	Sub-Head : Stone Work					
5	Credit for Servicable Stones recieved from site of Work.	3.00	Cum		One Cubic Metre	
	Sub-Head : Wood and P.V.C. Work					
6	Providing and fixing flat pressed 3 layer particle board medium density exterior grade (Grade I) or graded wood particle board IS: 3087 marked, to frame, backing or studding with screws etc. complete (Frames, backing or studding to be paid separately):					
a)	12 mm thick	135.00	Sqm		One Square Metre	
7	Providing and fixing M.S. grills of required pattern in frames of windows etc. with M.S. flats, square or round bars etc. including priming coat with approved steel primer all complete.					
a)	Fixed to openings /wooden frames with rawl plugs screws etc.	35.00	Kg		One Kilogram	
8	Providing and fixing ISI marked oxidised M.S. tower bolt black finish, (Barrel type) with necessary screws etc. complete:					
a)	150x10 mm	130.00	Nos.		Each	

9	Providing and fixing ISI marked oxidised M.S. handles conforming to IS:4992 with necessary screws etc. complete:			
a)	100 mm	65.00	Nos.	Each
10	Providing and fixing aluminium extruded section body tubular type universal hydraulic door closer (having brand logo with IS: 3564, embossed on the body, door weight upto 36 kg to 80 kg and door width from 701 mm to 1000 mm) with double speed adjustment with necessary accessories and screws etc. complete.	10.00	Nos.	Each
11	Providing and fixing aluminium sliding door bolts ISI marked anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour or shade with nuts and screws etc. complete :			
a)	300x16 mm	5.00	Nos.	Each
b)	250x16 mm	10.00	Nos.	Each
12	Providing and fixing aluminium tower bolts ISI marked anodised (anodic coating not less than grade AC 10 as per IS: 1868) transparent or dyed to required colour or shade with necessary screws etc. complete:			
a)	250x10 mm	42.00	Nos.	Each
13	Providing and fixing aluminium handles ISI marked anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour or shade with necessary screws etc. complete :			
a)	125 mm	84.00	Nos.	Each
14	Providing and fixing aluminium hanging floor door stopper ISI marked anodised (anodic coating not less than grade AC 10 as per IS: 1868)transparent or dyed to required colour and shade with necessary screws etc. complete.			
a)	Twin rubber stopper	18.00	Nos.	Each
15	Providing & Fixing decorative high pressure laminated sheet of plain / wood grain in gloss / matt / suede finish with high density protective surface layer and reverse side of adhesive bonding quality conforming to IS: 2046 Type S, including cost of adhesive of approved quality.			
a)	1.0 mm thick.	135.00	Sqm	One Square Metre
	Sub-Head : Steel Work			
16	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.			
a)	Hot finished welded type tubes.	550.00	Kg	One Kilogram
	Sub-Head : Flooring			
17	Providing and fixing Ist quality ceramic glazed wall tiles conforming to IS: 15622 (thickness to be specified by the manufacturer), of approved make, in all colours, shades except burgundy, bottle green, black of any size as approved by Engineer-in-Charge, in skirting, risers of steps and dados, over 12 mm thick bed of cement mortar 1:3 (1 cement : 3coarse sand) and jointing with grey cement slurry @ 3.3kg per sqm, including pointing in white cement mixed with pigment of matching shade complete	10.00	Sqm	One Square Metre

18	Providing and laying rectified Glazed Ceramic floor tiles of size 300x300mm or more (thickness to be specified by the manufacturer), of 1stquality conforming to IS: 15622, of approved make, in colours White, Ivory, Grey, Fume Red Brown, Iaid on 20 mm thick cement mortar 1:4(1 Cement: 4 Coarse sand), jointing with grey cement slurry @ 3.3kg/sqm including grouting the joints with white cement and matching pigments etc., complete.	15.00	Sqm	One Square Metre
19	Precast terrazzo tiles 22 mm thick with graded marble chips of size upto12 mm, laid in floors, and landings, jointed with neat cement slurry mixed with pigment to match the shade of the tiles, including rubbing and polishing complete, on 20 mm thick bed of cement mortar 1:4 (1cement:4 coarse sand):			
a)	Light shade pigment using white cement.	20.00	Sqm	One Square Metre
20	Rubbing of existing Precast terrazo tiles 22mm thick with graded marble chips of size upto 12mm laid in floors, and landings, all complete as per the direction of Engineer-incharge.	210.00	Sqm	One Square Metre
	Sub-Head : Roofing			
21	Providing and fixing on wall face unplasticised Rigid PVC rain water pipes conforming to IS: 13592 Type A, including jointing with seal ring conforming to IS: 5382, leaving 10 mm gap for thermal expansion,			
	(i)Single socketed pipes.			
a)	110 mm diameter	35.00	m	One Metre
b)	140 mm diameter	25.00	m	One Metre
22	Providing and fixing on wall face unplasticised - PVC moulded fittings/ accessories for unplasticised Rigid PVC rain water pipes conforming to IS: 13592 Type A including jointing with seal ring conforming to IS:5382 leaving 10 mm gap for thermal expansion.			
a)	Coupler			
(i)	110mm	25.00	Nos.	Each
(ii)	140 mm	25.00	Nos.	Each
b)	Bend 87.5°			
(i)	110 mm bend	15.00	Nos.	Each
(ii)	140 mm bend	10.00	Nos.	Each
	Sub-Head : Finishing			
23	12 mm cement plaster of mix :			
a)	1:6 (1 cement: 6 coarse sand)	50.00	Sqm	One Square Metre
24	15 mm cement plaster on rough side of single or half brick wall of mix :			
a)	1:6 (1 cement: 6 coarse sand)	50.00	Sqm	One Square Metre

25	18 mm cement plaster in two coats under layer 12 mm thick cement plaster 1:5 (1 cement: 5 coarse sand) and a top layer 6 mm thick cement plaster 1:3 (1 cement: 3 coarse sand) finished rough with sponge.	45.00	Sqm	One Square Metre
26	Distempering with oil bound washable distemper of approved brand and manufacture to give an even shade :			
a)	Old work (one or more coats) .	1550.00	Sqm	One Square Metre
27	Finishing walls with water proofing cement paint of required shade :			
a)	Old work (one or more coats @ 2.20 kg/10 sqm) complete.	1950.00	Sqm	One Square Metre
	Sub-Head : Repairs to Buildings			
28	Repairs to plaster of thickness 12 mm to 20 mm in patches of area 2.5 sq. meters and under, including cutting the patch in proper shape, raking out joints and preparing and plastering the surface of the walls complete, including disposal of rubbish to the dumping ground , all complete as per directions of Engineer-In-Charge.			
a)	With cement mortar 1:4 (1cement: 4 coarse sand).	60.00	Sqm	One Square Metre
29	Renewing glass panes, with putty and nails wherever necessary including racking out the old putty:			
a)	Float glass panes of thickness 4 mm.	5.00	Sqm	One Square Metre
30	Providing and fixing brass curtain rods of wall thickness 1.25mm with two brass brackets fixed with brass screws and wooden plugs etc. wherever necessary complete.			
a)	20 mm diameter.	50.00	m	One Running Metre
31	Painting on G.S. sheet with synthetic enamel paint of approved brand and manufacture of required colour to give an even shade:			
a)	Old work (one or more coats) .	550.00	Sqm	One Square Metre
32	Painting (two or more coats) on rain water, soil, waste and vent pipes and fittings with aluminium paint of approved brand and manufacture over a priming coat of ready mixed zinc chromate yellow primer on old work:			
a)	100 mm diameter pipes .	80.00	m	One Metre
33	Painting with synthetic enamel paint of approved brand and manufacture to give an even shade :			
a)	One or more coats on old work.	950.00	Sqm	One Square Metre
34	French spirit polishing :			111000
a)	One or more coats on old work.	15.00	Sqm	One Square Metre
35	Dismantling W.C. Pan of all sizes including disposal of dismantled materials i/c malba all complete as per directions of Engineer-in- Charge.	6.00	Nos.	Each

	Sub-Head : Dismantling and Demolishing			
36	Demolishing stone rubble masonry manually/ by mechanical means including stacking of serviceable material and disposal of unserviceable material within 50 metres lead as per direction of Engineer-in-charge :			
a)	In cement mortar	8.00	Cum	One Cubic Metre
37	Dismantling tile work in floors and roofs laid in cement mortar including stacking material within 50 metres lead.			
a)	For thickness of tiles 10 mm to 25 mm	25.00	Sqm	One Square Metre
38	Disposal of building rubbish / malba / similar unserviceable, dismantled or waste materials by mechanical means, including loading, transporting, unloading to approved municipal dumping ground or as approved by Engineer-in-charge, beyond 50 m initial lead, for all leads including all lifts involved.	5.00	Cum	One Cubic Metre
	Sub-Head : Sanitary Installations			
39	Providing and fixing white 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:			
a)	W.C. pan with ISI marked white solid plastic seat and lid	6.00	Nos.	Each
40	Providing and fixing white vitreous china flat back or wall corner type lipped front urinal basin of 430x260x350 mm and 340x410x265 mm sizes respectively with automatic flushing cistern with standard 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:			
a)	One urinal basin with 5 litre white P.V.C. automatic flushing cistern	6.00	Nos.	Each
41	Providing and fixing wash basin with C.I. brackets, 15 mm C.P. brass pillar taps, 32 mm C.P. brass waste of standard pattern, including painting of fittings and brackets, cutting and making good the walls wherever required:			
a)	White Vitreous China Wash basin size 630x450 mm with a single 15 mm C.P. brass pillar tap.	6.00	Nos.	Each
42	Providing and fixing 8 mm dia C.P. / S.S. Jet with flexible tube upto 1 metre long with S.S. triangular plate to European type W.C. of quality and make as approved by Engineer - in - charge.	6.00	Nos.	Each
43	Providing and fixing P.V.C. waste pipe for sink or wash basin including P.V.C. waste fittings complete.			
a)	Semi rigid pipe			
(i)	32 mm dia	6.00	Nos.	Each
44	Providing and fixing mirror of superior glass (of approved quality) and of required shape and size with plastic moulded frame of approved make and shade with 6 mm thick hard board backing:			

a)	Rectangular shape 453x357 mm	6.00	Nos.	Each
45	Providing and fixing 600x120x5 mm glass shelf with	6.00	Nos.	Each
40	edges round off, supported on anodisedaluminium angle frame with C.P. brass brackets and guard rail complete fixed with 40 mm long screws, rawl plugs etc., complete.	0.00	NOS.	Laur
46	Providing and fixing stainless steel soap dish complete with brackets fixed to wooden cleats with C.P. brass screws with cocealled fitting arragement of approved quality and colour.	7.00	Nos.	Each
47	Providing and fixing M.S. holder-bat clamps of approved design to Sand Cast iron/cast iron (spun) pipe embedded in and including cement concrete blocks 10x10x10 cm of 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size), including cost of cutting holes and making good the walls etc. :			
a)	For 100 mm dia. Pipe	25.00	Nos.	Each
48	Providing and fixing PTMT towel rail complete with brackets fixed to wooden cleats with CP brass screws with concealed fittings arrangement of approved quality and colour.			
a)	450 mm long towel rail with total length of 495 mm, 78 mm wide and effective height of 88 mm, weighing not less than 170 gms.	6.00	Nos.	Each
49	Extra for providing and fixing 100 mm Dia stainless steel grating with frame (with or without hole) instead of screwed down or hinged SCI grating.	24.00	Nos.	Each
50	Providing and fixing un-plasticised PVC trap of self cleansing design including cost of cutting and making good the walls and floors			
a)	110mm inlet and 110mm outlet	24.00	Nos.	Each
	Sub-Head : Water Supply			
51	Providing and fixing G.I. pipes complete with G.I. fittings and clamps, i/c cutting and making good the walls etc. : Internal work – Exposed on wall.			
a)	15 mm dia. nominal bore	50.00	metre	One Metre
b)	20 mm dia. nominal bore	40.00	metre	One Metre
52	Providing and fixing uplasticised PVC connection pipe with brass unions :			
a)	45 cm length			
(i)	15 mm nominal bore	14.00	Nos.	Each
53	Providing and fixing G.I. Union in existing G.I. pipe line, cutting and threading the pipe and making long screws including excavation, refilling the earth or cutting of wall and making good the same complete wherever required:			
a)	15 mm nominal bore.	20.00	Nos.	Each
54	Providing and placing on terrace (at all floor levels) polyethylene water storage tank ISI: 12701 marked, 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.			
а	Circular tank	5000.00	Litre	One Litre

EE	Description and fixing O.D. burns 1-2			
55	Providing and fixing C.P. brass bib cock of approved quality conforming to IS:8931:			
a)	15 mm nominal bore.	14.00	Nos.	Each
56	Providing and fixing C.P. brass long nose bib cock of approved quality conforming to IS standards and weighing not less than 810 gms.			
a)	15 mm nominal bore.	7.00	Nos.	Each
57	Providing and fixing C.P. brass stop cock (concealed) of standard design and of approved make conforming to IS:8931.			
a)	15 mm nominal bore.	21.00	Nos.	Each
58	Providing and fixing C.P. brass angle valve for basin mixer and geyser points of approved quality conforming to IS:8931:			
a)	15mm nominal bore	21.00	Nos.	Each
	Sub-Head : Drainage			
59	Providing and fixing square-mouth S.W. gully trap class SP-1 complete with C.I. grating brick masonry chamber with water tight C.I. cover with frame of 300x300 mm size (inside) the weight of cover to be not less than 4.50 kg and frame to be not less than 2.70 kg as per standard design:			
a)	100x100 mm size P type			
(i)	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	7.00	Nos.	Each
60	Constructing brick masonry manhole in cement mortar 1:4 (1 cement: 4 coarse sand) with R.C.C. top slab with 1:2:4 mix (1 cement: 2 coarse sand: 4 graded stone aggregate 20 mm nominal size), foundation concrete 1:4:8 mix (1 cement: 4 coarse sand: 8 graded stone aggregate 40 mm nominal size), inside plastering 12 mm thick with cement mortar 1:3 (1 cement: 3 coarse sand) finished with floating coat of neat cement and making channels in cement concrete 1:2:4 (1cement: 2 coarse sand: 4 graded stone aggregate 20 mm nominal size) finished with a floating coat of neat cement complete as per standard design:			
a)	Inside size 90x80 cm and 45 cm deep including C.I. cover with frame (light duty) 455x610 mm internal dimensions, total weight of cover and frame to be not less than 38 kg (weight of cover 23 kg and weight of frame 15 kg):			
(i)	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	10.00	Nos.	Each
61	Extra for depth for manholes			
a)	Size 90x80 cm			
(i)	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	3.00	m	One Metre
	Sub-Head : Water Proofing			
62	Providing and laying water proofing treatment to vertical and horizontal surfaces of depressed portions of W.C., kitchen and the like consisting of:			
	i) Ist course of applying cement slurry @ 4.4 Kg/sqm mixed with water proofing compound conforming to IS 2645 in recommended proportions including rounding off junction of vertical and horizontal surface.			

ii) IInd course of 20mm cement plaster 1:3 (1 cement : 3 coarse sand)mixed with water proofing compound in recommended proportion including rounding off junction of vertical and horizontal surface.				
iii) IIIrd course of applying blown or residual bitumen applied hot at 1.7Kg. per sqm of area.				
iv) IVth course of 400 micron thick PVC sheet. (Overlaps at joints of PVC sheet should be 100 mm wide and pasted to each other with bitumen @ 1.7 Kg/sqm.)	20.00	Sqm	One Square Metre	