



भारत संचार निगम लिमिटेड
(भारत सरकार का उपक्रम)
BHARAT SANCHAR NIGAM LIMITED
(A Govt. of India Enterprise)

**OFFICE OF THE
EXECUTIVE ENGINEER(C)
BSNL CIVIL DIVISION,
TELEPHONE EXCHANGE, THE MALL, SOLAN-173212).
(B'fone:01792-224300, FAX: 220660).**



e - TENDER DOCUMENT

FOR

THE WORK OF

“Construction of Commandant Home Guards Residence including boundary wall and site development at Nahan, Distt. Sirmour (HP).”

(NIT No: 17/ EE/BSNL/CD/SOL/2021-22

Dated: 28.12.2021).

To be submitted only online on the website: <http://www.tenderwizard.com/BSNL>

by 18:00 Hrs on 06.01.2022.

BSNL CIVIL DIVISION
SOLAN(HP)

(A Govt. of India Enterprise)
(CIVIL WING)
O/o Executive Engineer (Civil), BSNL, Civil Division, **Solan** (HP)

INDEX OF TENDER DOCUMENT

NAME OF WORK: Construction of Commandant Home Guards Residence including boundary wall and site development at Nahan, Distt. Sirmour (HP).

S. No.	Item Description	From	To
1	Cover Page	1	1
2	Index of Tender Documents	2	2
4	Information & instructions for contractors/bidders for e-tendering	3	4
5	Certificate for near relatives.	5	5
6	Declaration on EPF / ESIC / Labour license	6	6
7	Undertaking regarding submission of physical bid documents.	7	7
8	<u>Proforma for Earnest Money Deposit Declaration</u>	8	8
9	BSNL W - 6	9	14
10	Important instructions to all tenderers	15	15
11	BSNL W –8 (Abridged form)	16	17
12	Performa of Schedules A to F	18	21
13	Amendments to Clause 37 & 38 of GCC 2006	22	22
14	Special Conditions	23	29
15	List of Preferred Makes for the Work	30	31
16	Particular Specification of Work	32	37
17	Correction slips 6	38	38
18	Proforma of Agreement	39	40
19	Proforma of Guarantee Bond and Affidavit	41	42
20	Proforma of Arbitration application	43	43
21	SOQ	44	59

INFORMATION AND INSTRUCTIONS FOR CONTRACTORS / BIDDERS FOR E –TENDERING FORMING PART OF BID DOCUMENT

The Executive Engineer, BSNL Civil Division, Solan, Ph- ***** on behalf of HP State Govt., 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, HP 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	NIT NO. 17/ EE/BSNL/CD/SOL/2021-22 Dated: 28.12.2021	Construction of Commandant Home Guards Residence including boundary wall and site development at Nahan, Distt. Sirmour (HP).	Rs. 6537156.00	Rs.1180	EM declaration (Annex IV)	08(Eight) months	18:00 Hrs on 06/01/2022	After last date and time of online submission of bid and up to 15:00 Hrs on 10/01/2022	11:00 Hrs on 14/01/2022

- 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 "<http://www.tenderwizard.com/BSNL>" shall form part of bid document.
- 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 "<http://www.tenderwizard.com/BSNL>" or www.hp.bsnl.co.in/hpc or www.eprocure.gov.in .
- 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 as per Annexure- IV and other documents as specified.
- 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.
- 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.
- 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 <http://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>.
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:

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) **Earnest money declaration in prescribed proforma as per Annexure IV.**
- v) Demand Draft / Pay order or Banker's Cheque of any Scheduled Bank towards Cost of Bid Document
- vi) Certificates of Work Experience (for non 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 person who signs 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 para 13 and financial payment instrument against EMD & TC shall be deposited within the period of physical form submission.
15. Financial bid of those tenderer shall be opened who has uploaded the documents mentioned at SI. No. 13 and submitted hard copy before prescribed date.
16. **If the contractors do not 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 III.

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

"I..... S/o
.....Resident of
..... hereby certify that none of my
relative(s) as defined in clause 14 of BSNL W-6 is / are employed in **BSNL HP Civil Zone**.

In case, at any stage, it is found that the information given by me is false/ incorrect, BSNL shall have the absolute right to take any action as deemed fit without any prior intimation to me".

**SIGNATURE OF
CONTRACTOR**

(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 license

"I / We _____ do hereby solemnly declare that I shall abide by all the rules / condition / provisions of 'The Employees Provident Funds Act / Scheme 1961' and ESIC Act. I/We shall obtain and submit applicable EPF, Labour license & ESIC within one month of award of work. First payment shall be made to me/us only after submission of applicable EPF, ESIC & labour license by me/us. In case of any default, the sole responsibility shall be mine / 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

“If I / We _____ do not submit the physical bid documents / Technical Bid consecutively three times after submission of online bids, it shall be treated as breach of conditions and action shall be taken to withdraw my / our enlistment / debar me / us from tendering in BSNL for six months”.

**SIGNATURE OF
CONTRACTOR**

Annexure-IV

Proforma for Earnest Money Deposit Declaration

Whereas, I/we.....(name of agency).....
..... have submitted bids for (name
of work).....

I/We hereby submit following declaration in lieu of submitting Earnest Money Deposit.

(1). If after the opening of tender, I/we withdraw or modify my/our bid during the period of validity of tender (including extended validity of tender) specified in the tender documents,

or

(2). If, after the award of work, I/we fail to sign the contract, or to submit performance guarantee before the deadline defined in the tender documents,

I/we shall be suspended for Two years and shall not be eligible to bid/tender in BSNL and in my/our Enlisting departmental tenders, from date of issue of suspension order.

Further , if I/We fail to commence work in specified period as mentioned in tender after submission of PG, I/ We agree that the competent authority on behalf of BSNL shall without prejudice to any other right or remedy available in law/contract, be at liberty to forfeit the said performance guarantee absolutely ..

Signature of the contractor

(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.)

BHARAT SANCHAR NIGAM LIMITED
(A GOVERNMENT OF INDIA ENTERPRISE)

O/o Executive Engineer (Civil), BSNL Civil Division, Solan
NOTICE INVITING e-TENDER

NIT No. **NIT No: 17/ EE/BSNL/CD/SOL/2021-22**

Dated: 28.12.2021

1. **Item rate e-tenders** are invited by the Executive Engineer (C), BSNL Civil Division, **Solan** (HP), on behalf of **HP State Govt**, from approved and eligible contractors of BSNL and non – BSNL registered contractors registered with other public works organizations like CPWD, HP 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 “**Construction of Commandant Home Guards Residence including boundary wall and site development at Nahan, Distt. Sirmour (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. 6537156 .00(Rupees Sixty Five Lakh Thirty Seven Thousand One Hundred Fifty Six Only)**

- 1.2 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 No, as per latest orders of G.O.I. **The hard copies of attested uploaded documents should be submitted along with tender cost and EMD declaration in the wax / adhesive tape sealed envelope, to the office of Executive Engineer(C), BSNL Civil Division, Solan (HP) within the period mentioned in this NIT.**

- 1.2.1 **Eligibility criteria regarding Work Experience:**

- 1.2.1.1 For BSNL 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.

- 1.2.1.2 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. 26,15,000.00**
b) Two similar completed works each costing not less than **Rs. 32,69,000.00**
c) One similar completed works each costing not less than **Rs. 52,30,000.00**

Similar work means “**Building works in RCC frame or Load bearing construction as well as miscellaneous civil works in Buildings**”. 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.

Above works should have been carried out in Central / State Government/ Central or State Public Sector Undertakings.

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 with actual value of work done and actual date of completion and shall be issued by authorized signatory/ authority and shall be in original / attested. **The work experience certificate shall be considered as invalid, if extension of time (EOT) is granted with levy of compensation or not decided on the last date of submission of bids.**

- 1.2.2 Tenderers will be eligible to quote provided they produce proof of their valid enlistment with appropriate authority, copy of valid GST No with the appropriate department etc.
- 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/ ESI registration within one month of award of work or before payment of 1st RA bill.
- 1.3 The agency should fulfill the criteria of clause 14 of 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.
2. Agreement shall be drawn with the successful bidders on prescribed Form No. BSNL W 8 and General Conditions of Contract with up to date correction slips 1 to 6 which are available as a BSNL Publication and also on BSNL website www.civil.bsnl.co.in & www.hp.bsnl.co.in/hpc. Bidders shall quote his rates as per various terms and conditions of the said form which will form part of the agreement.
3. The time allowed for carrying out the work, will be **08 (Eight) 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 **06.01.2022 by 18:00** Hrs.
- (ii) The date of submission of eligibility documents etc. and EMD, tender fee, (After submission of online bid) will be **10.01.2022 by 15:00** Hrs. and shall be opened on same day at 15:30 Hrs.
- (iii) The date of opening of e-tenders will be **14.01.2022 at 11:00 Hrs.**
6. 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 to **Rs. 1180/-** drawn in favour of **Accounts Officer (EF) O/o CGMT Shimla, payable at Shimla (HP)**.
- (ii) **Earnest Money declaration as per Annexure IV.**
- (iii) **e-tender Processing Fee-** An amount of **Rs. -----xxx----- (Rs. -----xxx-----)** (**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 of tender, EMD, Processing fee should be submitted through separate 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, Solan (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.

7.2 **MODE OF SUBMISSION:-**

a) The copy of Earnest money declaration (Annexure IV) , 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 as 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 EM Declaration shall be submitted in the **wax / adhesive tape sealed envelope**, to the office of **Executive Engineer(C), BSNL Civil Division, Solan (HP)**, **after last date & time of online submission of bid and up to by 15:00 Hrs on 10.01.2022**. 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.

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

The financial bid submitted shall be opened at **11:00 Hrs on 14.01.2022**.

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

- i) The bidder is found ineligible.
- ii) The bidder does not upload all the documents as stipulated in the bid document.
- 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: In case the eligibility credentials are not found genuine at any stage i.e. before award of work or during execution of the work or after completion of the work, the contractor will be debarred from tendering in BSNL for three years including any other action under the contract or existing law.

8. The description of the work is as follows: -

“Construction of Commandant Home Guards Residence including boundary wall and site development at Nahan, Distt. Sirmour (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, **Solan (HP)**.

10. 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:

"I _____ S/o Shri _____ Resident of _____ hereby certify that none of my relative(s) as defined above is/are employed in concerned BSNL Civil Zone. In case at any stage, it is found that the information given by me is false/incorrect, BSNL shall have the absolute right to take any action as 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 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 3%** 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 from 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/hpc as 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 be paid 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 tax regulation. Non compliance of above provision will be treated as breach of contract and necessary action against the bidder will be taken.
- (d) All tendered rates shall be inclusive of all tax, levy or cess applicable on last stipulated date of receipt of tender including extension if any. No adjustment i.e. increases or decrease shall be made for any variation in the rate of GST, Building and Other Construction Workers Welfare Cess or any tax, levy or cess applicable on inputs. However, effect of variation in rates of GST or Building and Other Construction Workers Welfare Cess or imposition or repeal of any other tax, levy or cess applicable on output of the works contract shall be adjusted on either side, increase or decrease. Provided further that for Building and Other Construction Workers Welfare Cess or any tax (other than GST), levy or cess varied or imposed after the last date of receipt of tender including extension if any, any increase shall be reimbursed to the contractor only if the contractor necessarily and properly pays such increased amount of taxes/levies/cess_ Provided further that such increase including GST shall not be made in the extended period of contract for which the contractor alone is responsible for delay as determined by authority for extension of time under Clause 5 in Schedule F.
- (e) The invoices raised by the contractor shall indicate GST as a separate component of the gross bill raised.
Since, the Service Tax is subsumed in GST, there will not be any reimbursement/payment of Service Tax and the Clause- 37 of GCC of BSNL W-6 stands modified accordingly. Income Tax, TDS Towards GST (if made applicable subsequently), Labour Cess & other statutory deductions etc., shall be deducted at source as per the prevalent laws.
- (f) The contractor shall be solely responsible for timely payment of GST to the concerned department as per extant law. Any penalty / interest for late submission etc. arising thereupon and as demanded by the concerned department shall be sole responsibility of the contractor and BSNL shall have absolutely no liability what so ever on this account.
25. 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.
26. 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.
27. If there happens to be holiday on any dates mentioned above, then the transactions will be made on next working day.

Signature: _____
Name: _____
Executive Engineer (Civil)
BSNL Civil Division
Solan

For & on behalf of Director, Ayurveda Himachal Pradesh.

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 DSR 2018** and CPWD specifications 2019, 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
ZONE: H.P Civil Zone (North)

CIRCLE: BSNL Civil Circle-I, Shimla
DIVISION: BSNL Civil Division,
Solani
SUB-DIVISION: BSNL CSD Nahan

Item rate Bid for the work of: “Construction of Commandant Home Guards Residence including boundary wall and site development at Nahan, Distt. Sirmour (HP).”

- (i) To be submitted online on the website www.tenderwizard/BSNL by **18:00 hours on 06.01.2022**. Documents which are to be submitted by the bidders to the **Executive Engineer (Civil) BSNL Civil Division, Solani (HP)** after last date & time of submission of online bid and up to 15:00 Hrs on **10.01.2022**, will be opened in the presence of bidders who may be presented at 15:30 Hrs on the same day i.e. **10.01.2022**.
- (ii) To be opened at **11:00 hours on 14.01.2022** in the office of **Executive Engineer (C), BSNL Civil Division, Solani**

T E N D E R

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 take action as per EM declaration (Annexure IV)..

A copy of earnest money deposit declaration in prescribed proforma as per Annexure IV is scanned and uploaded.

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 take action as per EM declaration (Annexure IV). 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 3% 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, action will be taken as per EM declaration (Annexure IV)... Further, I / We agree that in case 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 take action as per Earnest Money Declaration /Performance Guarantee forfeiture.”

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, action as per declaration in Annexure IV be taken and it 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 **Solan (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 Address:

Signature of Contractor

ACCEPTANCE

The above tender [as modified by you (Contractor) and as provided in the letters mentioned hereunder] is accepted by me for

and on behalf of the HP State Govt., for a sum of

Rs.....(Rupees.....
.....)

The letters referred to below shall form part of this Contract Agreement:

(a)

.....

(b)

.....

**For & on behalf of the Director, Ayurveda,
Himachal Pradesh Shimla**

Dated

Signature:.....

**Executive Engineer (Civil)
BSNL Civil Division
Solan(HP)**

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. No.	Description of Item	Quantity	Rates in figures & words at which the materials will be charged from the contractor	Place of issue
1	2	3	4	5
..... NIL				
SCHEDULE - "C"				
Tools and Plants to be hired to the contractor				
S. No.	Description of Item	Hire charges per day	Place of issue	
1	2	3	4	
.....DELETED				
SCHEDULE - "D"				
Extra schedule for specific requirements / documents for the work. (a) Performa of 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				
Name of Work	Construction of Commandant Home Guards Residence including Boundary wall and site development at Nahan, Distt. Sirmour (HP).			
Estimated cost of Work	Rs. 6537156.00 (Rupees Sixty Five Lakhs Thirty Seven Thousand One Hundred Fifty Six Only)			
Earnest Money	As per Declaration given in Annexure IV			

Performance Guarantee (3% of the tendered value in the form of Bank Guarantee from Scheduled Bank in respect of works with estimated cost put to tender exceeding Rs. 15.00 Lakhs)		Rs. (Rupees))
Security Deposit (10% of the tendered value for works estimated cost put to tender upto Rs.15.00 Lakhs) (5% of the tendered value for works with estimated cost put to tender exceeding Rs. 15.00 Lakhs)		Rs. (Rupees))
GENERAL RULES AND DIRECTIONS		
Officer Inviting tender		Executive Engineer (C), BSNL Civil Division, Solan (HP)
Maximum percentage for quantity of items of work to be executed beyond which rates are to be determined in accordance with Clause 12.2 & 12.3		50% (Fifty Percent)
Definitions:		
2 (v)	Engineer-in-charge	Executive Engineer (C), BSNL Civil Division, Solan (HP)
2 (viii)	Accepting Authority	Jt. Chief Engineer (Civil) / Superintending Engineer (Civil), BSNL Civil Circle-I, Shimla.
2 (x)	Percentage on cost of materials and labour to cover all overheads and profit	15 %
2 (xi)	Standard Schedule of Rates	CPWD DSR 2018 with up to date corrections as on the date of opening of tenders
9 (ii)	Standard BSNL Contract Form	Form BSNLW – 8 with up to date correction slips (1 to 6) as on the date of opening of tenders
Clause 2		
	Authority for fixing compensation under Clause -2	Jt. Chief Engineer (Civil) / Superintending Engineer (Civil), BSNL Civil Circle-I, Shimla.
Clause 2A		
	Whether Clause 2A shall be applicable	No
Clause 3A		
	Whether Clause 3A shall be applicable	No
Clause 5		
i)	Time allowed for execution of work	08 (Eight) months
ii)	Authority to give fair and reasonable extension of time for completion of work.	Jt. Chief Engineer (Civil) / Superintending Engineer (Civil), BSNL Civil Circle-I, Shimla.
Clause 6A		
	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. 820000/-

Clause 10							
	Reinforcement steel to be used in the work shall have to be procured as below:				TMT bars to be procured from secondary Producers (Kamdhenu /Rathi/Jai Bharat)		
Clause 11							
	Specification to be followed for execution of work.				CPWD specifications 2019, Volume I & II with up to date correction slips.		
Clause 12							
12.2 & 12.3	Limit for value of any item of any individual trade beyond which sub clauses (i) to (ii) shall not apply and clauses 12.2 and 12.3 shall apply				50%		
Clause 16							
	Competent authority for deciding reduced rates				Jt. Chief Engineer (Civil) / Superintending Engineer (Civil), BSNL Civil Circle-I, Shimla.		
Clause 36(i)							
General guideline for fixing requirements of technical staff and rate of recovery in case of non compliance for a work, shall be as per the following.							
S No	Minimum Qualification of Technical representative	Discipline	Designation	Minimum Experience	Number	Rate at which recovery shall be made from contractor in event of non deployment	
						Figures	words
1	Graduate Engineer Or Diploma Engineer	Civil	Project Planning / Site / billing Engineer	2 Years Or 5 Years	1 No	Rs 15,000/- per month	Rs Fifteen thousand only per month
Clause-37 (i)							
Extent of service Tax payable by contractor for building and construction works.				Quoted rates shall be inclusive of 100% of applicable GST. However, consequent upon issue of detailed guidelines / rules at a later date by G.O.I , if TDS on GST is required to be deducted at source, the same shall be recovered from the contractor's bill as per guidelines]			
Clause 42							
i) (a)	Schedule / statement for determining theoretical quantities of cement.				DSR 2018 printed by CPWD with up to date correction slips as on the date of opening of tenders		
ii)	Variation permissible on theoretical quantities						
a)	Cement for works with estimated cost put to tender:						
	i) Not more than Rs. 5.00 Lakhs				3 % minus		
	ii) More than Rs. 5.00 Lakhs				2 % minus		

b)	Steel reinforcement and structural steel sections for each diameter, section and category.	2 % minus
Star prices to be considered for Escalation and Recoveries:		
S. No.	Material	Star Price (Rate in Figures and Words)
1	For Cement (OPC 43 grade only)	Rs. 6900.00 (Rs. Six Thousand Nine Hundred Only)
2 (a)	For Mild steel	Not Applicable
2 (b)	For Reinforcement Steel conforming to BIS 1786 (Fe 415 Grade)	Not Applicable
2 (c)	For Reinforcement Steel TMT bars (Secondary Producer)	Rs. 56000.00 (Rs. Fifty Six Thousand Only)
2(d)	For Galvanized steel	Not Applicable

**** - To be filled by EE (C) [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
Solon

Amendments to Clause 37 & 38 of GCC 2006

Sr. No.	Existing Provision	Modified Provision
1	<p>Page 12 of GCC (item 15 of General Rules & Directions)</p> <p>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.</p>	<p>Page 12 of GCC (item 15 of General Rules & Directions)</p> <p>15. GST, 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.</p>
2	<p>Clause 37</p> <p>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.</p>	<p>Clause 37</p> <p>Levy / Taxes payable by contractor (i) GST [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.</p>
3	<p>Clause 38</p> <p>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.</p>	<p>Clause 38</p> <p>Conditions for reimbursement of levy/taxes of levied after receipt of tenders (i) All tendered rates shall be inclusive of all tax, levy or cess applicable on last stipulated date of receipt of tender including extension if any. No adjustment i.e. increase or decrease shall be made for any variation in the rate of GST, Building and Other Construction Workers Welfare Cess or any tax, levy or cess applicable on inputs. However, effect of variation in rates of GST or Building and Other Construction Workers Welfare Cess or imposition or repeal of any other tax, levy or cess applicable on output of the works contract shall be adjusted on either side, increase or decrease. Provided further that for Building and Other Construction Workers Welfare Cess or any tax (other than GST), levy or cess varied or imposed after the last date of receipt of tender including extension if any, any increase shall be reimbursed to the contractor only if the contractor necessarily and properly pays such increased amount of taxes/levies/cess. Provided further that such increase including GST shall not be made in the extended period of contract for which the contractor alone is responsible for delay as determined by authority for extension of time under Clause 5 in Schedule F.</p>

PART-B
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, 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.
- 1.6. 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.
- 1.46 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 **SECURITY**

- 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 is confidential and must be strictly confined 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 therefrom 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 **LABOUR AND SECURITY**

- 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 bonafides 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 carry out work between 7 AM to 6 PM. However, he may also be allowed to carry out 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:

5.1 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, vernier calliper, 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 fulfilment 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.

6.2 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.

6.4 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.

6.5 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:-

8.1 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/items in the preferred list 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, which shall be meticulously followed to meet the quality standards.

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.

9.3 STEEL REINFORCEMENT: -

9.3.1 The contractor shall procure Thermo Mechanical Treated (TMT) Steel Reinforcement bars (of Fe 500D grade as per IS 1786 from approved Primary 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 20 tonnes 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 authorised spacer bars and lappages 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 centimetre. **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.
 - ii) Erection of space truss/roofing with necessary fittings
 - iii) Underground tank work
 - iv) Stainless steel railing
 - v) False ceiling and wall paneling
 - vi) Glass partitions and external wall tile cladding
- 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 the following laboratories/test houses as shall be decided by the Engineer in- charge. Decision of Engineer in- charge shall be final and binding.
- i. Any central/state Govt. Labs
 - ii. NABL accredited labs approved by O/o CE (C), BSNL Shimla.
- The agency shall make timely payment to the approved lab and ensure timely submission/procurement of test results. In case of failure to pay by the contractor resulting in delay in test results/reports, the Engineer in- charge will deduct such amount from contractor's bill and pay to the testing lab directly.
- 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.

12. TRANSPORTATION AND OFFICE INFRASTRUCTURE:

12.1 In order to complete the work within the scheduled time if the contractor shall be required to do the work in more than one shift and accepted by the department the contractor will provide vehicular facilities to the site staff to reach the site and their residence at his own cost for their services required beyond the normal office hours. In case the contractor fails to provide the facilities Engineer-in-Charge shall be at liberty to make the arrangement themselves and deduct the respective cost from the contractor's bills.

12.2 For Quality Control Measures, Preparation /checking of Bills and Monitoring the Quality etc., the contractor shall keep relevant service in site office at his own cost.

13. The agency shall quote rates considering the items in the SOQ first and if not in SOQ then by preferred list and use the same in the work. Wherever equivalent make/item is mentioned it implies equivalent in terms of cost as well as quality.

**Executive Engineer (Civil)
BSNL Civil Division
Solani**

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, JKCement, JP Rewa & Shree.
2	RMC	Ultratech, Lafarge, ACC
3	White Cement	Birla White / J. K. White
4	Reinforcement Steel	Primary producers - SAIL, TISCO, RINL. Secondary Producers - Kamdhenu / Rathi / Jai Bharat
5	Veneered Particle Board	Greenply, Century, Merino, GreenPanel
6	Laminated Particle Board	Sunmica, Century, Greenply, Action Tesa
7	uPVC sections material & fittings	Veka, Encraft, Fenesta, Aluplast
8	Pressed Steel Frames	Krishna Steel Fabrication Sirsa, Laxmi Steel Works Bahadurgarh, Ashish Industries Ghaziabad, Ashwani & Sons.
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	Nerolac Acrylic Distemper, Tractor Acrylic Distemper (Asian Paint), Maxilite Acrylic Distemper (ICI), Bison Acrylic Distemper (Berger)
12	Synthetic Enamel Paint	DULUX HI-GLOSS (ICI), APCOLITE PREMIMUM GLOSS (ASIAN) NERLOLAC HIGH GLOSS (NERLOLAC), LUXOL HI-GLOSS (BERGER)
13	Steel Primer	ICI, Narolac, Berger & Asian Paints
14	Wood Primer	ICI, Narolac, Berger & Asian Paints
15	Mosaic Glass Tiles	Coral, Mridul, Italia & Bisaza
16	Dash / Anchoring Fasteners	HILTI / Fischer
17	Nuts / Bolts & Screws	GKW & Atul
18	Stainless Steel Sink (Out of Salem Steel only)	DIAMOND, NIRALI, Neelkant & Jayna
19	Float Valve	Viking & Prayag.
20	Admixtures	Fosroc & Sika
21	Vitreous China Sanitary Ware like W.C., EWC, Wash Basin, Urinal & Urinal Division Plates	Parryware, Hindware Jaquar & Cera
22	Plastic Seat Cover of W.C. (ISI Mark only)	Commander, Hindware, Admiral, Parryware & Cera
23	CP Fittings / Mixer Pillar taps Washers	ESS-ESS, Jaquar continental series or equivalent
24	CP Accessories	ESS-ESS, Jaquar 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, 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	APEX ULTIMA (ASIAN), DULUX WEATHERSHEILD MAX (ICI), EXCEL (NEROLAC), WEATHERCOAT ALL GUARD (BURGER)
38	Friction Hinges	Zipco, AKS, Dorma & Earl Bihari
39	Reflective Sun Control Film	Garware
40	6 mm / 12 mm thick Ply	Greenply, Century, Merino, Green Panel, Archid
41	Telescopic Drawer Channel	Earl Bihari & Hettich
42	Ceramic Glazed Tiles (Rectified)	Nitco, Johnson, Orientbell, Asian & Kajaria
43	Vitrified Tiles (Full body only)	NITCO, Johnson, Orientbell, Restile, Kajaria, RAK
44	AUTOCLAVED AERATED BLOCKS	BILTECH, ECO GREEN, FINECRETE, J.K. LAKSHMI CEMENT LTD.
45	Glass including high performance thermal glass	Saint Gobain, Modi Guard & AIS
46	Brass Locks	Dorset, Crust, Kich & Godrej
47	12 mm Particle/ply Board	Greenply, Century, Merino, Green Panel, Archid
48	19 mm Block Board	Greenply, Century, Merino, Green Panel, Archid
49	Poly Carbonate Sheet	GE
50	Acoustical Wall Paneling	Armstrong / Anutone
51	Silicon Sealent	Dow Corning, GE & 3M
52	Glass Wool	Twiga, Rockwool
53	Stainless Steel staircase Railing	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, Orient bell, Asian & Kajaria
57	W.C., EWC, Wash Basin, Urinal & Urinal Division Plates	Hindware, Parryware, Cera & Jaguar
58	Health Shower, Taps, Jet Spray	Jaguar, ESS-ESS, Moen & Marc
59	Hand Drier cum Paper Dispenser Unit	Hindware, Parryware, & Jaguar
60	Flush Door Shutters	Century , Greenlam, Archid ,Merino and Green Panel
61	MILD STEEL DOOR, WINDOWS & VENTILATORS MANUFACTURERS	FRIENDS MANUFACTURING COMPANY, KOTKAPURA, PD INDUSTRIES, SHAKTI INDUSTRIES, STEELMAN INDUSTRIES, SKS STEEL INDUSTRIES, SHIVAM

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 up to 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 levelled, 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 at least 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 adding 10 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. centring / 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 centring, 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.

1.6.2 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 mitred.

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 coaltar.

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, failing 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 be 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 within 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.
- 6.2 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.
- 6.4 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.
- 6.6 Whenever the Kota stone/marble stone flooring are to be provided in treads of staircase it should be provided in one piece with 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 aluminium 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 **General:** - 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 aluminium 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. **Samples:** -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. **Sections:** -Aluminium 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 aluminium 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 aluminium 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 aluminium 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 groove 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:**
- 10.1 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.
- 10.2 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 bolts. 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 through 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.

10.4 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.

10.5.2 **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 No.6

(To GCC for civil works-2006)

Clause No.	Present Provision	Proposed Provision
Clause 7	<p>No payment shall be made for work, ----- rates as decided by Engineer-in-Charge.</p> <p>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.</p> <p>All such interim payment detailed measurement thereof.</p>	<p>No change.</p> <p>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.</p> <p>No change.</p>

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

CONTRACT 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 or repugnant to be subject or context include its successors and permitted assigns) of the one part and the Bharat Sanchar Nigam Limited hereinafter called the BSNL (which term shall unless excluded by or repugnant to the subject or context include its successes and assigns) of the other part.

WHEREAS

- 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 WHEREAS

The BSNL accepted the tender of M/s _____ (refer note _____) (Contractor) for the construction of _____ at _____ and conveyed vide letter No. _____ dated _____ at the rates stated in the Schedule of quantities for the work and accepted by the BSNL (hereinafter called the Schedule of Rates) 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 there-from 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 **Solan (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

Shri.....s/o.....r/o.....carrying on business under the name and style of.....at..... (here in after called the said Contractor which expression shall unless the context requires otherwise include his heirs, executors, administrators and legal representatives).

For Partnership Concern

M/s a partnership firm having its registered office at (hereinafter called the said Contractor which expression shall unless the context requires otherwise include his heirs, executors, administrators and legal representatives). The partners of the firms are:

- i) Shris/o....., And
- ii) Shris/o.....etc..

For Companies

M/sa company duly incorporated under the Indian Companies Act, 1956 and having its registered office atin the state of(hereinafter called the said Contractor which expression shall unless the context requires otherwise include its successors and assign).

**FORM OF PERFORMANCE SECURITY
BANK GUARANTEE BOND
(To be used by approved Scheduled Banks)**

1. In consideration of the BHARAT SANCHAR NIGAM LIMITED (hereinafter called "the BSNL") having agreed under the terms and conditions of agreement No. _____ Dated _____ made between _____ and _____ (hereinafter called "the said contractor(s)") for the _____ work (hereinafter called "the said agreement") for compliance of his obligation in accordance with the terms and conditions in the said agreement.

We _____ (indicate the name of the Bank) (hereinafter referred to as "as Bank) hereby undertake to pay to the BSNL and amount not exceeding Rs. _____ (Rupees _____ only) on demand by the BSNL.

2. We _____ (Indicate the name of the Bank) do hereby undertake to pay the amount due and payable under this Guarantee without any demure, merely on a demand from the BSNL stating that the amount claimed is required to meet the recoveries due or likely to be due from the said contractor(s). Any such demand made on the Bank shall be conclusive as regards the amount due and payable by the bank under this Guarantee. However, our liability under this guarantee shall be restricted to an amount not exceeding Rs. _____ (Rupees _____ only).

3. We undertake to pay to the BSNL any money so demanded notwithstanding any dispute or disputes raised by the contractor (s) in any suit or proceeding pending before any court or Tribunal relating thereto our liability under this present being absolute and unequivocal. The payment made by us under this bond shall be valid discharge of our liability for payment to there-under and the contractor(s) shall have no claim against us making such payment.

4. We _____ (Indicate the name of Bank) further agree that the guarantee herein contained shall remain in full force and effect during the period that would be taken for the performance of the said agreement and that it shall continue to be enforceable till all the dues of the BSNL under or by virtue of the said agreement have been fully paid and it is claims satisfied or discharged or till Engineer-in-charge on behalf of the BSNL certifies that the terms and conditions of the said Agreement have been fully and properly carried out by the said contractor(s) accordingly discharges this guarantee.

5. We _____ (indicate the name of Bank) further agree with the BSNL that the BSNL shall have the fullest liberty without our consent and without affecting any manner our obligations hereunder to vary any of the terms and conditions of the said agreement or to extend time of performance by the said contractor(s) from time to time or to postpone for any time to time any of the powers exercisable by the BSNL against the said contractor(s) and to forebear or enforce any of the terms and conditions relating to the said agreement shall not be relieved from our liability by reasons of any such variation or extension being granted to the said contractor(s) or for any forbearance act of omission on that part of the BSNL or any indulgence by the BSNL to the said contractor(s) or by any such matter or thing whatsoever which under the law relating to sureties would, but for this provision, have effected or so relieving us.

6. The guarantee will not be discharged due to the change in the constitution of the Bank or the contractor(s).

7. We _____ (indicate the name of Bank) lastly undertake not to revoke this guarantee except with the previous consent of the BSNL in writing.

8. This guarantee shall be valid upto _____ unless extended on demand by BSNL. Notwithstanding any thing mentioned above our liability against this Guarantee is restricted to Rs. _____ (Rs. _____ only) and unless a claim in writing is lodged with us within six months of the date of expiry or the extended date of expiry of this guarantee, all our liabilities under the Guarantee shall stand discharged.

Date the _____ date of _____

for _____
(Indicate the name of Bank)

AFFIDAVIT

I/We have submitted a bank guarantee for the work _____ (Name of Work),
Agreement No. _____
Dated: _____ from _____ (Name of the Division) with a view to seek exemption from
payment of performance guarantee in cash. This Bank guarantee expires on _____

I/We undertake to keep the validity of the bank guarantee intact by getting it extended from time to time at my/our own initiative upto a period of
_____ months after the recorded date of completion of the work or as directed by the Engineer in charge.

I/We also indemnify the Bharat Sanchar Nigam Limited against any losses arising out of non-encashment of the bank guarantee if any.

(Deponent)
Signature of Contractor

Note: The affidavit is to be given by the Executants before a first class Magistrate.

APPENDIX-XV

**Notice for appointment of Arbitrator
(Refer clause 25)**

To

The Chief Engineer,
BSNL H.P. North 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.

1. Name of applicant.
2. Whether applicant is individual/Prop. Firm/Partnership Firm/Ltd Co.
3. 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.
9. 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:

1. **The Executive Engineer,
BSNL Civil Division
Solan (HP)**



BHARAT SANCHAR NIGAM LIMITED



SCHEDULE OF QUANTITIES

Name of Bidder:

Name of Work: Construction of commandant Home Guards Residence including boundary wall and site development at Nahan, Distt. Sirmour (HP)

S. No.	Description of Item	Quantity	Rate (Rs)	Unit	Amount (Rs)
Sub-Head : Earth Work					
1	Earth work in excavation by mechanical means (Hydraulic excavator)/manual means over areas (exceeding 30 cm in depth, 1.5 m in width as well as 10 sqm on plan) including getting out and disposal of excavated earth lead upto 50 m and lift upto 1.5 m, as directed by Engineer-in-charge.				
a)	All kinds of soil	270	Cum	One Cubic Metre	0
2	Earth work in excavation by mechanical means (Hydraulic excavator)/ manual means over areas (exceeding 30 cm in depth, 1.5 m in width as well as 10 sqm on plan) including getting out and disposal of excavated earth lead upto 50 m and lift upto 1.5 m, as directed by Engineer-in-charge.				
a)	Ordinary rock	30	Cum	One Cubic Metre	0
3	Earth work in excavation by mechanical means (Hydraulic excavator) / manual means in foundation trenches or drains (not exceeding 1.5 m in width or 10 sqm on plan) including dressing of sides and ramming of bottoms, lift up to 1.5 m, including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50 m.				
a)	All kinds of soil.	86	Cum	One Cubic Metre	0
4	Excavation work by mechanical means (Hydraulic excavator)/ manual means in foundation trenches or drains (not exceeding 1.5m in width or 10 sqm on plan), including dressing of sides and ramming of bottoms, lift upto 1.5 m, including getting out the excavated soil and disposal of surplus excavated soils as directed, within a lead of 50 m.				
a)	Ordinary rock	10	Cum	One Cubic Metre	0
5	Excavating trenches of required width for pipes, cables, etc including excavation for sockets, and dressing of sides, ramming of bottoms, depth up to 1.5 m, including getting out the excavated soil, and then returning the soil as required, in layers not exceeding 20 cm in depth, including consolidating each deposited layer by ramming, watering, etc. and disposing of surplus excavated soil as directed, within a lead of 50 m :				
a)	All kinds of soil				
(i)	Pipes, cables etc. exceeding 80 mm dia. but not exceeding 300 mm dia	20	m	One Metre	0

6	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 m and lift up to 1.5 m.	341	Cum		One Cubic Metre	0
7	Extra for every additional lift of 1.5 m or part thereof in excavation /banking excavated or stacked materials.					
a)	All kinds of soil.	9	Cum		One Cubic Metre	0
8	Supplying and filling in plinth with local fine sand under floors, including watering, ramming, consolidating and dressing complete.	12	Cum		One Cubic Metre	0
	Sub-Head - Concrete Work :					
1	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level :					
a)	1:2:4 (1 cement : 2 coarse sand(zone-III) : 4 graded stone aggregate 20 mm nominal size)	3	Cum		One Cubic Metre	0
b)	1:5:10 (1 cement : 5 coarse sand(zone-III) : 10 graded stone aggregate 40 mm nominal size)	24	Cum		One Cubic Metre	0
2	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)	1:2:4 (1 Cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size)	2	Cum		One Cubic Metre	0
b)	1:5:10 (1Cement : 5 Coarse Sand : 10 Graded brick aggregate 40 mm nominal Size)	2	Cum		One Cubic Metre	0
3	Centering and shuttering including strutting, propping etc. and removal of form work for :					
a)	Retaining walls, return walls, walls (any thickness) including attached pilasters, buttresses, plinth and string courses fillets, kerbs and steps etc.	255	Sqm		One Square Metre	0
4	Making plinth protection 50mm thick of cement concrete 1:3:6 (1 cement: 3 coarse sand (zone - III) : 6 graded stone aggregate 20 mm nominalsize) over 75mm thick bed of dry brick ballast 40 mm nominal size,well rammed and consolidated and grouted with fine sand, includingnecessary excavation, levelling & dressing & finishing the top smooth	24	Sqm		One Square Metre	0
5	Providing and laying in position plum concrete with hard stone boulders in retaining walls etc up to all height and level, in required size and shape etc. with cement concrete of mix 1:3:6 (1 Cement : 3 Coarse sand : 6 Graded stone aggregate 40 mm nominal size) using 40 % plum / hard stone boulders of size 150 mm to 300 mm, excluding cost centring and shuttering all complete as per the direction of Engineer-in-charge.	113	Cum		One Cubic Metre	0
	Sub-Head - Reinforced Cement Concrete :					
1	Providing and laying in position specified grade of reinforced cement concrete, excluding the cost of centering, shuttering, finishing and reinforcement - All work up to plinth level :					
a)	1:1.5:3 (1 cement : 1.5 coarse sand (zone-III): 3 graded stone aggregate 20 mm nominal size)	26	Cum		One Cubic Metre	0

2	Reinforced cement concrete work in walls (any thickness), including attached pilasters, buttresses, plinth and string courses, fillets, columns, pillars, piers, abutments, posts and struts etc. above plinth level up to floor five level, excluding cost of centering, shuttering, finishing and reinforcement :					
a)	1:1.5:3 (1 cement : 1.5 coarse sand(zone-III) : 3 graded stone aggregate 20 mm nominal size)	9	Cum		One Cubic Metre	0
3	Reinforced cement concrete work in beams, suspended floors, roofs having slope up to 15° landings, balconies, shelves, chajjas, lintels, bands, plain window sills, staircases and spiral stair cases above plinth level up to floor five level, excluding the cost of centering, shuttering, finishing and reinforcement with 1:1.5:3 (1 cement : 1.5 coarse sand(zone-III) : 3 graded stone aggregate 20 mm nominal size).	43	Cum		One Cubic Metre	0
4	Centering and shuttering including strutting, propping etc. and removal of form for :					
a)	Foundations, footings, bases of columns, etc. for mass concrete	26	Sqm		One Square Metre	0
b)	Suspended floors, roofs, landings, balconies and access platform	171	Sqm		One Square Metre	0
c)	Shelves (Cast in situ)	4	Sqm		One Square Metre	0
d)	Lintels, beams, plinth beams, girders, bressumers and cantilevers	263	Sqm		One Square Metre	0
e)	Columns, Pillars, Piers, Abutments, Posts and Struts	95	Sqm		One Square Metre	0
f)	Stairs, (excluding landings) except spiral-staircases	22	Sqm		One Square Metre	0
g)	Weather shade, Chajjas, corbels etc., including edges	26	Sqm		One Square Metre	0
5	Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete at all levels.					
a)	Thermo-Mechanically Treated bars of grade Fe-500D or more.	10700	Kg		One Kilogram	0
6	Smooth finishing of the exposed surface of R.C.C. work with 6 mm thick cement mortar 1:3 (1 Cement : 3 fine sand).	284	Sqm		One Square Metre	0
7	Add for plaster drip course/ groove in plastered surface or moulding to R.C.C. projections	50	m		One Metre	0
	Sub-Head - Masonry Work :					
1	Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in foundation and plinth in:					
a)	Cement mortar 1:6 (1 cement : 6 coarse sand)	21	Cum		One Cubic Metre	0
2	Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in superstructure above plinth level up to floor V level in all shapes and sizes in :					
a)	Cement mortar 1:6 (1 cement : 6 coarse sand)	12	Cum		One Cubic Metre	0
3	Half brick masonry with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in superstructure above plinth level up to floor V level.					
a)	Cement mortar 1:4 (1 cement :4 coarse sand)	112	Sqm		One Square Metre	0
4	Extra for providing and placing in position 2 Nos 6mm dia. M.S. bars at every third course of half brick masonry.ird course of half brick masonry.	112	Sqm		One Square Metre	0

5	Brick edging 7cm wide 11.4cm. deep to plinth protection with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 including grouting with cement mortar 1:4 (1 cement : 4 fine sand).	27	m		One Metre	0
	Sub-Head - Stone Work :					
1	Random rubble masonry with hard stone in foundation and plinth including levelling up with cement concrete 1:6:12 (1 cement : 6 coarse sand : 12 graded stone aggregate 20 mm nominal size) upto plinth level with :					
a)	Cement mortar 1:6 (1 cement : 6 coarse sand)	11	Cum		One Cubic Metre	0
2	Supplying & back filling with well graded stone boulders of size 150 mm to 300 mm behind retaining wall complete as per the directions of the Engineer-in-charge. (Note :- 30% deductions in measurements shall be made for voids).	38	Cum		One Cubic Metre	0
3	Providing and fixing 75 mm dia Rigid PVC pipe (working pressure 4kg./sqcm.) conforming to IS : 13592 type A in retaining walls for use as weep holes, laid to required slope etc. all complete as per the directions of the Engineer-in-charge.	40	m		One Metre	0
	Sub-Head - Cladding Work :					
1	Providing and fixing 18 mm thick gang saw cut, mirror polished, premoulded and prepolished, machine cut for kitchen platforms, vanity counters, window sills, facias and similar locations of required size, approved shade, colour and texture laid over 20 mm thick base cement mortar 1:4 (1 cement : 4 coarse sand), joints treated with white cement, mixed with matching pigment, epoxy touch ups, including rubbing, curing, moulding and polishing to edges to give high gloss finish etc. complete at all levels.					
a)	Granite of any colour and shade					
(i)	Area of slab up to 0.50 sqm	4	Sqm		One Square Metre	0
2	Providing and fixing 1st quality ceramic glazed rectified wall tiles of minimum size 300X450 mm 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 : 3 coarse sand) and jointing with grey cement slurry @ 3.3kg per sqm, including pointing in white cement mixed with pigment of matching shade complete.	62	Sqm		One Square Metre	0
	Sub-Head - Wood And P.v.c. Work :					
1	Providing wood work in frames of doors, windows, clerestory windows and other frames, wrought framed and fixed in position with hold fast lugs or with dash fasteners of required dia & length (hold fast lugs or dash fastener shall be paid for separately).					
a)	Sal wood	1.93	Cum		One Cubic Metre	0

2	Providing and fixing glazed shutters for doors, windows and clerestory windows using 4 mm thick float glass panes, including ISI marked M.S. pressed butt hinges bright finished of required size with necessary screws.					
a)	Second class teak wood					
(i)	30 mm thick	22	Sqm		One Square Metre	0
3	Providing and fixing ISI marked flush door shutters conforming to IS : 2202 (Part I) decorative type, core of block board construction with frame of 1st class hard wood and well matched commercial 3 ply veneering with vertical grains or cross bands and face veneers on both faces of shutters:					
a)	35 mm thick including ISI marked Stainless Steel butt hinges with necessary screws.	20	Sqm		One Square Metre	0
4	Extra for cutting rebate in flush door shutters (Total area of the shutter to be measured).	5	Sqm		One Square Metre	0
5	Providing and fixing wire gauge shutters using galvanized M.S. wire gauge of average width of aperture 1.4 mm in both directions with wire of dia 0.63 mm, for doors, windows and clerestory windows with hinges and necessary screws :					
a)	35 mm thick shutters.					
i)	with ISI marked M.S. pressed butt hinges bright finished of required size - Second class teak wood	10	Sqm		One Square Metre	0
b)	30 mm thick shutters					
i)	with ISI marked M.S. pressed butt hinges bright finished of required size - Second class teak wood	22	Sqm		One Square Metre	0
6	Providing and fixing chromium plated brass curtain rod having wall thickness of 1.25mm with two chromium plated brass brackets fixed with C.P. brass screws and PVC sleeves etc., wherever necessary complete :					
a)	20 mm dia	30	m		One Metre	0
7	Providing and fixing nickel plated M.S. pipe curtain rods with nickel plated brackets :					
a)	20 mm dia (heavy type)	11	m		One Metre	0
8	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.	697	Kg		One Kilogram	0
9	Providing 40x5 mm flat iron hold fast 40 cm long including fixing to frame with 10 mm diameter bolts, nuts and wooden plugs and embedding in cement concrete block 30x10x15cm 1:3:6 mix (1 cement : 3 coarse sand : 6 graded stone aggregate 20mm nominal size).	126	Nos.		Each	0
10	Providing M.S. Piano hinges ISI marked IS : 3818 finished with nickel plating and fixing with necessary screws etc., complete.					
a)	Overall width 35 mm.	36	m		One Metre	0
11	Providing and fixing aluminium extruded section body tubular type universal hydraulic door closer (having brand logo with ISI, 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.	5	Nos.		Each	0

12	Providing and fixing bright finished brass hasp and staple (safety type) with necessary screws etc. complete :					
a)	150 mm	8	Nos.		Each	0
13	Providing and fixing chromium plated brass 50 mm cupboard or wardrobe knobs with nuts complete.	21	Nos.		Each	0
14	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	2	Nos.		Each	0
b)	250x16 mm	9	Nos.		Each	0
15	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	29	Nos.		Each	0
b)	200x10 mm	11	Nos.		Each	0
c)	150x10 mm	40	Nos.		Each	0
16	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	26	Nos.		Each	0
b)	100	40	Nos.		Each	0
17	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	11	Nos.		Each	0
18	Providing and fixing 2nd class teak wood lipping/ moulded beading or taj beading of size 18X5 mm fixed with wooden adhesive of approved quality and screws/nails on the edges of the Pre-laminated particle board as per direction of Engineer-in-charge.	75	m		One Metre	0
19	Providing and fixing magnetic catcher of approved quality in cupboard / ward robe shutters, including fixing with necessary screws etc. complete.					
a)	Double strip (horizontal type)	30	Nos.		Each	0
20	Providing and fixing powder coated telescopic drawer channels 300 mm long with necessary screws etc. complete as per directions of Engineer-in-charge.	8	Sets		One Set	0
21	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)	1.5 mm thick	24	Sqm		One Square Metre	0

22	Providing and fixing glass panes with wooden fillets and nails in fixed portion of windows, ventilators, doors etc. all complete as per directions of Engineer-in-charge. (Note:- Area of opening of glass panes excluding portion inside rebate shall be measured for payment).					
a)	Float glass panes of thickness 4 mm.	24	Sqm		One Square Metre	0
23	Providing and fixing BWP Grade Block Board conforming to IS : 1659 of approved brand and manufacture, bonded with phenol formaldehyde synthetic resin in cup boards, shelves, shutters with necessary screws, nails and adhesive etc. all complete as per the directions of Engineer-in-charge.					
a)	19 mm thick BWP grade block board with commercial veneering on both faces.	92	Sqm		One Square Metre	0
24	Providing and fixing 6 mm thick ISI marked commercial plywood of approved quality to frames, backing, studding and similar places with screws, nails, adhesive etc all complete as per the direction of Engineer-in-charge. (Note: Frames, backing or studding to be paid seperately).	30	Sqm		One Square Metre	0
	Sub-Head - Steel Work :					
1	Structural steel work riveted, bolted or welded in built up sections, trusses and framed work, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer all complete.	3640	Kg		One Kilogram	0
2	Supplying and fixing rolling shutters of approved make, made of required size M.S. laths, interlocked together through their entire length and jointed together at the end by end locks, mounted on specially designed pipe shaft with brackets, side guides and arrangements for inside and outside locking with push and pull operation complete, including the cost of providing and fixing necessary 27.5 cm long wire springs manufactured from high tensile steel wire of adequate strength conforming to IS: 4454 - part 1 and M.S. top cover of required thickness for rolling shutters.					
a)	80x0.90 mm M.S. laths with 0.90 mm thick top cover.	8	Sqm		One Square Metre	0
3	Steel work welded in built up sections/ framed work, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer using structural steel etc. as required.					
a)	In gratings, frames, guard bar, ladder, railings, brackets, gates and similar works	1000	Kg		One Kilogram	0
4	Providing and fixing stainless steel (Grade 304) railing made of Hollow tubes, channels, plates etc., including welding, grinding, buffing, polishing and making curvature (wherever required) and fitting the same with necessary stainless steel nuts and bolts complete, i/c fixing the railing with necessary accessories & stainless steel dash fasteners , stainless steel bolts etc., of required size, on the top of the floor or the side of waist slab with suitable arrangement as per approval of Engineer-incharge, (for payment purpose only weight of stainless steel members shall be considered excluding fixing accessories such as nuts, bolts, fasteners etc.).	161	Kg		One Kilogram	0
Sub-Head Flooring	Sub-Head - Flooring :					

1	Marble stone flooring with 18mm thick marble stone as per sample of marble shall be approved by Engineer-in-charge over 20 mm (average) thick base of cement mortar 1:4 (1 cement : 4 coarse sand) laid and jointed with grey cement slurry including rubbing and polishing complete with :					
a)	Udaipur green marble	25	Sqm		One Square Metre	0
2	Extra for marble stone flooring in treads of steps and risers using single length up to 2.00 metre .	7	Sqm		One Square Metre	0
3	Providing and laying rectified Glazed Ceramic floor tiles of size 300x300 mm or more (thickness to be specified by the manufacturer), of 1st quality conforming to IS : 15622, of approved make, in all colours, shades, except White, Ivory, Grey, Fume Red Brown, laid on 20 mm thick Cement Mortar 1:4 (1 Cement : 4 Coarse sand), jointing with grey cement slurry @ 3.3 kg/ sqm including pointing the joints with white cement and matching pigments etc., complete.	33	Sqm		One Square Metre	0
4	Providing and laying full body homogeneous & unglazed Restile or equivalent make vitrified floor tiles in different sizes (thickness to be specified by the manufacturer) with water absorption less than 0.08%and conforming to IS : 15622 , of approved make, in all colours and shades, laid on 20mm 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.					
a)	Size of Tile 600x600 mm	117	Sqm		One Square Metre	0
5	Providing and laying full body homogeneous & unglazed Restile or equivalent makeVitrified tiles in different sizes (thickness to be specified by manufacturer) with water absorption less than 0.08 % and conforming to I.S. 15622, of approved make in all colours & shade in skirting, riser of steps, over 12 mm thick bed of cement mortar 1:3 (1cement: 3 coarse sand), jointing with grey cement slurry @ 3.3kg/sqm including grouting the joint with white cement & matching pigments etc. complete.					
a)	Size of Tile 600x600 mm	18	Sqm		One Square Metre	0
6	Providing and laying full body parking Vitrified tiles in different sizes (thickness to be specified by manufacturer) with water absorption less than 0.08 % and conforming to I.S. 15622, of approved make in all colours and shades, laid on 20mm thick cement mortar 1:4 (1 cement : 4 coarse sand) including grouting the joints with white cement and matching pigments etc., complete. Size of Tile 300x300 mm	14	Sqm		One Square Metre	0
	Sub-Head - Roofing :					
1	Providing and fixing on wall face unplastiscised 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	14	m		One Metre	0

2	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)	Bend 87.5°					
(i)	110 mm bend	2	Nos.		Each	0
3	Providing and fixing unplasticised -PVC pipe clips of approved design to unplasticised - PVC rain water pipes by means of 50x50x50 mm hardwood plugs, screwed with M.S. screws of required length including cutting brick work and fixing in cement mortar 1:4 (1 cement : 4 coarse sand) and making good the wall etc. complete.					
a)	110 mm	8	Nos.		Each	0
4	Providing and fixing pre-coated galvauium iron profile sheets (size, shape and pitch of corrugation as approved by Engineer-in-charge) 0.50 mm (+ 0.05 %) total coated thickness with zinc coating 120 grams per sqm as per IS: 277, in 240 mpa steel grade, 5-7 microns epoxy primer on both side of the sheet and polyester top coat 15-18 microns. Sheet should have protective guard film of 25 microns minimum to avoid scratches during transportation and should be supplied in single length upto 12 metre or as desired by Engineerin- charge. The sheet shall be fixed using self drilling /self tapping screws of size (5.5x 55 mm) with EPDM seal, complete upto any pitch in horizontal/ vertical or curved surfaces, excluding the cost of purlins, rafters and trusses and including cutting to size and shape wherever required.	146	Sqm		One Square Metre	0
5	Providing and fixing pre-coated galvauium steel sheet roofing accessories 0.50 mm (+0.05 %) total coated thickness, Zinc coating 120 grams per sqm as per IS: 277, in 240 mpa steel grade, 5-7 microns epoxy primer on both side of the sheet and polyester top coat 15-18 microns using self drilling/ self tapping screws complete :					
a)	Ridges plain (500 - 600mm).	20	m		One Metre	0
b)	Flashings/ Aprons.(Upto 600 mm)	42	m		One Metre	0
c)	Barge board (Upto 300 mm).	12	m		One Metre	0
	Sub-Head - Finishing :					
1	12 mm cement plaster of mix :					
a)	1:6 (1 cement: 6 coarse sand)	382	Sqm		One Square Metre	0
2	15 mm cement plaster on rough side of single or half brick wall of mix :					
a)	1:6 (1 cement: 6 coarse sand)	351	Sqm		One Square Metre	0
3	15 mm cement plaster 1:3 (1 cement: 3 coarse sand) finished with a floating coat of neat cement on the rough side of single or half brick wall.	10	Sqm		One Square Metre	0
4	Distemping with 1st quality acrylic distemper (ready mixed) having VOC content less than 50 gms/litre, of approved manufacturer, of required shade and colour complete, as per manufacturer's specification.					

a)	Two or more coats on new work	887	Sqm		One Square Metre	0
5	Finishing walls with Acrylic Smooth exterior paint of required shade :					
a)	New work (Two or more coat applied @ 1.67 ltr/10 sqm over and including priming coat of exterior primer applied @ 2.20 kg/10 sqm).	426	Sqm		One Square Metre	0
6	Applying priming coat:					
a)	With ready mixed pink or Grey primer of approved brand and manufacture on wood work (hard and soft wood)	184	Sqm		One Square Metre	0
7	Painting with synthetic enamel paint of approved brand and manufacture to give an even shade :					
a)	Two or more coats on new work.	312	Sqm		One Square Metre	0
8	French spirit polishing :					
a)	Two or more coats on new works including a coat of wood filler	113	Sqm		One Square Metre	0
9	Providing and applying white cement based putty of approved brand and manufacture , minimum @ 6 kg/10 sqm, over the plastered /wall surface to prepare the surface even and smooth all complete.	1013	Sqm		One Square Metre	0
	Sub-Head - Road Work :					
1	Providing and laying 60mm thick factory made cement concrete interlocking paver block of M -30 grade made by block making machine with strong vibratory compaction, of approved size, design & shape, laid in required colour and pattern over and including 50mm thick compacted bed of coarse sand, filling the joints with fine sand etc. all complete as per the direction of Engineer-in-charge.	70	Sqm		One Square Metre	0
	Sub-Head - Sanitary Installations :					
1	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	2	Nos.		Each	0
2	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 require:					
a)	White Vitreous China Wash basin size 550x400 mm with a pair of 15 mm C.P. brass pillar taps	4	Nos.		Each	0
3	Providing and fixing white vitreous china pedestal for wash basin completely recessed at the back for the reception of pipes and fittings.	3	Nos.		Each	0
4	Providing and fixing Stainless Steel A ISI 304 (18/8) kitchen sink as per IS:13983 with C.I. brackets and stainless steel plug 40 mm, including painting of fittings and brackets, cutting and making good the walls wherever required :					
a)	Kitchen sink with drain board					

(i)	510x1040 mm bowl depth 250 mm.	1	No.		Each	0
b)	Kitchen sink without drain board					
(i)	470x420 mm bowl depth 178 mm.	1	No.		Each	0
5	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.	4	Nos.		Each	0
6	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	4	Nos.		Each	0
(ii)	40 mm dia	2	Nos.		Each	0
7	Providing and fixing 600x450 mm beveled edge mirror of superior glass (of approved quality) complete with 6 mm thick hard board ground fixed to wooden cleats with C.P. brass screws and washers complete.	2	Nos.		Each	0
8	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 1500x450 mm	2	Nos.		Each	0
9	Providing and fixing 600x120x5 mm glass shelf with edges round off, supported on anodised aluminium angle frame with C.P. brass brackets and guard rail complete fixed with 40 mm long screws, rawl plugs etc., complete.	4	No.		Each	0
10	Providing and fixing toilet paper holder :					
a)	C.P. brass	3	No.		Each	0
11	Providing and fixing soil, waste and vent pipes :					
a)	100 mm dia.					
(i)	Centrifugally cast (spun) iron socket & spigot (S&S) pipe as per IS: 1729	45	m		One Metre	0
12	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	20	Nos.		Each	0
13	Providing and fixing bend of required degree with access door, insertion rubber washer 3 mm thick, bolts and nuts complete.					
a)	100 mm dia					
(i)	Sand cast iron S&S as per IS - 1729	4	Nos.		Each	0
14	Providing and fixing plain bend of required degree.					
a)	100 mm dia					

(i)	Sand cast iron S&S as per IS : 1729	4	Nos.		Each	0
15	Providing and fixing single equal plain junction of required degree with access door, insertion rubber washer 3 mm thick, bolts and nuts complete.					
a)	100x100x100 mm					
(i)	Sand cast iron S&S as per IS - 1729	4	Nos.		Each	0
16	Providing and fixing single equal plain junction of required degree :					
a)	100x100x100 mm					
(i)	Sand cast iron S&S as per IS - 1729	4	Nos.		Each	0
17	Providing and fixing terminal guard:					
a)	100 mm					
(i)	Sand cast iron S&S as per IS - 1729	4	Nos.		Each	0
18	Providing and fixing collar:					
a)	100 mm					
(i)	Sand cast iron S&S as per IS - 1729	8	Nos.		Each	0
19	Providing lead caulked joints to sand cast iron/centrifugally cast (spun) iron pipes and fittings of diameter:					
a)	100 mm	56	Nos.		Each	0
20	Providing and fixing trap of self cleansing design with screwed down or hinged grating with or without vent arm complete, including cost of cutting and making good the walls and floors :					
a)	100 mm inlet and 100 mm outlet					
i)	Sand Cast Iron S&S as per IS: 1729	9	Nos.		Each	0
21	Painting sand cast iron/ centrifugally cast (spun) iron soil, waste vent pipes and fittings with two coats of synthetic enamel paint of any colour such as chocolate grey, or buff etc. over a coat of primer (of approved quality) for new work :					
a)	100 mm diameter pipe	26	m		One Metre	0
22	Providing and fixing vitreous china dual purpose closet suitable for use as squatting pan or European type water closet (Anglo Indian W.C pan) with seat & lid fixed with C.P. brass hinges and rubber buffers, 10 litre low level flushing cistern with fitting and brackets, 40 mm flush bend, 20 mm over flow pipe, with specials of standard make and mosquito proof coupling of approved municipal design complete, including painting of fittings and brackets, cutting and making good the walls and floors wherever required:					
a)	White vitreous china dual purpose WC pan with white solid plastic seat and lid with white vitreous china flushing cistern and C.P. flush bend.	2	Nos.		Each	0
23	Providing and fixing CP brass towel rail of approved brand complete with brackets fixed with rawl plugs & CP brass screws with concealed fittings arrangement of approved quality complete as per direction of Engineer-in-charge.	3	Nos.		Each	0
24	Providing and fixing MS Powder coated set of 6 peg hooks with necessary screws etc. complete as per direction of Engineer - in - Charge.	10	Nos.		Each	0

25	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 for floor/Nahni trap.					
a)	100 mm dia	9	Nos.		Each	0
	Sub-Head - Water Supply :					
1	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	2	m		One Metre	0
b)	20 mm dia. nominal bore	35	m		One Metre	0
c)	25 mm dia. nominal bore	15	m		One Metre	0
d)	40 mm dia. nominal bore	10	m		One Metre	0
2	Providing and fixing G.I. Pipes complete with G.I. fittings and clamps, i/c making good the walls etc. concealed pipe, including painting with anticorrosive bitumastic paint, cutting chases and making good the wall:					
a)	15 mm dia. nominal bore	51	m		One Metre	0
b)	20 mm dia. nominal bore	18	m		One Metre	0
3	Providing and fixing G.I. pipes complete with G.I. fittings including trenching and refilling etc.					
a)	25 mm dia nominal bore	25	m		One Metre	0
4	Making connection of G.I. distribution branch with G.I. main of following sizes by providing and fixing tee, including cutting and threading the pipe etc. complete :					
a)	25 to 40 mm nominal bore	1	No.		Each	0
5	Providing and fixing gun metal gate valve with C.I. wheel of approved quality (screwed end) :					
a)	25 mm nominal bore	1	Nos.		Each	0
6	Providing and fixing ball valve (brass) of approved quality, High or low pressure, with plastic floats complete :					
a)	20 mm nominal bore	2	Nos.		Each	0
7	Providing and fixing uplasticised PVC connection pipe with brass unions :					
a)	45 cm length					
(i)	15 mm nominal bore	20	Nos.		Each	0
8	Providing and fixing C.P. brass shower rose with 15 or 20 mm inlet :					
a)	150 mm diameter	3	Nos.		Each	0
9	Painting G.I. pipes and fittings with synthetic enamel white paint with two coats over a ready mixed priming coat, both of approved quality for new work :					

a)	15 mm diameter pipe	2	m		One Metre	0
b)	20 mm diameter pipe	35	m		One Metre	0
c)	25 mm diameter pipe	15	m		One Metre	0
d)	40 mm diameter pipe	10	m		One Metre	0
10	Painting G.I. pipes and fittings with two coats of anti-corrosive bitumastic paint of approved quality :					
a)	25 mm diameter pipe	25	m		One Metre	0
11	Providing and filling sand of grading zone V or coarser grade, allround the G.I. pipes in external work :					
a)	25 mm diameter pipe	25	m		One Metre	0
12	Providing and fixing G.I. Union in G.I. pipe including cutting and threading the pipe and making long screws etc. complete (New work)					
a)	15 mm nominal bore	2	Nos.		Each	0
b)	20 mm nominal bore	2	Nos.		Each	0
c)	25 mm nominal bore	1	Nos.		Each	0
d)	40 mm nominal bore	1	Nos.		Each	0
13	Providing and placing on terrace (at all floor levels) polyethylene water storage tank, IS : 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.	2500	Litre		One Litre	0
14	Providing and fixing C.P. brass bib cock of approved quality conforming to IS:8931:					
a)	15 mm nominal bore.	4	Nos.		Each	0
15	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.	6	Nos.		Each	0
16	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.	5	Nos.		Each	0
17	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	16	Nos.		Each	0

18	Providing and fixing C.P. Brass extension nipple (size 15mmx50mm) of approved make and quality as per direction of Engineer-in-charge.	4	Nos.		Each	0
	Sub-Head - Drainage :					
1	Providing, laying and jointing glazed stoneware pipes class SP-1 with stiff mixture of cement mortar in the proportion of 1:1 (1 cement : 1 fine sand) including testing of joints etc. complete :					
a)	150 mm diameter	15	m		One Metre	0
2	Providing and laying cement concrete 1:5:10 (1 cement : 5 coarse sand : 10 graded stone aggregate 40 mm nominal size) all-round S.W. pipes including bed concrete as per standard design:					
a)	150 mm diameter S.W. pipe	15	m		One Metre	0
3	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	5	Nos		Each	0
4	Constructing brick masonry manhole in cement mortar 1:4 (1 cement : 4 coarse sand) with R.C.C. top slab with 1:1.5:3 mix (1 cement : 1.5 coarse sand(zone-III) : 3 graded stone aggregate 20 mm nominal size), foundation concrete 1:4:8 mix (1 cement : 4 coarse sand (zone-III) : 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	4	Nos.		Each	0
5	Extra for depth for manholes					
a)	Size 90x80 cm					
(i)	With common burnt clay F.P.S. (non modular) bricks of class designation 7.4	1	m		One Metre	0

6	Making connection of drain or sewer line with existing manhole including breaking into and making good the walls, floors with cement concrete 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) cement plastered on both sides with cement mortar 1:3 (1 cement : 3 coarse sand) finished with a floating coat of neat cement and making necessary channels for the drain etc. complete :					
a)	For pipes 100 to 250 mm diameter	1	No.		Each	0
	Sub-Head - Water Proofing :					
1	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 20 mm 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 1.7 kg. 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).	10	Sqm		One Square Metre	0
2	Providing and fixing GI Spouts in depressed portions, 40mm dia and 60Cm long in Cement Mortar 1:4 (1 Cement: 4 Fine Sand) including making arrangement for smooth & efficient functioning of the spout as per the direction of the Engineer-in-charge.	4	No.		Each	0
	Grand Total :					0

**Executive Engineer (C)
BSNL Civil Division
Solan (HP)**