

Directorate of Urban Development
Government of Himachal Pradesh,
Palika Bhavan, Talland, Shimla-171002.

EOI No. UD-H(F)(2)-1/2002-IHSDP (EOI)-6455-57

Date: 01.10.2014

INVITATION OF EXPRESSION OF INTEREST

The Department of Urban Development, Government of Himachal Pradesh invites Expression of Interest for Construction of Pre-Fabricated Houses under IHSDP Scheme of Government of India for Urban Poor at three sites in Himachal Pradesh i.e. Solan, Baddi and Dharamsala. Interested Bidders and Developers having experience of execution of Construction in Pre-Fabricated Houses/ Buildings may send their Expression of Interest comprising of Eligibility and Technical Bid in separate sealed envelopes which shall be addressed to Director, Urban Development Department, Palika Bhavan, Talland, Shimla-02, Himachal Pradesh up to 21.10.2014 by 02:00 PM. The EOI will be opened on 21.10.2014 at 03: 00 PM. The relevant details about technology and eligibility criteria are available at <http://www.ud-hp.in>. The Director Urban Development, Himachal Pradesh reserves the right to accept or reject any or all the proposal without assigning any reason.

Director,
Urban Development, Shimla, HP.
Ph: 0177-2626518; Mail: ud-hp@nic.in
For enquiries please call: 91-9882238372; 91-9418036533.

RELEVANT DETAILS AND TECHNOLOGY:

1. The building must have G+3 structure along with infrastructure development at these sites. The approximate no. of Houses/ Dwelling Units (DU) to be constructed on these sites are as follows:
 - a. Solan: 84- 336 DUs
 - b. Baddi: 200-480 DUs
 - c. Dharamsala: 152-328 DUs
2. The built up area required to be constructed will be per 25-27 Sq. Mtr unit.
3. Building will be constructed with Pre-Fabricated Structure as per the technologies recommended by Buildings Materials and Technology Promotion Council (BMTPC), New Delhi for Mass Housing.
4. The construction period should not exceed more than 6 months.

ELIGIBILITY BID CRITERIA:

1. The agency should have used the technology at least once in India. Details of Work Orders/ Completion Certificate must be attached.
2. The bidder must have average annual turnover of Rs. 3 crores minimum. The audited balance sheet of the last three financial years must be submitted in support of the turnover.
3. The copy of Registration Certificate, TIN of the firm must be submitted.
4. The Technical Bids of only those bidders will be opened who qualify the eligibility criteria.
5. Joint Venture/ Consortium of not more than two firms can also apply along with a copy of agreement. However, the turnover of secondary bidder shall not be considered for calculating the turnover.

TECHNICAL BID CRITERIA:**Special Aspects of Construction to be followed by the Executing Agency:**

1. The technology used shall be structurally safe for vertical and lateral forces as per relevant Indian standard codes including seismic forces. Material used shall have adequate fire resistant, thermal insulation and acoustic behavior.
2. The frames of doors and windows shall be of aluminum. System must be capable of using/ fixing aluminum frame.
3. The Bath fittings shall be ISI marked CPVC pipes and fittings.
4. The structure of the houses shall have a minimum life span of 50 years. Bidder shall ensure the same.
5. The bidders have to submit their company profile with technical staff details with their qualification and experience. (Minimum 5 CVs & Maximum 10 CVs).
6. The technology / materials should either be certified by BMTPC or approved by any of the following institutions: Structural Engineering Research Institute/ Central Building Research Institute Roorkee/ IITs.
7. The firms who have Performance Appraisal Certificate (PAC) from BMTPC shall be preferred.
8. The bidders declared qualified in the eligibility bid are required to give presentation on 22.10.2014 at 11:00 AM on the Pre-Fabricated technology that shall be used by the bidder for construction of houses.
9. Proofs of all above mentioned technology/ criteria must be submitted by the bidders along with the bids.

INSTRUCTIONS TO THE BIDDERS:

1. The bidders are required to submit the bids i.e. Eligibility Bid and Technical Bid in two separate sealed envelopes clearly marked on the bid document **“Eligibility Bid for Construction of Pre-Fabricated Houses under IHSDP Scheme”** and **“Technical Bid for Construction of Pre-Fabricated Houses under IHSDP Scheme”**.
2. All the pages of the EOI submitted must be numbered and signed by the authorized signatory.
3. The bidders are required to submit all the necessary documents in support of eligibility and technical criteria mentioned above.
4. The technology will be evaluated and finalized by the committee constituted for the purpose by the department.
5. The bidder declared technically qualified will be eligible to submit the financial bid.
6. Financial bids will be invited from the technically qualified bidders only. The site layout plan details will be provided to the technically qualified bidder(s).
7. The bids submitted by the bidders will be valid for a period of 120 days from the last date of submission of bids.
8. Bidder(s) may clarify their doubt(s) (if any) by contacting the authorized official(s) of the project communicating through telephone or email. Tel: 0177-2626518, 2629757; E mail: ud-hp@nic.in
9. The Director Urban Development, Himachal Pradesh reserves the right to accept or reject any or all the proposal without assigning any reason.

Director,
Urban Development Department,
Shimla, Himachal Pradesh.

Technical Evaluation Criteria.

Sr. No.	Criteria	Marks
1.	Time Bound implementation. Time of Completion: a. 2 months from date of award: 10 Marks b. 3 months from date of award – 8 Marks c. 4 months from date of award- 6 marks	10
2.	Technical Presentation covering following points: a. Structurally safe for vertical and lateral forces as per relevant Indian standard codes including seismic forces – 3 Marks b. Fire resistant, thermal insulation and acoustic behavior material: 3 marks c. Capable of using/ fixing aluminum frame and ISI marked CPVC pipes and bath fittings- 3 Marks d. The structure's life span of 50 years minimum – 3 Marks e. Certified technology from BMTPC or approved by any of the following institutions: Structural Engineering Research Institute/ Central Building Research Institute Roorkee/ IITs. – 8 Marks	20
3.	Technical staff details with their qualification and experience. (Minimum 5 CVs).	10
4.	Experience of Prefabricated structures 1-2 years: 5 Marks 2-3 years: 8 Marks 3-5 years & above: 10 Marks	10
	Total	50

Note:

1. Proofs of all above mentioned technology/ criteria must be submitted by the bidders along with the bids.
2. The bidder securing minimum 35 marks will be declared technically qualified.

GOVERNMENT OF HIMACHAL PRADESH
URBAN DEVELOPMENT DEPARTMENT



STANDARD
LUMP SUM TENDER DOCUMENT

DEPARTMENT **Urban Development**
ULB **Municipal Council Solan**

NAME OF WORK **Construction of Houses and Community Centre**
using Pre-Fab technology under IHSDP Scheme.

ESTIMATED COST: **Rs. 6,22,06,572/-.**

AGREEMENT NO



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**GOVERNMENT OF HIMACHAL PRADESH
NOTICE INVITING TENDERS
URBAN DEVELOPMENT DEPARTMENT**

GENERAL INSTRUCTIONS

ULB: MUNICIPAL COUNCIL SOLAN

1. Tender in the prescribed forms are hereby invited on behalf of Governor of H.P. for the work construction of houses using Pre-Fab technology for estimated cost of Rs. 622.06 lacs only. Contract documents consisting of the detailed plan, specifications, the schedule of quantities of the various clauses of work to be done and the set conditions of contract to be complied with by the person whose tenders may be accepted can be down loaded from site <http://ud-hp.in> from 05.01.2015, 10:00 Hrs to 27.01.2015, 3:00 PM.
2. The tender shall be submitted in two parts
Part-I Technical Bid
Part II Financial Bid
3. Eligibility for Bids: The tenderer must following eligibility criteria:
 1. The agency should have used the technology at least once in India. Details of Work Orders/ Completion Certificate must be attached.
 2. The bidder must have average annual turnover of Rs. 3 crores minimum. The audited balance sheet of the last three financial years must be submitted in support of the turnover.
 3. The copy of Registration Certificate, TIN of the firm must be submitted.
 4. The Technical Bids of only those bidders will be opened who qualify the eligibility criteria.
 5. Joint Venture/ Consortium of not more than two firms can also apply along with a copy of agreement. However, the turnover of secondary bidder shall not be considered for calculating the turnover.
- 3.1(i) Pre-qualified Bidders will be considered for technical qualification as per the qualification criteria below:

Sr. No.	Criteria	Max. Marks
1.	Completion of work within stipulated period in all respect. (The bidder must submit the undertaking in his own format)	15
2.	Technical staff details with their qualification and experience. (5 CVs-1 Mark for each CV).	5



Sr. No.	Criteria	Max. Marks
3.	Experience of Prefabricated projects quoted: 1 Project: 5 Marks 2 Projects: 10 Marks 3 Projects & above: 15 Marks	15
4.	Average Annual Turnover: 3-5 Crores: 5 Marks 5-8 Crores: 10 Marks 8 Crores and above: 15 Marks	15
	Total	50

(ii) The financial bid of only those bidders will be opened who secure minimum 40 marks.

4. The tenders shall be opened in the Office of Director, Urban Development Shimla on 11:00 AM on 28.01.2015 and the bids shall be evaluated. Thereafter the financial bid of the successful bidders shall be opened.

5. Site for the work is available.

6. The Security deposited will be collected by the deductions from the running bills of the contractor at the rates mentioned in the Chapter -II and the earnest money deposited at the time of tenders, will be treated as a part of the Security deposit.

The security deposit will also be accepted in:-

1. Post office cash certificates, National Saving Certificate, Treasury Saving Certificates and National Plan saving certificate.
2. Deposit Receipts of recognized Bank approved by the Govt .for the purpose.

7. The acceptance of a Tender will rest with Director, Urban Development not bind himself to accept the lowest tender, and reserves to him the authority to reject any or all of the tenders received without the assignment of reason. All tenders in which any of the prescribed conditions are not fulfilled or are incomplete in any respect are liable to be rejected.

8. Canvassing in connection with tenders is strictly prohibited and the tenders submitted by the contractors who resort to canvassing will be liable to rejection.

9. On acceptance of the tender, the name of the authorized representative of the Contractor who would be responsible for taking instructions from the Directorate of Urban Development should be intimated.

10. **(OMITTED)** Special care should be taken to write the rates in figures as well as in words and the amount in figures, only in such way that interpolation is not possible. The total amount should be written both in figure and in words and in case of figures, the word Rs. Should be written before the figures of rupees and words after the decimal



figures, e.g. Rs.2.15, and in case of world s the wordø Rupeesø should precede and the wordsø Paisaø should be written at the end. Unless the rate is in whole rupees and followed by the wordsø onlyø it should invariably be up to two decimal place. While quoting the rate in schedule in quantities, the world õonlyø should be written closely following the amount and it should not be written in the next line.

11. The Government of H.P. does not bind himself to accept the lowest or any other tender and reserves to himself the right of accepting the whole or any part of the tender and the tenderer shall be bound to perform the same at the rate quoted.

12. Sale tax or any other tax on material in respect of this contract shall be payable by the contractor and Govt. will not entertain any claim whatsoever in this respect or deduction at source will be regulated under the provision of the sale tax. Act.

Percentage (2%) sale tax will be deducted from the bills of the contractor under section 12-A of the Pradesh General sales tax 1968 as per Gazetted Notification published in H.P. Rajpatra dated 4/8/1995.

13. The contractor shall not be permitted to tender for works in the UDD (responsible for awards and execution of contracts) in which his near relative is posted as Divisional Accountant or as officer in any capacity between the grades of Superintending Engineer and Junior Engineer (both inclusive). He 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 relatives to any gazetted officer in UD. Any breach of this condition by the contractor would render him liable to be removed from the approved list of contracts or this Department.

14. The contractor shall give a list of non-gazetted UDD employees related to him.

15. No Engineer of Gazetted rank or other Gazetted officer employed in Engineering or Administrative duties in an Engineering Department of the Govt. of H.P. allowed to work as a contractor for a period of two years of his retirement from Govt. services without the previous permission of the Govt. of H.P. This contract is liable to be conceded if either the contractor or any of his employees is found at any time to be such a person who has not obtained the permission of the Govt. of H.P. as aforesaid before submission of the tender or engagement in the contractorø service.

16. The tender for works shall remain open for acceptance for a period of 120 Days from the date of opening of tenders.

17. The contractors exempted from payment of earnest money/security deposit in individual cases should attach with the tender deposit and should produce the original whenever called upon to do so.

18. The tender for the work shall not be witnessed by a contractor or contractors who himself/themselves has/have tendered or who may and has /have tendered for the same work. Failure to observe this condition would render tenders of the contractors tendering as well as witnessing the tender liable to similarly rejection.

19. The tenders for the composite work includes the building sanitary and water supply installations and Electrical works.

20. It will be obligatory on the part of the tenderer to tender and sign the tender documents for all the components parts and that after the work is awarded, he will have to enter into an agreement for each component with the competent officer concerned.



21. **(DELETED)** The tenderer apart from being a (B&R) contractor must associate himself with agencies of the appropriate class which are eligible to tender for sanitary and water supply installations and electrical.
22. He should also see all drawings and in case of doubt obtain required particulars from Executive Engineer which may in any way influence his tender as no claim whatsoever shall be entertained for any alleged ignorance thereof. He should plan his Pre Fab structure accordingly.
23. If on check there are differences between the rates quoted by the contractor in words and in figures or in the amount worked out by him, the following procedure shall be followed:-
- (i) When there is difference between the rates in figures and in words the rates which correspond to the amounts worked out by the contractor shall be taken as correct.
 - (ii) When the amount of an item is not worked out by the contractor or it does not correspond with the rate written either in figures or in words , then the rate quoted by the contractor in words shall be taken as correct and not the amount.
 - (iii) When the rate quoted by the contractor in figures and in words tallies but the amount is not worked out correctly the rate quoted by the contractor shall be taken as correct and not the amount.
24. If it is found that the tender is not submitted in proper manner or contain too many corrections or absurd rates of amounts, it would be open for Govt. to take suitable action against the contractor.
25. **(DELETED)** The contractor should see all drawings and in case of doubt obtain required particulars which may in any way influence his tender from the Executive Engineer as no claim what so ever will be entertained for any alleged ignorance thereof.
26. Before tendering the contractor should visit the site and satisfy himself as to the condition prevalent there.
27. **(DELETED)** If it is found that the tender is not submitted in proper manner or contains too many corrections or absurd rates of amounts it would be open for the Govt. to take suitable disciplinary actions against the contractor.
28. Where Tenderer voluntarily offers a rebate for payment within a stipulated period this may be considered.
29. The contractor shall comply with the provision of the apprentices Act. 1961 and the rules and orders issued there under from time to time. If he fails to do so his failure will be a breach of the contract and the Director, Urban Development may in his discretion cancel the contract. The contractor shall also be liable for any pecuniary liability arising on account any valuation by him of the provisions of the Act.
30. The site shown in the layout plant shall be cleared of all obstruction loose stone material rubbish of all kind as well as brush wood. All holes or hollows whether originally existing or are produced by removal of loose stone or brush wood shall be carefully filled up with earth well rammed and levelled off as directed.
31. The contractors responsibility for the contract shall commence from the date of issue of orders of acceptance of tender.
32. **(OMITTED)** Un-sealed tenders shall be similarly rejected.



33. Before tendering the contractor shall inspect the site to fully acquaint himself about the condition in regard to accessibility of site nature and extent of ground working condition including stacking of materials of T&P etc. conditions affecting accommodation and movement of labour etc required for the satisfactory execution of the work contract No. claim whatsoever on such account shall be entertained by the Department on any circumstances.

34. The contract should read the specifications and study the working drawing carefully before submitting the tender.

35. The tenderer should acquaint themselves with the work and working conditions of the site and locality and no claim will be entertained on this issue.

36. **(DELETED)** The contractor should verify all plans elevations and sections shown in the drawing and in case of doubt obtain required particulars which may in any way influence his tender from the Directorate of Urban Development as no allowance whatsoever will be made beyond the contract for any alleged ignorance thereof. The contractor should plan his proposal in Pre Fab technology accordingly.

37. The site of execution of the work will be made available as soon as the work is awarded. In case it is not possible for the department to make the entire site available on the award of work the contractor shall arrange his working programme accordingly. No claim whatsoever for not giving the site in full on award of work or for giving the site gradually in parts will be tenable.

38. The tender documents show already the specific times and conditions on which tenders are required by the Govt. Hence all tender should be in strict conformity with the tender documents and should be filled in where ever necessary and initiated. Incomplete tenders are liable to be rejected. The terms and conditions of the tender documents are firm as such conditional tenders are liable to be rejected.

39. The site shown in the lay out plan handed over for execution of work shall be cleared of all observations loose stone material rubbish of all kinds as well as bush wind. All holes and hole whether originally

40. **(DELETED)** In case of discrepancy in the rates quoted by the contractor in words and figures, the rates quoted in words will be the correct basis and not the rates quoted in figures.

41. The contractor's responsibility for the contract shall commence from the date of issue of orders of acceptance of the tender.

42. The tenderer while submitting tenders must provide adequate information regarding his financial technical and organizational capacity to execute the work of the nature and magnitude.

43. The contractor should read the specifications, study the working drawing carefully before submitting the tender.

44. The rate of all items of work shall, unless clearly specified otherwise, include cost of all Labour materials and other inputs involved in the execution of the items.

Note 1: If a tender does not understand any articles/clause which is given in English version he should enquire before filling in the tender. No suit on this account will be entertained afterwards and held valid.

45. The tender for works shall remain open for acceptance for the period of 90 days from the date of opening of tender.



46. The Directorate of Urban Development reserves right to ask for submission of sample as in respect of material for which the tender has quote his rates before the tender can be considered for acceptance. If the tenderer who is called upon to do does not submit samples within 7 (seven) days of written order to do so the Government shall be at liberty to forfeit 10% of the said earnest money absolutely.

47. The tenderer on acceptance of offer if fails to commence the work within stipulated period the earnest money deposited with tender will be forfeited and will be absolutely at the disposal of the H.P. Govt. without any reservation on the part of the tenderer.

48 In case the lowest tenderer withdraw the offer or fails to start the work or refuses to carry out the work for which he has tendered and found to be the lowest one after its opening within the validity period, the earnest money so deposited by the tenderer shall stand forfeited and will be absolutely at the disposal of the H.P. Govt. without any reservation on the part of the tenderer.

(DELETED) MINIMUM MACHINERY REQUIRED FOR CONTRACTORS TO BE ELIGIBLE FOR TENDERING

Sr. No.	Description	Works where amount put to Tender Rs. 10.00 crores and above	Works where amount put to Tender between Rs. 5.00 crores lacs to Rs.10.00 crores .	Works where amount put to Tenders up to Rs.5.00 crores
1.				
2.				
3.				

The Contractor shall submit the detail of requisite machinery/equipments available with him.

Signature of Contractor
With Full Address

Director,
Urban Development Department.
(for and on behalf of Governor of HP)



LUMPSUM CONTRACT DOCUMENT

CHAPTER I

GENERAL CONDITIONS OF TENDER

1. Location and Description of Work:-

Lump sum tender, based on the tenderer's own design, conforming to the Design data specified in Chapter VI, are invited for the work **Construction of Pre Fabricated Houses in Pre-Fab technology for estimated cost about Rs. 6,46,80,512/- only.**

2. Time limit: - 6 months.

The work covered in this tender are required to be completed in all respects within **above given time** from the seven day after the date on which the Director, Urban Development issues written orders to commence the work. The tender should be based on this time of completion.

3. Application for Tender Documents

The tender document can be downloaded from Department website i.e. <https://ud-hp.in>.

4. Form on which tender is to be drawn

The tender shall be drawn on the form provided in Chapter IV and duly signed.

5. Date time and place of submitting tenders.

The contractor must submit the tenders on or before 27.01.2015 at 03:00 PM in the office of Director, Urban Development, Palika Bhavan Talland, Shimla-02.

6. Procedure for submitting the tenders: The contractor has to submit the following documents with his tender

TECHNICAL PART-I

6.1. Cost of tender in shape of Demand Draft drawn in name of Director, Urban Development, Shimla. Rs. 5000/-.

6.2. Earnest Money in shape of Demand Draft drawn in name of Director, Urban Development, Shimla. (Rs. 5,00,000/-)

6.3. (DELETED) Certificate from Bank for availability of liquid credit facility

6.4. (DELETED) Work in hand detail duly signed by competent authority

6.5. (DELETED) PAN No

6.6. (DELETED) Sales Tax Registration

6.7. (DELETED) Contractor Registration Certificate

6.8. (DELETED) Affidavit of Possessing Minimum machinery indicated in tender document

6.9. The affidavit of having technical personnel

6.10. Duly filled Annexure V

6.11 Duly filled Annexure VIII

6.12 Tender Form on format given in Chapter IV



6. 13. Technical Proposal with general arrangement drawing ,specifications ,construction methodology
- 6.14 And all other conditions as per tender document.

6. 17 FINANCIAL PART-II

FINANCIAL Offer as per BILL OF QUANTITIES (B.O.Q.)

7. Earnest Money

7.1. Earnest Money amounting Rs 5,00,000/-may be submitted in the form of irrecoverable Bank Guarantee with any Nationalized bank, National Saving certificate, certified cheques/ Demand Drafts duly pledged in the name of Director, Urban Development, Shimla. Bank guarantees submitted as Earnest Money shall be valid for 28 days beyond the validity of the bid. Earnest money of unsuccessful bidders shall be refunded as promptly as possible as but not later than 28 days after the expiry of the bid validity.

7.2. Deposit of earnest money in any other form is not acceptable;

7.3. A tenderer has to deposit earnest money in individual case.

7.4 In the case of the successful tenders the amount of the earnest money will be transferred towards a part of the security deposit to be paid after the award of work.

7.5. Earnest money of unsuccessful bidders shall be refunded as promptly as possible as but not later than 28 days after the expiry of the bid validity.

7.6 The Department shall not be responsible for any m in the value of the securities nor for loss of interest thereon.

8. Other conditions for submission of Tenders

8.1 Inspection of site óThe tenderers shall, in their own interest, examine the drawings, conditions of contract and specifications of work. They shall also inspect the site and satisfy themselves on their own as to the hydrological climatic and physical conditions prevailing at site, the nature, extent and practicability of the works, all existing and required roads and other means of communication and access to the site, whether by water or land, availability of housing and other facilities, the availability of different materials and their adequacy, labour and probable sites for labour camps, stores and go downs etc..

They shall themselves, obtain all necessary information as to risks, contingences and other circumstances which may affect or influence their tender. No extra charges consequent on any misunderstanding or otherwise shall be allowed.

The bidder must also check the mode of transportation of material to the site on his own.

8.2 Discrepancies in tender:-Should there be any discrepancy in, or any doubts or obscurity as to the meaning of any of the tender documents, or as to anything to be done or not to be done by the tenderer, or as to the instructions to be observed by him, he must set forth in writing such discrepancy, doubt or obscurity and submit the same to the Directorate of Urban Development, Shimla for elucidation as soon as possible, but not latter than 14 days before the date fixed for receipt of tenders.

8.3 Sufficiency of tender- The lump ósum tender shall be inclusive of all expenses for proper and entire completion of the work and shall, amongst other things, include all taxes, tolls, octroi, royalties, patent rights etc.



8.4 Whether a tenderer quotes on the departmental outline design or on his own alternative design, he shall be responsible for furnishing detailed designs & working drawings. Further he shall obtain technical approval of the Technical Committee for each of the components of the work without any extra cost as required in clause 45 before carrying out the work.

8.5 All the pages of the tender documents, accompanying the tender shall be initialed in ink at the lower right hand corner and signed in ink where required in the tender papers by the tenders or his authorized representative with official seal.

8.6 All corrections, interpolations or cuttings in the tender shall be attested in ink by the tenderer or his authorized agent with his dated signature in ink. Tenders shall not contain any erasures

8.7 The Director, Urban Development shall have the right to omit or suspend certain items of work to revise or to amend tender documents prior to the date of receipt and opening of the tender, Such revisions or amendments or extension, if any, shall be communicated to all concerned through e mail.

8.8 It will be obligatory for the tenderers to keep the offer of their quotation/tender valid for a period of 120 days from the due date for receipt of tenders.

8.9. The tenders shall be in the same units as provided for in the departmental. Outline design (vide chapter VI).

9. Opening of tenders.

9.1 The tender documents consisting part-I excluding the ``Financial bid`` will be opened by technical committee constituted for the purpose. Thereafter the financial bids of the technically successful bidders shall be opened on the schedule date.

9.2 Thereafter all tenders received will be examined and clarifications sought if necessary; on the conditions which may have been stipulated by the tenderers, and are at variance with the stipulations of the tender documents.

9.3 Each of these condition shall be evaluated from the details furnished in the tenders or, if necessary after obtaining clarification from the tenderers.

9.4 Financial bids will be opened in the presence of such of the tenderers or their representatives as may be present and the lump-sum amounts quoted by them will be read out. In addition, the amount evaluated for each tender for withdrawing or modifying the conditions stipulated by him so as to bring it in conformity with the stipulations in these documents will also be announced.

10. (DELETED) Rejection of Tenders

10.1 If a tenderer's design violates the basic design data supplied with the tender documents, the tender shall be liable to rejection. However, if along with the quotation a tenderer gives reasons which, in the opinion of Engineer-in-charge justify a departure from the basic design data he may, in his absolute discretion, consider the tender on merits. In any case, the tenderer must furnish priced details, showing the financial effect of the departures from the said design data.

10.2 A tender not accompanied by Income-tax clearance certificate, tender itself is liable to rejection.

10.3 A tender not accompanied by full earnest money as prescribed, tender itself is liable to rejection.



10.4 If a tenderer proposes any alterations in or addition to the prescribed form of tender (Vide Chapter IV) or reserves the right to decline or carry out any work included in these tender documents, his tender is liable to be rejected.

10.5 The Director, Urban Development, Shimla, however, reserves the right to reject any or all the tender without assigning any reason whatsoever.

10.6 Canvassing in connection with a tender, in any form renders the tender liable to rejection.

CHAPTER II CONDITIONS RELATING TO AWARD OF WORK

11. Award of work:-

11.1) The successful tenderer will be notified by a letter (in the form specified in Annexure-II) sent by Registered Post to the address shown on his tender, that his tender has been accepted.

11.2) The tender together with the letter of acceptance thereof shall constitute a binding contract between the successful tenderer and the Department and shall form the foundation of the rights and the obligations of both the parties,

11.3) The several documents forming the contract are to be taken as mutually explanatory to one another, detailed drawing being followed in preference to small scale drawing and figures dimensions in preference to scale dimensions and special conditions in preference to General Conditions:-

In case of any discrepancy between Schedule of works, the specification and or the drawings, the following order of preference shall be observed:-

- a) Letter of Acceptance
- b) Description in Schedule of works.
- c) Particular specifications;
- d) Drawings;
- e) General specifications

If there are varying or conflicting provisions made in any one document forming part of the Contract the Accepting Authority shall be the deciding authority with regard to the intention of the document.

In the event of a discrepancy between description in words and figures quoted by a tenderer, the description in words shall prevail.

11.4) Any error in description, quantity or rate in Schedule of Works/items or any omission there from shall not vitiate the Contract or release the Contractor from the execution of the whole or any part of the works comprised therein according to drawing and specification or from any of his obligations under the Contract.

11.5) The bidder shall be awarded the work only after the acceptability and consent of the beneficiaries for paying the additional cost of prefabricated housing as compared to the approved cost by GOI.



12. Security deposit.

12.1) Amount of Security Deposit:- Security Deposit shall consist of two parts(a) Performance Guarantee to be submitted at award of work and b) Retention money to be recovered from Running Bills. Performance guarantee should be @5% of Contract amount and should be submitted as Bank Guarantee, Government Securities, FDR within 28 days of receipt of letter of acceptance. Retention money shall be deducted at @ 5% from Running Bills. Total of Performance Guarantee and Retention Money should not exceed @10% of Contract amount or lesser sum indicated in the bid documents. @5% Performance Guarantee should be refunded within 14 days of the issue of the defect liability certificate (taking over certificate with a list of defects). Retention money shall be refunded after issue of No. Defects Certificate. This balance amount can be substituted by on demand Bank Guarantee.

12.2 The amount of the earnest money (vide clause 7 of Chapter-1) of the successful tenderer will be treated as a part of the security deposit.

12.3 The recovery of Security Deposit by deduction from running amount bills does not arise in case the contractor deposits the total security deposit in the form of Government Securities in the shape of Bank Guarantee as specified under clause 12.1. Government papers tendered as security shall be taken at the value at which they are purchased and not for their face value.

12.4 All compensation or other sums payable by the contractor under the terms of this contract or any other contract or account will be deducted from his Security Deposit or from any sums which may be due to him or may become due to him from the Government on any account and in the event of the Security Deposit being reduced by reasons of any such above noted deduction, the contractor shall within 14 days of receipt of notice of demand from the Engineer-in-Charge make good the deficit.

12.5 There shall be no liability on the Department to pay interest on the Security deposited by or recovered from the contractor, unless or until it is made interest bearing as mentioned in Para 12.1.

12.6 In case the contractor does not complete the work or leaves the work unfinished the security deposited by the contractor will be forfeited.

13. Performance Bond

The successful tenderer, in addition to the prescribed security deposit, shall provide Guarantee of Insurance Company or a Scheduled bank to be jointly and severally bound with the Contractor to the Department for a sum of 5% of his tender sum for the due performance of the contract. The bond shall be in a form as specified in Annexure-III. The obtaining of such guarantee or the provision of such sureties and the cost of the bond to be so entered into shall be at the expense in all respect of the contractor.

14. Return of Security Deposit

14.1 On satisfactory completion of the work to be certified by the Technical Committee and handing over of the job to the department half the security deposit will be refunded to the contractor.

14.2 The balance half will be retained by the department free of interest as security against any non compliance with the prescribed specifications, rectification of defects (which the contractor shall be liable to rectify or make good during the defect liability



period). This half portion of the security deposit will be refunded with his final bills or after his satisfactory compliance with his liabilities notified to him during the defect liability period (vide clause 67 of chapter III) which ever is later.

CHAPTER III

CONDITION OF CONTRACT

SECTION I-DEFINITION AND INTERPRETATION

15. Definitions

In the Contract (as hereinafter defined) the following words and expressions shall have the meanings herein assigned except where otherwise specified.

16.1 The Contract shall mean the notice of tender, quotation and the tender document including the tender and acceptance there of together with the document referred to therein and the conditions with Annexure mentioned therein including any special conditions, specifications designs, drawings, priced schedule/bill of quantities and schedule of rates. All these document taken together shall be deemed to form one Contract and shall be complementary to one another.

16.2 The Contractor shall means the individual or firm or company whether incorporated or not, undertaking the works and shall include legal representatives of such individual or persons composing such firm or unincorporated company, or successors of such firm or company as the case may be and permitted assigns of such individual or firm or company.

16.3 The Contract Sum shall mean the sum for which the tender accepted.

17.1 The Accepting Authority shall mean the Director, Urban Development.

17.2 The Director, Urban Development, Shimla Himachal Pradesh shall mean the officer who is designated as such for the time being and in whose jurisdiction the work lies.

17.3 Department means the Urban Development Department of the State of Himachal Pradesh and Government mean the Governor of Himachal Pradesh, his successors in office and assigns.

17.4 The ULB shall mean the concerned Urban Local Body.

17.5 The Engineer-in-Charge shall mean the Engineer/ Technical Person appointed by Director, Urban Development for supervision of work.

17.6 The Technical Committee shall mean the Committee formed by the State Government for monitoring, evaluation and quality control, etc. of the project headed by Director, Urban Development.

18.1 A Day shall mean a day of 24 hours from midnight to midnight irrespective of the number of hours worked in that day.

18.2 A week shall mean seven consecutive days without regard to the number of hours worked in any day in that week.

19. Excepted Risks are risks due to riots (otherwise than among Contractor's employees) and civil commotion (in so far both those are un-insurable), war (whether declared or not), invasion, act foreign enemies hostilities, civil war rebellion, revolution insurrection, military or usurped power any acts of God such as earth, quake, lightening



and unprecedented floods over which the Contractor has no control and accepted as such by the Accepting Authority.

20. "Market Rate" shall be the rate as decided by the Engineer-in-charge on the basis of the cost of materials and labour to the Contractor prevailing at the site where the work is to be executed plus a percentage of to cover all overheads and profit.

21. "Nominated sub-contractor" shall mean all specialists, merchants, trades men and other executing any special work or supplying any materials for which provisional sums or prime cost sums are included in the contract who may have been or nominated or selected or approved by the Accepting Authority/Engineer-in-charge and shall be demanded to be employed by the Contractor.

The nominated sub-contractor shall undertake towards the Contractor the like obligations and liabilities as are imposed upon the Contractor by the terms of this contract.

"Sub-contract" shall mean by contractor entered into by the contract with any such nominated sub-contractor.

22. "Site" shall mean the lands and/or other place on, under, in or through which the work is to be executed under the Contract including any other land or places which may be allotted by Department or used for the purpose of the Contract.

23. "Temporary Works" shall mean temporary works of every kind required in or about the execution, completion or maintenance of the work.

24. "Urgent Works" shall mean any measures which in the opinion of the Engineer-in-charge, become necessary during the progress of the work to avert any risk of accident or failure or which become necessary for the security of works or the persons working thereon.

25. "Works" shall mean the works to be executed in accordance with the Contract or part (s) thereof as the case may be and shall include all extra or additional altered or substituted works as required for performance of the Contract.

26. Singular and Plural

Interpretations-Where the context so requires words importing the singular only also include the plural and vice versa

27. Heading and Marginal Notes.

Heading and Marginal notes, if any, to the General conditions shall not be deemed to form part thereof or be taken into consideration in the interpretation thereof of the contract.



SECTION II-SCOPE OF THE CONTRACT SCOPE OF WORK

28. Intent of plans and specification

The work to be carried out under the Contract shall include all the items given in the Schedule of Works vide Annexure IV (Page-72) and shall except as otherwise provide in these conditions include all labour, materials including wastage, tools, plant, equipment and transport, hoisting, setting fixing and fixing in position which may be required in preparation and completion of the works.

Provisional items shall mean all items of works which may be required and for which only approximate quantities have been included in the Tender Documents.

No work under such provisional item shall begin without prior instructions in writing from the Director, Urban Development.

29. (DELETED) Urgent Works:-

If any urgent work (in respect where of the decision of the Engineer in charge shall be final and binding) becomes necessary and the contractor is unable or unwilling to carry it out at once. The Engineer in charge may by his own or other people have it carried out as he may consider necessary. If the urgent work shall be such as the contractor is liable under the Contract to carry it out as he may consider necessary. If the urgent work shall be such as the contractor is liable under the Contract to carry it out at his expense, all expenses incurred on it by the Department shall be recoverable from the Contractors and be adjusted or set off against any sum payable to him.

30. Materials found at site

30.1 Materials of any kind obtained from excavation on the site shall remain the property of the Department and shall be disposed of as directed.

Provided that if the excavated material is soil and is used in the work, the use of such materials will be allowed free of cost.

30.2 All fossils, coins, articles of value or antiquity and structure and other remains or things of geological archaeological interest discovered on the site shall be the absolute property of the Department and the Contractors shall take reasonable precautions to prevent his workman or any other persons from removing or damaging any such articles or thing and shall immediately upon discovery thereof and before its removal acquaint and obtain the necessary directions. All work connected with the removal and carriage of such articles of the place directed by the Engineer-in-charge shall be at the expense of the Department.

31. Deviation

31.1 The members of Technical Committee may make any alterations additions to or omission from the work as described in the tender documents, including change in the lines, levels, positions and dimensions of any part of the work, that may, in his opinion, be necessary and for that purpose he shall have absolute power to order the Contractor to do and the Contractors shall carry out the same as provided in this contract document.



31.2 The rate of these deviations shall be as provided for in Annexure V of the Contract. Rate for variation should be quoted in per sqm. of plinth area for both increase and decrease.

31.3 Such deviations of the item of work that may occur during the course of construction are indicated in Annexure V. The contractor shall quote his rate(s) against each of these items, along with his Tender

32. Temporary services roads, removal of obstructions, etc.

32.1 Unless otherwise specified the Contractors shall provide and bear all expenses and charge for special temporary service roads required by him in connection with access to the site. He shall after adopt or maintain the same as required from time to time.

He shall not object to the use of these services roads by other construction traffic.

32.2 The Contractor will not have any claim in case of delay by the department of removal of trees or shifting raising, removing of telegraph, or electric lines (overhead or underground) and other structures, if any, which may come in the way of the work. However, suitable extension of time can be granted to cover such delays as provided in clause 46.

33. Final clearing of site

On the completion of work the contractor shall clear away and removed from the site all constructional plant surplus materials, rubbish and temporary work of every kind and leave the whole of the site and works clean and in a work manlike condition to the satisfaction of the Engineer-in-charge.

MATERIALS

34. General

34.1 The Contractors shall at his own expense, provide all materials,

34.2 All materials to be provided by the Contractor shall be in conformity with the specification laid down in contract and the Contractor shall, if required by the Engineer-in-charge, furnish proof about their suitability to the satisfaction of the Engineer-in-charge.

34.3 (DELETED) Subject to as hereinafter provided in clause 60.I all charges on account of control, terminal or sale tax and other duties on materials obtained for the works from any source (excluding materials supplied by the Department including those due to loading, unloading, lead and life shall be borne by the Contractor.

34.4 Departmental officials concerned with the contract shall be entitled, at any time to inspect and examine any material intended to be used in or on the works, either on the site or at factory or workshop or other place (s) where such materials are assembled, fabricated or manufactured or at any place (s) where these are lying or from where these are being obtained and the Contractor shall give such facilities as may be required for such inspection and examination.

34.5 All materials brought to the site shall not be removed off the site without the prior approval of the Director, Urban Development.



35. Materials to be supplied by the Department:-

All the Material will be arranged by the contractor and no material will be supplied by the department.

35.1 (DELETED) Materials to be supplied by the Department.

Materials to be supplied by the Department are shown in Annexure VI which also stipulates quantum place of issue and rate(s) to be charged in respect thereof. If the contractor wished to exercise an option to supply some or all of those materials himself, he shall stipulate accordingly when submitting the tender and in that event the remaining materials. If any shall be supplied by the Department as aforesaid soon after acceptance of the tender the contractor shall agree in writing with Director, Urban Development on a phased programme of his requirements with regard to the delivery of materials.

The Department will however not be responsible for any delay in supply of these material and no claims in cost on account of such delay shall be against the Department. However suitable extension of time in such cases may be allowed as per clause 46 of the contract.

If after acceptance of the tender the contractor wants the Department to supply any further quantities of materials out of those mentioned in the said Annexure such materials may be supplied by the Department, if found justified at rates indicated in Annexure-VI.

For the materials listed in Annexure VI which the contractor does not stipulate to supply himself but requires Department to supply he shall give a reasonable notice in writing of his requirement to the Director, Urban Development in accordance with the agreed phased programme. Such materials shall be supplied for the purpose of this contract only and the value of the materials so items of work for which payment is being made to the contractor from any sums then due or which may thereafter become due to the contractor under the contract.

All materials issued to the contractor by department for incorporation or fixing the works (including preparatory work) shall on completion of the work, be returned by the contractor at his expense, at the place of issue, after making due allowances for actual consumption, reasonable wear and tear and or waste. If the contractor is required to deliver such materials at a place other than the place of issue, he shall do so and the difference in the transportation charges actually incurred and which would have been incurred by the contractor had such materials been delivered at the place of issue, shall be borne by the department or the Contractor, as the case may be.

Surplus material returned by the Contractor in good condition and accepted by the Director, Urban Development shall be credited to him at rates at which these were originally issued to him.

If within a month of obtaining the certificate of completion of works the Contractor fails to return surplus materials out of those supplied by the department in good acceptable condition, then in addition to any other liability which the contractor would incur, the Director, Urban Development may by a written notice to the Contractor require him to pay within a month of receipt of the notice of, Such un-returnable surplus materials at one and a half times the issue rates.

For material supplied by the department, the contractor shall at all times maintain proper records showing the basis of the indents, the receipts and the utilization of the materials supplied and these shall at all times be open for inspection by the Director or his authorized representative or Technical Committee.



35.8 (DELETED) Cement

35.8 (i) Cement will be supplied to the Contractor in the slandered packing bags as received from the suppliers of the cement and will be delivered at the specified departments stores at the respective rates mentioned in Annexure-VI.

35.8(ii) the contractor shall forth with remove from the work area any cement that the Engineer-in Charge may disallow for use and refuse to take back. The disposal of such cement shall comply with the rules and regulations that may be in force at the time and as the Engineer-in Charge may approve.

35.8(iii) the contractor shall provide near the site of work a satisfactory storage for not less than thirty days requirements of cement for the work in hand and anticipated at the rate then in progress. Every cement godown shall be provided with two locks on each door. The key of one lock at each door will remain with the Engineer-in Charge or his representative and that of the other lock with contractors authorized agent at the site of work so that cement is removed from the godown only according to daily requirements with the knowledge of both the parties.

35.9 (DELETED) For Steel

35.9 (i) Steel reinforcement shall be supplied at the Department's store at rate (s) stipulated under Annexure VI. These shall be supplied in lengths as received from the manufactures.

35.9 (ii) When surplus steel items are returned they shall be in sizes and preferably in lengths as supplied previously to the contractor. Cut pieces of less than 3 meters length (each) will not be taken back.

36. (DELETED) Procurement of material.

The Engineer-in-charge on request from the Contractors will, if in his opinion the request is reasonable in the interest of work and progress, assist the Contractors in the procurement of the indigenous materials. He will also assist the Contractors in securing the priorities for deliveries, transport in particulars, railway wagons etc. where such are needed. The Department will not, however, be responsible for the non availability of any of the facilities or delay in this behalf and no claims either in cost or time on account of such failure or delay shall be admissible against the Department.

37. Storage

37.1 Materials required for the works whether brought by the Contractors or supplied by the Department shall be stored by the Contractors only at places approved by the Engineer-in-charge Storage and safe custody of materials shall be the responsibility of the Contractor.

37.2 Explosives and inflammable materials

If explosives or inflammable materials are to be used for the execution of the works the contractor shall at his expense, obtain such license or license as may be required for



storing and/using explosive and/or inflammable materials and locate, construct and maintain magazines if such are required for storage in accordance with the requirements of the appropriate Rules in force.

The Contractor shall exercise utmost care while using explosives and inflammable materials not to endanger life and property and he shall be solely responsible for any and all damages resulting from the storage and use of such materials. Further he shall indemnify absolutely the Department and its officers and employees against any claim and liability arising out of any accident or violation of any laws, rules, orders etc, in force regarding storage and use of such materials.

38. Sampling and testing

38.1 The Contractors shall at his own expense and without delay, supply to the Director and Engineer-in-charge samples of materials proposed to be used in the works. The Engineer-in-charge within three days of supply of samples or within such further period as he may require intimate to the Contractor in writing whether samples are approved by him or not.

38.2 If samples are not approved, Contractor shall further arrange to supply to the Engineer-in-charge for his approval fresh samples complying with the specification laid down in the Contract.

38.3 The Engineer-in-charge shall be entitled to have tests carried out as specified in the Contract for any materials supplied by the Contractor other than those for which satisfactory proof has already been furnished at the cost of the Contractor and the contractor shall provide at his expense all facilities which the Engineer-in-charge may require for the purpose.

38.4 If any tests other than those specified in the Contract are required by the Engineer-in-charge, the Contractor shall provide all facilities required for the purpose of the purpose and the charges of such tests shall be borne by the Department.

38.5 The cost of materials consumed in tests shall be borne by the Contractor in all cases.

39. Defective materials

39.1 Any materials used on work without prior inspection (and where necessary, testing) and without approval of the Engineer-in-charge is liable to be considered un-authorized and defective.

39.2 The Engineer-in-charge shall have full powers for getting removed any or all of the materials brought to the site by the Contractors but are not in accordance with the Contract specifications or do not conform in character or quality to the samples approved by him.

In case of default on the part of the Contractor in removing rejected materials, the Engineer-in-charge shall be at liberty to have them removed by other means at the cost of the Contractor.

39.3 The Engineer-in-charge shall have full powers to require other proper materials to be substituted for rejected materials and in the event of the Contractor refusing to comply with he may cause the same to be supplied by other means at the cost of the Contractors.

40. Patent rights

The Contractor shall indemnify the Department or any agent, servant and employees of the Department against any action, claim or proceeding relating to infringement or use of



any patent or design rights and shall pay any royalties or other charges which may be payable in respect of any article or materials or part of included in the Contract.

PLANT AND EQUIPMENT

41. General Rules

41.1 The Contractor shall arrange at his own expense all tools, plant and equipment (here in after referred to as T & P) required for execution of the work.

41.2 (DELETED) In the case the Contractor so requires, some or all item of T & P listed in Annexure VII will be given to him on hire by the Department, at the rate shown in the Annexure provided he has indicated his requirement at the time of submitting his tender. The Department will, however, not be responsible for any delay in supply of Departmental T&P and no claims in cost on account of such delay shall be against the Department. However, suitable extension of time in such cases may be allowed as per clause 46 in the Contract.

41.3 All constructional plant, provided by the Contractor shall when brought on or to the site, be deemed to be exclusively intended for the construction and completion of the work and the Contractor shall not remove the same or any part thereof (even for the purpose of moving it from one part of the site to another) without the consent in writing of the Engineer-in-Charge which shall not be unresponsibly withheld.

41.4 Upon completion of the works, the contractor shall remove from the site all the said constructional plant.

41.5 The Department shall not at any time be liable for the loss of or damage to any of the said constructional plant save as otherwise provided in these documents.

41.6 In respect of any constructional plant which the Contractor shall have imported for the purpose of the works the Department will assist the Contractor, where required in procuring any necessary Government consent for re-exporting of such constructional plant if required by the Contractor upon the completion of the work.

41.7 The Department will assist the Contractor where required in obtaining clearance through the customs of constructional plant, accessories and spares parts required for the works.

42. (DELETED) Condition of hire of Departmental T & P

The Contractor will have to pay token Tax to the HRTC for the period in case he uses the Department (PWD) trucks on his request for bonafide use according to the rates fixed by the corporation. The receipt for payment of Token Tax to the HRTC will have to be produced by the contractor to the Engineer-in-Charge at the time of payment for the work.

42.1 (DELETED) Soon after acceptance of the tender, the Contractor shall agree in writing with the Engineer-in-charge on a phased programme of his requirement with regard to issue of Department T & P.

42.2 (DELETED) Department T & P hired to the Contractor shall be carried by him at his expense from the place of issue to the site and back, when no longer required by him.



42.3 If the Contractors require any item of T & P on hire from the Department over and above the requirement indicated by him at the time of submitting his tender, the Department may, if such item is available, hire it to the Contractor at a rate to be agreed upon between him and the Director, Urban Development.

42.4 The period of hire will be reckoned from the commencement of the day of issue up to the end of the day of return (including all recognized holidays) irrespective of the actual hour of issue and return

42.5 The contractor will be exempted from levy of any charge for the number of days he is called upon in writing by the Director, Urban Development to suspend execution of the work, provided department T&P in question has, in fact, remained idle with the Contractor because of the aforesaid suspension of the work.

42.6 The hire charges shall be reckoned as under:-

- i) The first eight working hours (excluding break one hour) 1 working day.
- ii) every working hour or part thereof in excess of 8 working hours at the rate of $1/8^{\text{th}}$ of the hire charges for a working day, provided, however, if the Department has paid more than at the rate of $1/8^{\text{th}}$ of the wages of the crew for overtime under the Minimum Wages Act or any other law for the time being in force, the excess over the $1/8^{\text{th}}$ of the wages shall also be charged to the Contractor.

42.7 If, however, the Department T&P has been worked for less than 8 hours or has not been worked during a day. Charges shall be reckoned as under:-

- a) For working between 4 to 8 hours, for the actual number of hours worked, at the specified hourly rate.
- b) for working for less than 4 hours for full 4 hours, at the specified hourly rate and
- c) When not worked at all, at idle hour charges for the whole day.

42.8 If, however, the Departmental T&P could not be used on account of a major break down, and it has :-

- i) not worked at all on a day, no charges will be levied and
- ii) Worked for some period before the break down, charges will be levied for the actual hours worked.

42.9 (DELETED) The hire charges shown in Annexure VII cover charges of crew stores for maintenances and cleaning purposes and fuel needed to start a machine at the time of issue. All other charges such as cost of fuel for running a machine engine oil, kerosene oil etc, for working Departmental and all unskilled labour and water required for servicing /wash out shall be borne by the Contractor. The Contractor shall permit the engineer-in-charge to carry out periodical maintenance of Department T&P in accordance with the provision therefore and there will be no deduction in hire charges for the period spent on such maintenance.

42.10 The contractor shall be responsible for care and custody of Department T&P (including Employment of chowkidar/s) during the period Departmental T&P remains with him and any damage (fair wear and tear excepted) to any of the equipment (except for Excepted Risks provided always the contractor has taken precaution necessary to protect from such risks) shall be made good at the contractor's expense to the satisfaction of the Engineer-in-charge unless such damage is caused because of negligence of crew provided by the Department.



42.11 Department gives no guarantee in respect of Departmental T&P hired to the Contractor and no reduction in respect of any compensation shall be allowed on the ground that out turn of performance of T&P was not to the Contractor's expectation.

42.12 Department T&P hired to the Contractor shall be returned at the place of issue unless otherwise directed) by the Contractor on completion of the work or section of the work or earlier on termination of the hire by Department as hereinafter provided on a written notice by the Director, Urban Development. Department shall be entitled to terminate the hire on three days' notice without assigning any reason whatsoever and the Contractor shall have no claim to any payment of compensation whatsoever on account of such termination of hire Departmental T&P by the Department. In such an event, however, a reasonable extension of time for completion of the work may be given by the Director, Urban Development if demanded by the contractor,

42.13 A Log Book for recording hours during which every item of Departmental Machinery issued to the Contractor has worked each day shall be maintained by the member of the crew in-charge there or any representative of the Engineer-in-charge appointed in that behalf by Director, Urban Development and shall be daily attested by the Contractor or his authorized agent. In case the Contractor contests correctness of any entry and/or fails to sign the Log Book the decision of the Director, Urban Development shall be final and binding on him. Hire charges shall be calculated in accordance with the entries of the Log Book.

42.14 Statement of Hire Charges

A monthly detailed statement of the hire charges incurred in respect of Departmental T&P and /or transport shall be given by the Contractor to the Director, Urban Development and Engineer-in-charge for verification.

PROGRAMME OF CONSTRUCTION

Programme

43.1 Time is the essence of the contract and it shall be clearly understood that the contractor is bound to complete the work in all respect within the time specified vide Cl.2 of these documents.

43.2 The tenderer's programme of work acquired vide Clause 6.4 shall include a Progress Schedule which shall bear a reasonable relation to the total time specified for completion of works. This schedule shall give the forecast of the dates of commencement and of completion of the various construction trades/stages of the work. It shall also indicate the time schedule for all preliminary arrangements the contractor intends to make before start of the work.

43.3 This progress schedule, after modifications, if any, during the process of seeking clarifications while examining the tenders, shall form a part of the contract.

43.4 The progress schedule may be amended, as and when necessary, by agreement between the Director, Urban Development and Contractor within the limitations of time imposed by the contract, without levy of any compensation.

43.5 The acceptance of the above programme by the Director, Urban Development shall not relieve, Contractor of any of his responsibilities to complete the whole of the works by the prescribed time or extended time, if any.



44. Progress of Works

Contractor shall give the Director, Urban Development, on the 4th day of each month a report on progress of work done during the previous month.

45. Submission and approval of designs and drawings

45.1 At least four copies of the complete design calculation and drawing for each component units shall be submitted by the Contractor for approval and the Engineer-in-charge shall ensure that the approval to the drawing, if found in order, is accorded within 15 DAYS from the date of receipt of the drawing from the contractor. Otherwise he shall apprise the Contractor of his comments on such design calculations and drawings within the above mentioned period.

Where such comments are communicated to the Contractor, the Contractor shall ensure that the designs, modified in view of these comments are submitted to the Engineer-in-charge within 15 days of receipt of these comments. Similar course of action, as aforesaid shall be taken by the Engineer-in-charge on the modified designs

45.2 The structural design for its conformity to specified requirements given in the Annexure-IV be approved by IITs/ NITs/ CBRI/SERC/other reputed technical institute.

45.3 The Contractor shall be bound to make all such modifications in the said design and drawings as may be indicated by the Accepting Authority, whose decision in this respect shall be final and binding to comply with the standard codes and specification mentioned in this contract or in their absence, with principles, of sound engineering practice, at no extra cost to the Department.

45.4 Not with standing the approval of the Accepting Authority to the contractor's design, and drawings, the contractor shall be responsible for the stability of the various structures in accordance with the provisions of the contract and the approval accorded shall not absolve him of his responsibility for the safety of the structure.

45.5 On receipt of the approval to the Contractor's design and drawings, the Contractor shall supply to the Accepting Authority within a period of 15 days on the receipt of such communication, six copies of the approved drawings for use of the Department One set of drawings shall be signed by both parties to the contract, for the purpose of identification.

46. Extension of time

46.1 The time for completion of the works in the event of any authorized deviations resulting in additional cost over the Contract sum shall be extended, if requested by the Contractor in the proportion in which the cost of the altered, additional or substituted work bears to the original Contract sum plus any additional time which the Director, Urban Development may consider reasonable.

46.2 If the works be delayed by :-

- a) force majeure, or
- b) abnormally bad weather, or
- c) serious loss of damage by fire, or
- d) civil commotion, local combination of workmen, strike or lookout, affecting any of the trades employed on the work, or



- e) delay on the part of other contractors or tradesmen engaged by the Department in executing work on which the progress of the work under this contract is dependant but does not form part of this Contract, or
- f) non-availability of stores which are the responsibility of the Department to supply, or
- g) Non availability or breakdown of Tools and Plant to be supplied or supplied by Department, or
- h) Any other cause which in the absolute discretion of the Accepting Authority is beyond the Contractor's control;-

then upon the happening of any such ever causing delay, the Contractor shall immediately give notice thereof in writing to the Director, Urban Development, but shall nevertheless use constantly his best endeavors to prevent or make good the delay and shall take all possible steps to the satisfaction of the Director, Urban Development to proceed with the work

46.3 Request for extension of time, shall be made by the Contractor in writing not later than **7 (SEVEN)** days of happening of the event causing delay. The Contractor may also, if practicable, indicate in such a request the period for which extension is desired.

46.4 In any such situation, the Accepting Authority may give a reasonable extension of time for completion of the work which shall be communicated to the Contractor by the Engineer-in-charge in writing within **15 DAYS** of the date of receipt of such request by the Engineer-in-charge.

SECTION III-PERFORMANCE OF THE CONTRACT WORK CONTROL.

47 Authorities of the Director, Urban Development's representative

47.1 The duties of the representative of the Director, Urban Development are to watch and supervise the works and to test and examine any materials to be used or workmanship employed, in connection with the works.

47.2. The Director, Urban Development may from time to time, in writing, delegate to his representative any of the powers and authorities vested in the Director, Urban Development and shall furnish to the Contractor a copy of all such delegations, of powers and authorities. Any written instructions or approval given by the representative of the Director, Urban Development to the Contractor within the term of such delegation (but not otherwise) shall bind the Contractor and the Department, as though it had been given by the Director, Urban Development:

Provided always as follows:-

- a) Failure of the representative of the Director, Urban Development to disapprove any work of materials shall not prejudice the power of the Director, Urban Development thereafter. To disapprove such work or materials and to order the pulling down, removal or breaking up thereof:
- b) If the Contractor shall be dissatisfied with any decision of the representative of the Director, Urban Development he shall be entitled to refer to the matter



to the Director, Urban Development who shall thereupon confirm, reverse or vary such decision.

48. Subletting of contracts

48.1 The Contractor shall not sublet any portion of the Contract without the prior written approval of the Accepting Authority.

48.2. The Contractor shall be responsible for any sub-contractor who may carry out any work or supply and materials in connection with the contract, whether such sub-contractor be selected by the Accepting Authority or by the Contractor. The Contractor shall make good any loss or damage suffered by the Department by reason of any default, neglect or failure on the part of such sub-contractor in relation to such work or material.

49 (DELETED) Admission to site

The Contractor shall not be permitted to enter on (other than for inspection purpose) or take possession of the site until instructed to do so by the Engineer-in-charge in writing. The portion of the site to be occupied by the Contractor shall be defined and/or marked on the site plan, failing which these shall be indicated by the Engineer-in-charge, and the Contractor shall on this account be allowed to extend the operations beyond these areas. In respect of land allotted for the purpose of accommodation of labour, erection of temporary workshops, stores, etc., storage of materials and the like, the Contractor shall pay compensation of Rs._____/ - per sq mtr. Per year or part of a year for use and occupation in respect of each and every separate area of land allotted to him.

50 Setting out of works

50.1 The works, unless the reference pillars will be erected as per layout drawing for all the components at site and in case reference pillars are missing or disturbed fresh reference pillars shall be established by the contractor at his own cost after carrying out the necessary survey with reference to the said drawings.

50.2 These Reference Pillars shall be connected with some permanent features in the site so that they can be correctly relocated in case they get disturbed during the construction period.

For the lay-out work and establishing the center line of the alignment, only one steel tape shall be utilized throughout the work and where work is done by traversing, the traverse shall be closed. In case of minor errors these should be connected by interpolation and the layout and the center line pillars got approved by the Engineer-in-charge.

50.3 The contractor shall be responsible for the true and proper setting out of the works. He shall be responsible for proper maintenance of all Reference Pillars, Bends, Marks, Stakes and other expenses existing in the field required in connection with the setting out of works at his own cost till physical completion of all the terms of the work or prior to that if agree to by the Director, Urban Development.

50.4 All such Bench Marks, Reference Pillars, etc., established by the Contractor shall be subject to check and approval of the Engineer-in-charge or his authorized



representative at all times. Any variations noticed in the work as a result of improper establishment or maintenance of these shall be at the risk and expense of the contractor.

51. Limitation of operations.

51.1 Contractor's employees- The Contractor shall employ in and about execution of works only such person as are skilled and experienced in their several trades. The Director, Urban Development shall be at liberty to object to and require the Contractor to remove from the works any person employed by the Contractor in or about the execution of the works who in the opinion, of the Director, Urban Development misconducts himself or is incompetent or negligent in the proper performance of his duties and such person shall not be again employed on the works without the prior permission of the Director, Urban Development.

51.2 Instruction and notices:

51.2(i) Subject as otherwise provided in this Contract, all notices to be given on behalf of Department and all other action to be taken on its behalf may be given or taken by the Director, Urban Development or any officers for the time being entrusted with the function, duties and powers of the Director, Urban Development.

51.2(ii) All instruction, notice and communication, etc, under the Contract shall be given in writing and if sent by registered post to the last known place of abode or business of the Contractor shall be deemed to have been served on the date when in the ordinary course of the post these would have been delivered to him.

51.2(iii) The Director, Urban Development shall communicate or confirm his instruction to the Contractor in respect of the execution of the work in a -Works Site Order Book and the Contractor or his authorized agent shall confirm receipt of such instructions by signing the relevant entries in this book. If required by the Contractor he shall be furnished a certified true copy of such instruction(s).

51.3 Drawing to be kept on site:- One copy of the approved drawings furnished to the Contractor shall be kept by the Contractor on the site and the same shall at all reasonable times be available for inspection and use by the Director, Urban Development and Engineer-in-Charge.

51.4 Watching and lighting ó The Contractor shall provide and maintain at his own expense all lights, guards, fencing and watching when and where necessary as required by the Engineer-in-charge for the protection of the work for the safety and convenience of those employed in the works or the public

51.5 Work during nights or Sundays and holidays ó Subject to any provisions contained in the contract none of the permanent works shall be carried out during night or on Sundays or on authorized holidays without the permission writing of the Engineer-in-charge except when the work is unavoidable or absolutely necessary for the safety of life, property or works in which case the Contractor shall immediately advise the Engineer-in-charge accordingly.

Provided always that the provisions of this clause shall not be applicable in the case of any work which it is customary to carry out by rotary or double shifts.



52. Notices to local Bodies:

- 52.1** The Contractor shall comply with and give all notices required under any Governmental authority, instrument rule or order made under any Act of Parliament, State laws or any regulation or bye-laws of and local authority relating to the works. He shall before making any variation from the contract drawings necessitated by such compliance give to the Director, Urban Development a written notice giving reasons for the proposed variation and obtain the Engineer-in-charge's instructions thereon.
- 52.2** Subject to any provisions to the contrary contained in these Contract Conditions, the Contractor shall pay and indemnify the Department against any liability in respect of any fees or charges payable under any Act of Parliament, State laws or any Government instrument, rule or order and any regulations or bye-laws of any local authority in respect of the works.

53 Facilities to other contractors

The Contractor shall in accordance with the directions of the Director, Urban Development, afford all reasonable facilities to other Contractors engaged contemporaneously on separate Contracts in connection with the works and for departmental labour and labour of any other properly authorised authority or statutory body which may be employed at the site on execution of any work not included in the Contract or of any Contract which the Department may enter into in connection with or ancillary to the work.

54. Inspection of works

- 54.1** The Contractor shall either himself supervise the execution of the Works or shall appoint a competent agent approved by the Director, Urban Development to act on his behalf: If in the opinion of the Engineer-in-charge the Contractor has himself not sufficient knowledge and experience of receiving instructions or cannot give his full attention to the works, the Contractor shall at his own expense, employ as his accredited agent a qualified engineer approved by the Director, Urban Development. Order given to the Contractor's agent shall be considered to give the same force as if these had been given to the Contractor himself. If the Contractor fails to appoint a suitable agent as directed by the Director, Urban Development, the Director, Urban Development shall have full powers to suspend the execution of the works until such date a suitable agent is appointed and the Contractor shall be held responsible for the delay caused to the works.
- 54.2** All works shall be subject to examination and approval by the Director, Urban Development or his representatives. No work shall be covered up or put out of view prior to such approval and the Contractor shall give due notice to the Director, Urban Development or his authorized representative, whenever any such work is ready and the Engineer-in-charge or his authorized representative shall, without unreasonable delay, attend for the purpose of examining such works
- 54.3** In the event of the failure of the contractor to give such a notice, he shall uncover any part of the works and/or make openings in or through the same as the Director, Urban Development may direct for his verification and shall make good such part



to the satisfaction of Director, Urban Development and the Engineer-in-charge, as Contractors' expense.

- 54.4** If any such part, covered up or put out of view after being approved by the Director, Urban Development., is required to be uncovered, the same shall be done by the Contractor. If it is found on uncovering to be executed in accordance with the Contract, the expenses of uncovering and/or making opening in and making good the same shall be borne by the Department.

MEASUREMENTS AND PAYMENTS

55. Records and measurements

55.1 The Engineer-in-charge shall except as otherwise stated, ascertain and determine by measurement the value, in accordance with the contract, of work done:

55.2 He shall, when he requires any part or parts of the works to be measured give notice to the Contractor's authorized agent or representative who shall forthwith attend or send a qualified authorized agent to assist the Director, Urban Development's representative in making such measurement and shall furnish all particulars required by either of them.

Should the Contractor not attend or neglect or omit to send such agent, the measurement made by the Engineer-in-charge or approved by him shall be taken to be the correct measurement of the work.

55.3 Measurement taken jointly shall be signed and dated by both parties on each day of measurement.

55.4 The value of work under provisional items, ordered and executed shall be ascertained by measurement.

56. Advances (Admissible only to contract exceeding Rupees 10 lakhs)

56.1 Advances, as under if required by Contractor will be given within six weeks of the submission of an application by him.

a) a lump-sum advance not exceeding 10% of the contract sum against a bank guarantee for the amount of advances from a scheduled Bank. The Advance shall be utilized for the purpose of this contract only and for no other purpose.

b). **(DELETED)** for any essential preliminary items of work such as access road, site officers, temporary accommodation etc. at 75 % of the completed cost thereof as assessed by the Engineer-in-charge. Advances against this item shall in no case exceed 2 % of the Contract sum.

c) **(DELETED)** for plant and equipment specifically acquired for the work and brought to site at 75 % of the value of machinery, against production of documents in support thereof and subject to the condition that the Engineer-in-charge considers the value reasonable and that such plant & equipment are necessary for the works and not in excess of requirement and are hypothecated in favour of Government in the form prescribed by the Department Advance against this item shall in no case exceed 6% of the Contract sum.

d). **(DELETED)** Where a Contractor is not able to secure an advance of 6% under item (c), above for procurement of plant and equipment specifically required for the work at 75 % of the value of machinery against production of documents in support of the placement of orders for its purchase and against a bank guarantee, for the amount of advance from a schedule Bank, and subject to the Conditions that:-



- i) the Engineer-in-charge considers the value reasonable and that such plant and equipment are necessary for the works and not in excess of the requirements, and
- ii) such plant and equipment are actually required and brought to site within a period of $\frac{1}{4}$ the of the completion period specified vide clause 2, of these documents which may be extended by the Engineer-in-charge up to a maximum period of $\frac{1}{2}$ of the completion period specified in clause 2 in exceptional cases, and are hypothecated in favour of Government in the form prescribed by the Department.

Advance against items (c) and (d) shall together in no case exceed 6% of the Contract sum

56.2 (DELETED) If a request for advance if made by the Contractor against all the four aforesaid provision of 56.1 (a) (b)(c) & (d) the total sum to be give as advance shall not exceed 10% of the Contract sum.

56.3 Recovery of the sums advanced against clauses 56.1 (a) above shall be made by deduction from every interim bill referred to in clause 57.1 and recovery to be effected in suitable percentage in relation to the progress, as fixed by the Director, Urban Development so that all the sums advance shall be fully recovered by the time work amounting to nearly 80% of the contract sum is completed.

56.4 (DELETED) If for any reason, except as default of the contractor, the work under the Contract is suspended or is to be suspended for more than thirty days, the Contractor shall be at liberty to move the plant and equipment or any part thereof hypothecated to Government under clauses 56.1 (c) 56.1 (d) above to any other works site of the Contract for carrying on his other works, on his furnishing prior to such removal a bank guarantee acceptable to Department for the amount of the outstanding advance granted under clauses 56.1 (c) and 56.1 (d) above the undertaking to bring back to site the plant and equipment as may be necessary for completion of the works, before expiry of the period of suspension.

56.5 (DELETED) f such plant and equipment are not brought back the Contractor shall forthwith repay the amount of the advance outstanding.

57. Interim payments

57.1 On account payment –Payment on account for amount admissible shall be made on the Director, Urban Development certifying the sum to which the Contractor is considered entitled by way of interim payment for all work executed after deducting there from the amounts already paid the security deposit /retention money and such other amounts as may be deduct able or recoverable in terms of the Contract.

All payment under this clause shall be treated as advance payment and can be modified and adjusted subsequently if found not correct.



57.2 (DELETED) Secured advances- payment as secured advances, shall also be admissible during the course of the execution of the work, on the contractor signing an indenture in the form to be specified by the Engineer-in-charge 75% of the cost (as assessed by the Engineer-in-charge) of any materials which are in the opinion of the Engineer-in-charge, non perishable are in accordance with the specification in the Contract, have been brought on the site for incorporation in the works and are adequately stored and/or protected against damage and loss due to any cause whatsoever, to the Engineer-in-charge, but have not been so incorporated.

The payment under this clause shall be adjusted as and when materials are utilized in the works.

57.3 Interim Bills- Interim bills shall be submitted by the Contractors monthly, on or before the date fixed by the Director, Urban Development, for payment under clause 57.1, the Director, Urban Development shall then arrange to have the bill verified and the amount admissible shall normally be paid within 10 days of the presentation of the bill.

57.4 Pending consideration of extension of date of completion, interim payments shall continue to be made as herein provided.

57.5 For the purposes of interim payment, the tenderer along with his tender shall submit a schedule for interim payment in the form given in Annexure VIII.

These rates shall be realistic as they are not only intended for the purposes of interim payments but also for the overall assessment.

58. Mode of payments and receipt for payments

58.1 Payments to Contractors shall be made by crossed cheques drawn on the Treasury with which the Director, Urban Development has an account or through Remittance Treasury Receipt (R.T.R.) within Himachal Pradesh.

58.2 Receipts for payments made on account of any work shall be signed by the Contractor (s) or any persons having the power of attorney to receive payments on behalf of the Contractor.

59. (DELETED) Payments for deviations

59.1 Rates for additional altered or substituted work as may be ordered as a deviation under clause 31, shall be determined by the Engineer-in-charge, as follows.

59.2 If the rate for additional, altered or substituted item of work is specified in the contract, the Contractor shall carry out that the additional, altered or substituted item at the same rate.

59.3 If the rate for any altered, additional or substituted item of work is not specified in the Contract, the rate for that item shall be derived from the rate for the nearest similar item specified therein.

59.4 If the rate for any altered, additional or substituted item if work can not be determined in the manner specified in the clauses 59.2 and 59.3 above, the Contractor shall, within **7 days** of the date of receipt of the order to carry out the said work, inform the Engineer-in-charge in writing the rate which he proposes to claim for such item of work duly supported by a complete analysis of the rate



claimed. The Engineer-in-charge shall within **15 days** thereafter. After giving due consideration to the rate analysis given by the Contractor, determine the rate of the item (s) in question on the basis of prevailing rates.

Provided that-

- 1) If the Contractor is not satisfied with the Engineer-in-charge's assessment of cost, he may, represent the matter to the Accepting Authority within **7 days** of receipt of the decision of the Engineer-in-charge and the Accepting Authority shall communicate his decision on the rates within **7 days**, after receipt of the contractor's representation.
- 2) In the event of the Contractor failing to inform the Engineer-in-charge within the period of time referred to in sub-clause (1) above, the rate which he proposes to claim the rates for such items shall be determined by the Engineer-in-charge on the basis of prevailing rates and these shall be binding on the Contractor.
- 3) In case the Engineer-in-charge/Accepting Authority fails to communicate his decision within the stipulated period, the Contractor shall still Continue to carry out the altered or additional items of work order as deviation, as provided in the Contract. However in such cases interim payments will be made without prejudice to the final decision taken, at the rates claimed by the Contractor until a decision on the rates for such items of work has been communicated by the Engineer-in-charge/Accepting Authority. Thereafter interim payment for these work items will be made at the rates decided by the Engineer-in-charge/Accepting Authority and any adjustment between the rates so approved and those at which previous interim payments were made, will be made from subsequent payments.

60. Payments for variation in prices

60.1 (DELETED) Materials- If after final acceptance of the tender and/or during the progress of the works, the price of any material (not being a material supplied from the Engineer-in-charge's store in accordance with the conditions of the Contract) is increased or decreased by an Act or legislature (Central or State) and/or any notification there under of on account of new duties or levies or on Account of increase or decrease in such duties affecting the price of materials required for information in the works and the Contractor has thereupon to pay in respect of such material a price which is higher or lower than a price of that materials as prevailing immediately before the passing of such Act or levying, increasing/decreasing of such duty, the Department shall in case of increase in the price reimburse to the Contractor the increase in price on the additional or increased duty paid by the Contractor and in case of decrease in price the Department shall be entitles to a refund of the reduction in price or the reduction in duty.

Provided however, reimbursement or refund shall be made for the increase/decrease only on the variation over +10%.

60.2 (DELETED) Petrol, oil lubricants- If after final acceptance of the tender and/or during the progress or the works, price of petrol diesel oil, lubricants (P.O.L.) (not being supplied from Engineer-in-charge store in accordance with the condition of the contract)



is increased or decreased by an Act of legislature (Central or State) and (or any notifications there under and the Contractor has thereupon to pay for P O.L. a price which is higher or lower than the price, prevailing immediately before the passing of such Act, Department shall, in case of increase in the price, reimburse to the Contractor the increase in price paid by the Contractor and in case of decrease in price: Department shall be entitled to a refund as a result of this reduction in price.

Provided, however Reimbursement or refund shall be made on the increase/decrease only on the variation over +10%.

60.3 (DELETED) Labour- For the purpose of this contract, the minimum wages of labour shall be taken as shown in annexure IX if on account of any legislation notification, labour award, the minimum wages of labour are increased at any time or time after the date of final acceptance of the tender then the Department shall reimburse to the contractor the increase permitted under the legislation notification, labour award, or duly approved binding agreement as aforesaid.

Provided, however, increase shall be payable only on the variation over 10%.

60.4 (DELETED) For assessment of payments or recoveries arising from a variation in prices mentioned in clauses 60.1, 60.2 and 60.3 the contractor while submitting the tender, shall quote the material component, the labour component and also the P.O.L. component as a percentage of the cost of work vide Annexure X.

For materials the percentage component to be supplied by the contractor shall exclude the effect of materials to be supplied by the Department, as indicated in clause 60.1.

For assessment of payments due to variations in labour rates, the variation in wage of an unskilled of adult male mazdoor shall form the basis.

60.5 The price variations provided herein shall be calculated on the cost of the work yet to be done. Provided further no price variation shall be admissible if such variations have become operative after the Contract (or extended) period of completion of the works in question.

60.6 (DELETED) Insurance under workmen's Compensation Act and other Liabilities:-

In the event of any increase in Workmen's Compensation Insurance premium under any law or in case, any additional or new liability under the labour laws is imposed on the Contractor after the date of submission of the tender, the additional expenditure incurred by the Contractor in that behalf shall be paid to the contractor by the Department.

60.7 (DELETED) The Contractor shall within a reasonable time of becoming aware of any alteration in the prices or variation in wages or variation in premia etc, give notice thereof in writing to the Department that the same is given in pursuant to this condition and shall furnish all information relating there to which he may be in a position to supply. In case of claim in respect of deviation under clause 60.6 the Contractor shall produce satisfactory documentary evidence in support thereof

Similarly if any refund is to be claimed from the Contractor on account of any reduction on account of any aforesaid variation, the Contractor shall allow the Government the refund so due.



61. (DELETED) Payment to sub-contracts

Before making any advance payments to the Contractor in respect of work done or materials supplied by any nominated sub-contractor, the Engineer-in-charge shall be entitled to demand from the Contractor reasonable proof that all payments (less retentions) included in previous certificates in respect of the work or materials of such nominated sub-Contractor have been made or discharged by the Contractor, in default whereof unless the Contractor shall have informed the Engineer-in-charge in writing that he has reasonable cause for withholding or refusing to make such payment and produce to the Engineer-in-charge reasonable proof that he has so informed such nominated sub-contractor in writing the Engineer-in-charge shall be entitled to pay to such nominated sub-Contractor direct all payments (less retentions) which the contractor has failed to make to such nominated sub-contractor and to deduct the amount so paid from any sums due to the Contractor.

62. Acceptance and final payment

62.1 The final bill shall be submitted by the Contractor within 15 days of physical completion of the works as certified in clause 66. no further claim shall be made by the Contractor after submission of the final bill.

62.2 Payment of those items of the final bill in respect of which there is no dispute and of items in dispute for quantities and at rates as approved by the Director, Urban Development, shall be made within 1 (ONE) month reckoned from the date of receipt of the aforesaid bill by the Director, Urban Development.

63. Over-payment and under payments

63.1 Whenever any claim for the payment of a sum of money to Department arises out of or under this contract against the Contractor, the same may be deducted by the department from any sum then due or which at any time thereafter may become due to the Contractor under this Contract and failing that under any other contract with the Department or from any other sum due to the Contractor from the Department (which may be available with the Deptt.) or from his security deposit/ retention money, or he shall pay the claim on demand.

63.2 Department reserves the right to carry out post-payment audit and technical exam not on of the work and final bill including all supporting vouchers, abstracts, etc. Department further reserves right to claim recovery of any over payments as and when detected, not with standing the fact that the amount of the final bill may be included by one of the parties as an item of dispute before an arbitrator appointed under clause 65 of the Contract and notwithstanding the fact that the amount of the final bill figures in the arbitration award:

Provided that the said right of the Department to adjust over payments and under payments shall not extend beyond a period of three years from the date of final bills in case of minus final bill the date from which three years will be reckoned will be the date on which the intimation of the minus bills is communicated to the Contractor.

63.3 If as a result of such audit and technical examination any over payment is discovered in respect of any work done by the Contractor or alleged to have been done by him under the Contract, it shall be recovered by the Department from the Contractor by any or all of the methods prescribed above or if any underpayment is discovered, the amount shall be duly paid to the Contractor by the Department.



SUSPENSION OF WORKS DISPUTED CLAIMS ARBITRATION AND TERMINATION OF CONTRACT

64. Compensation for unreasonable delays

64.1 If the Contractor -

- i) Fails to complete the works and clear the site on or before the Contract (or extended) date/period of completion; or
- ii) fails to complete works costing $1/8^{\text{th}}$ of the contract sum within $1/4^{\text{th}}$ of the contract period of works costing $3/8^{\text{th}}$ of the Contract sum in half the contract period and/or works costing $3/4^{\text{th}}$ of the Contract sum within $3/4^{\text{th}}$ of the contract period;

he shall, without prejudice to any other right or remedy of Government on account of such breach, pay as agreed compensation an amount as calculated below (or such smaller amount as may be fixed by the Accepting Authority) on the contract sum in respect of (i) above and on the appropriate cost of works viz $1/8^{\text{th}}$, $3/8^{\text{th}}$ or $3/4^{\text{th}}$ of the Contract sum, as the may be in respect of (ii) above, which the compensation is livable:-

- a) completion period (as originally stipulated or as extended)
not exceeding 6 months @ of 1% per week
- b) Completion period (as originally stipulated or as extended)
exceeding 6 months and not exceeding 2 years. @ of $1/2\%$ per week
- c) Completion period (as originally stipulated or as extended)
exceeding 2 years @ of $1/4\%$ per week

64.2 When the delay in completion of the work/part work amount to less than a week the compensation payable shall be proportional to the number of days involved.

64.3 Provided always that the total amount of compensation for delay to be paid under this condition shall not exceed the under noted percentage of the Contract value of the work:-

- a) Completion period (as) originally stipulated or as extended) not
exceeding 4 months. 10 %
- b) Completion period (as) originally stipulated or as extended) exceeding
4 months not exceeding 1 Year 7 $1/2\%$
- c) Completion period (as originally stipulated or as extended) exceeding
1 year. 5 %

64.4 The amount of compensation may be adjusted or set off against any sum payable to the Contractor under this or any other contract with the Department.

64.5 Where compensation has been levied for delay in completion of one interim stage of work referred to in clause 64.1,(ii) it shall be refundable if the Contractor completes the subsequent stage of work (whether interim or final) in time as required in clause 64.1

64.6 The Director, Urban Development shall keep a watch as to whether the actual physical progress of work is as per the progress Schedule (vide clause 43.2) and in case the Contractor defaults in achieving progress on works at intermediate stages as per this schedule and continues to do so even after one month after a notice, writing from the Director, Urban Development the Contractor will tender himself liable to action as provided vide clause 68.3.



65 Disputed claims and arbitration

In the event of dispute of any kind arising out of contract, the law court of District Head Quarter of the concerned ULB or High Court of Himachal Pradesh Shimla has the legal jurisdiction. The conditions will however, not interfere with the Arbitration clause of the contract agreement.

Except where otherwise provided in the contract all questions and disputes relating to the Meaning of the specifications, designs , drawing and instructions herein before mentioned and as to the quality of workmanship or materials used on the work or as to any other question, claim, right matter or thing whatsoever, in anyway arising out of or relating to the contract, designs, drawings, specifications, estimates , instructions, order or these conditions or otherwise concerning the works, or the execution or failure to execute the same whether arising during the progress of the work or after the completion or abandonment thereof shall be referred to the sole arbitration of the person appointed by the Director, Urban Development. It will be no objection to any such appointment that the arbitrator so appointed is a Government servant, that he had expressed views on all or any of the matters in dispute of difference. The arbitrator unto whom the matter is originally referred being transferred or vacating his office or being unable to act for any reason the Director, Urban Development at the time of such transfer, vacation of office or inability to act, shall appoint another person to act as arbitrator in accordance with the terms of the contract. Such person shall be entitled to proceed with the reference from the stage at which it was left by his predecessor. It is also a terms of this contract that no person other than a person appointed by Director, Urban Development should act as arbitrator and if for any reason that is not possible , the matter is not to be referred to arbitration at all.

Subject as aforesaid the provisions of the Arbitration Act, 1940, or any statutory modification or reenactment thereof and the rules made there under and of the time being in force shall apply to the arbitration proceeding, under this clause.

It is also the terms of the contract that expert invoking arbitration shall specify and dispute and disputes to be referred to arbitration under this clause together with the amount of claim in respect of each such dispute.

It is also the term of the contract that if the contractor do/does not make any demand for arbitration in respect of any claim(s) in writing within 90 days of receiving the intimation from the Govt. the bill is ready for payment, the claim of contractor(s) will be deemed to have waived and release of all liabilities under the contract in respect of these claims the arbitration(s) may from time to time with consent of the parties enlarge the time for making and publishing the award.

66. Final certificates, termination of responsibilities.

66.1 Within ten days after the work is completed, the Contractor shall give notice of such completion to the Director, Urban Development and within **10 days** of receipt of such notice the Director, Urban Development or his representatives shall inspect the work and if there is no defect in the work, shall furnished the Contractor with a



certificate indicating the date of completion. However, if there are any defects which in the opinion of the Director, Urban Development or the members of Technical Committee or the Engineer-in-charge do not need re-construction and can be rectified or in case he is prepared to accept at the defective work at reduced value he shall given a certificate indicating(a) the date of completion,(b) defects to rectified by the Contractor and/ or ,© items for which payment shall be made at reduced rate.

No certificate of completion shall be issued nor shall the work considered to be complete till the site is finally cleared as provided for in clause 33 of these documents, except for such materials and equipment as may be required for rectification of defects.

66.2 If the Contractor fails to comply with any of the requirements of this conditions aforesaid, the Engineer-in-charge may at the expenses of the Contractor fulfill such requirements and dispose of the scaffolding, surplus materials and rubbish, etc. as he thinks fit and the contractor shall have no claim in respect of any such scaffolding or surplus materials except for any sum actually realized by the sale thereof less the cost of fulfilling the requirements and any other amount that may be due from the contractor.

66.3 If the expense of fulfilling such requirements is more than the amount realized on such disposals as aforesaid, the Contractor shall forth with on demand pay such excess.

67. Defects liability:

67.1 If it shall appear to the Director, Urban Development or his representative at any time during construction or reconstruction or prior to the expiration of the defects liability period (vide clause 67.3) that-

- i) any work has been executed with unsound, imperfect or unskillful workmanship or that any materials or articles provided by the Contractor for execution of the work are unsound or of a quality inferior to that contracted for, or
- ii) any defect, shrinkage or other fault have appeared in the work arising out of defective or improper materials or workmanship.

The contractor upon receipt of a notice in writing to that effect from the Engineer-in-charge shall forthwith rectify or remove the materials or articles so specified and provide other materials or articles at his own expense notwithstanding that the same have been inadvertently passed certified and paid for.

67.2 If the Contractor or his workmen or employees shall injuries or destroy any part of the structure in which they may be working or any structure road fence, etc contiguous to the premises on which the work or any part of it is being executed, or if any damage shall happen to the work while in progress, The contractor shall have to make good the same at his own expense.

67.3 The contractor shall be responsible to make good and remedy at his own cost, any defect which may develop or may be noticed and intimation of which has been sent to the contractor by a letter sent by and delivery or by registered post, before the expiry of a



period twelve months (hereinafter referred to as the defects liability period) from the date of completion of whole of the work.

67.4 In the event of the contractor failing to rectify or damage within the period to be specified by the Director, Urban Development in his notice aforesaid, the Engineer in-charge may rectify or remove and re-execute the work and/ or remove and replace with others materials articles or complained of, as the case may be by, other means at the risk and expenses of the contractor.

68. Termination of contract- Foreclosure in full or in part in due to abandonment or reduction in scope of work.

68.1.(i) If at any time after acceptance of the tender, department decide to abandon or reduce of the scope of the works for any reason whatsoever and hence not require the whole or any part of the works to be carried out, the Director, Urban Development shall give notice in writing to that effect to the Contractor and the contractor shall have no claim to any payment of compensation or otherwise whatsoever. On account of any profit or advantage which he might have derived from the execution of the works in full but which he did not derive in consequence of the foreclosure of the whole or part of the works.

68.1(ii). (DELETED) The Contractor shall be paid at Contract rates full amounts for works executed at site and, an addition a reasonable amount as certified by the Engineer-in-charge for the items hereunder mentioned which could not be utilized on the work to the full extent because of the foreclosure:-

a) Any expenditure incurred on preliminary site or, e.g., temporary access roads, temporary labour huts, staff quarters and site office storage accommodation and water storage tanks. b) The department shall have the option to take over Contractor's materials or any part there of either brought to site or of which the Contractor is legally bound to accept delivery from supplies;-

1) For materials taken over or be taken over by the Department, the cost to be taken over by the department, the cost to be paid shall take, into account purchase price, cost of transportation and deterioration or damage which have been caused to materials whilst in the custody of the Contractor.

2) For materials not retained by the department, reasonable cost of transporting such materials from site to contractor's permanent stores or to his other works, whichever is less. If materials are not transported to either of the said places, no cost of transportation shall be payable.

c) If any materials supplies by the department are rendered surplus, the same except normal wastage shall be returned by the Contractor to department at rates not exceeding those at which these were originally issued less allowances for any deterioration or damage which may have been caused whilst the materials were in the custody of the contractor. Such materials shall be transported by him from the site the place of issue or a place other than the place of issue, if so required by the Department and in such an event he will be paid for the cost of transporting such materials from site,

d) Reasonable compensation for transfer of T & P from site to contractor's permanent stores or to his other works, whichever is less. If T & P are not transported to either of the said places, no cost of transportation shall be payable,



- e) Reasonable compensation for repatriation of Contractor's site staff and imported labour to the extent necessary,
- f) a sum to be certified by the Engineer-in-charge being the amount of any expenditure reasonably incurred by the Contractor in the expectation of completing the whole of the works.

68.1(iii) The contractor shall, if required by the Engineer-in-charge furnished to him books of accounts, wage books, time sheets and other relevant documents as may be necessary to enable him to certify the reasonable amount payable under clause 68.1(2).

68.2 Termination of Contract in the event of death

68.2 (i) If the Contractor is an individual or a proprietary concern and the individual or the proprietor dies and if the Contractor is a partnership concern and one of the partners dies, then, unless the Accepting Authority is satisfied that the legal representatives of the individual Contractor or the proprietor of other proprietary concern and in the case of a partnership, the surviving partners are capable of carrying out and completing the Contract. The Accepting Authority shall be entitled to cancel the contract, as to its uncompleted part without department being in any way liable to payment of any compensation to the estate of the deceased Contractor and / or to the surviving partners of the Contractor; firm on account of the cancellation of the Contract.

68.2 (ii) The decision of the Accepting Authority that the legal representatives of the deceased Contractor or the surviving partners of the Contractor's firm cannot carry out and complete the Contract shall be final and binding on the parties.

68.3 Cancellation of the Contract in full or in part

68.3(1) If the Contractor:-

- a) At any time makes default in proceeding with the works with due diligence and continues to do so even 15 days after a notice in writing from the Director, Urban Development; or
- b) Commits defaults in complying with any of the terms and conditions of the Contract and does not remedy it within 15 days after a notice in writing is given to him in that behalf by the Director, Urban Development.
- c) Fails to complete the works on or before the date on completion, and does not complete them within the period specified in a notice given in writing in that behalf by the Director, Urban Development
- d) shall offer or give or agree to give to any person in department service or to any other person on his behalf any gift or consideration of any kind as an inducement or reward for doing or fore bearing to do or for having done or for borne to do any act in relation to the obtaining or execution of this or any other contract for department; or
- e) enters in to some sort of contract with other parties and has paid commission or has agreed to pay, unless the particulars of any such commission and the terms of payment there of have previously been disclosed in writing to the Accepting Authority , Director, Urban Development;
- f) has obtained a Contract with the department as a result of wrong tendering or other non-bonafide methods of competitive tendering; or
- g) being an individual, or if a firm, any partner thereof, shall at any time be adjudged insolvent or have a receiving or per or order of administration of his estate made against him or shall take any proceedings for liquidation or composition (other than a voluntary



liquidation for the purpose of amalgamation or reconstruction) under any insolvency Act for the time being in force or make any conveying of assignment of his effects or composition or arrangement for the benefit of his creditors or purport to do or if any application be made under any insolvency act for the time being force for the sequestration of his estate or if a trust deed be executed by him for benefit of his creditors; or

h) being a company shall pass resolution or the court shall make an order for the liquidation of its affairs or a receiver or manager on behalf of the debenture holders shall be appointed or circumstances shall arise which entitle the court or debenture holders to appoint a receiver or manager; or

i) shall suffer an execution being levied on his goods and allow it to be continued for a period of 21 days; or

j) assigns, transfer, sublets (engagement of labour on apiece work basis or of labour with materials not to be incorporated in the work, shall not be deemed to be subletting) or attempts to assign, transfer or sublet the entire works or any portion thereof without the prior written approval of the accepting Authority;

the Accepting Authority may, without prejudice to any other right or remedy which shall have accrued or shall accrue thereafter of Department, by written notice cancel the contract as a whole or only such items of work in defaults from the Contract.

68.3. (2) The accepting authority shall on such cancellation have powers to:

a) take possession of the site and any materials, constructional plants, implements, stores, etc. thereon, and/or

b) Carry out the incomplete work by any means at the risks and cost of the contractor.

68.3 (3) On cancellation of the Contract in full or in part the Director, Urban Development shall determine what amount if any is recoverable from the contractor for completion of the works or in case the works or parts of the works is not to be completed, the loss or damage suffered by the Department. In determining this amount, credit shall be given to the Contractor for the value of the work executed by him up to the time of cancellation the value of Contractors materials taken over and incorporated in the work, and use of machinery belonging to the Contractor

68.3 (4) Any excess expenditure incurred or to be incurred by the Department in completing the works or part of the works or the excess loss or damage suffered or may be the Department as aforesaid after allowing such credits shall be recovered from any money due to the contractors on any account and if such moneys are not sufficient, the Contractor shall be called upon in writing to pay the same within 30 days of the notice given to that effect by the Director, Urban Development.

68.3 (5) If the Contractor shall fail to pay the required sum within the aforesaid period of 30 days, the Director, Urban Development shall have the right to sell any or all of the Contractor unused materials, constructional plant, implement, temporary buildings etc. and apply the proceeds of sale thereof towards the satisfaction of any sums due from the Contractor under the Contract and in accordance with the provision.

68.3(6) Any sums in excess of the amounts due to the Department and unsold materials, constructional plant, etc. shall be returned to the Contractor, provided always that if cost or anticipated cost of completion by the Department of the works is less than the amount



which the contractor would have been paid, had completed the work such benefit shall not accrue to the contractor.

68.4 Changes in constitution

68.4 (1) where the Contractor is a partnership firm, the prior approval in writing of the accepting authority shall be obtained before any charge is made in the Constitution of the firm

68.4 (2) Where the Contractor is an individual or a Hindu Undivided family business concern such approval as aforesaid shall likewise be obtained before the Contractor enters into any partnership agreement where under the partnership firm would have the right to carry out the work here by undertaken by the Contractor.

68.4 (3) If prior approval as aforesaid is not obtained the Contract shall be cancelled as provided for in clause (68.3, 3).

69. Excepted Risks

69.1 The Contractors shall be under no liability whatsoever whether by way indemnity or otherwise for or in respect of destruction of or damage to the works (save to work condemned under the provision of clause 34 hereof prior to the occurrence of any expected risk hereinafter mentioned) or temporary works or to property whether of the Department or third parties or for in respect of injury or loss of life which is the consequences whether direct or indirect of war hostilities (whether war be declared or not) invasion, act of foreign enemies, rebellion revolution, insurrection or military or usurped power, civil war of riot. Commotion or disorder otherwise than among the contractor own employees (hereinafter comprehensively referred to as the said Excepted Risks) and the Department shall indemnify and save harmless the Contractors against and from the same and against and from all claim, demands, proceeding, damages costs charges and expense whatsoever arising there out or in connection therewith and shall compensate the Contractor for any loss of or damage to property of the Contractor used or intended to be used for the purpose of the works including property in transit to the site) and occasioned either directly or indirectly by the said Excepted Risk.)

69.2 Damage to works by excepted risk- If the works or temporary works or any materials (whether for the former or the latter) brought to site shall sustain destruction or damage by reason of any of the said Excepted Risks, the contractor shall be entitled to permanent or temporary works and for any materials so destroyed or damaged and shall be paid by the Department the cost of making good any such destruction or damage whether to the works or temporary works and of replacing or making good such materials so far as may be necessary for the completion of the works on a prime costs basis as the Director, Urban Development may be certified to be reasonable.

69.3 Projectile missile etc. destruction, damage injury or loss caused by the explosion or impact, whenever and wherever occurring, of any mine, bomb, shell, grenade or other projectile missile or munitions or explosive or war shall be deemed to be a consequence of the said excepted Risks.,



LABOUR AND GENERAL LAWS

70.1. Labour Regulations:- The contractor shall employ labour in sufficient numbers either directly or through sub- contractors to maintain the required rate of progress and of quality to ensure workmanship of the degree specified in the contract and to the satisfaction of the Director, Urban Development.

70.2 The Contractor shall not employ in connection with the works and any person who has not completed his Eighteenth year of age.

70.3 The Contractor shall furnish to the Director, Urban Development /Engineer-in-charge fortnightly distribution return of the number and description by trades of work people employed on the works.

70.4 The Contractor shall also submit on the 4th and 19th of every month to Director, Urban Development a true statement showing in respect of the second half of the preceding month and the first half of the current month(1) the accidents that Occurred during the said fortnight showing the circumstances under which they happened and the extent of damage and injury caused by them and (2) the number of female workers who have been allowed Maternity Benefit as provided in the Maternity Benefit Act,1961,or Rules made there under and the amount paid to them.

70.5 The Contractor shall pay to the labour employed by him either directly or through sub contractor wages not less than fair wages defined in the Contractor's Labour Regulations at Annexure XI.

70.6 The Contractor shall in respect of labour employed by him either directly or through sub contractors comply with or cause to be complied with the Contractor's Labour Regulations at Annexure XI in regard to all matters provided therein.

70.7 The contractor shall comply with the provisions of the payment of Wages Act, 1936, Minimum Wages Act, 1948, Employers Liability Act, 1938 Workman's Compensation Act, 1923, Industrial Disputes Act 1947 and the Maternity benefit Act 1961, The contract Labour Regulation and Abolition Act 1970 or any modifications thereof or any other law relating there to and rules made the re-under from time to time.

70.8 The Contractor shall indemnify Department against any payments to be made under and for the observance of the Regulations aforesaid without prejudice to his right to claim indemnity from his sub contractors.

70.9 The decision of the Director, Urban Development in matters relating to the reports from the Inspecting Officers as defined in Annexure XI shall be final and binding and deductions for recovery of any liquidated damages in this respect may be made from any amount payable to the contractor.

71. Model Rules for Labour Welfare

71.1 The Contractor shall at his own expense comply with or cause to be complied with Model Rules for Labour welfare as contained in Annexure XII, or rules framed by Department from time to time for the protection of health and for making sanitary arrangements for workers employed directly or indirectly on the Works.

71.2 In case the Contractor fails to make arrangements as aforesaid, the Director, Urban Development shall be entitled to do so and recover the cost there of from the Contractor.



72. Safety Code

The Contractor shall at his own expense arrange for the safety, provisions indicated in Annexure XIII or as required by the Director, Urban Development in respect of all labour directly or indirectly employed for performance of the works and shall provide all facilities in connection there with. In case the Contractor fails to make arrangements and provide necessary facilities as aforesaid, the Director, Urban Development shall be entitled to do so and recover the costs thereof from the Contractor.

73 Nuisance

73.1 The Contractor shall not at any time do, cause or permit any nuisance on the site or do anything which shall cause un-necessary disturbance or inconvenience to owners tenants or occupants of other proper ties near the site and to the public generally.

73.2 The contractor shall save harmless and indemnify the department in respect of all claims, demand, proceedings, damages, costs charges and expenses whatsoever arising out of or in relation to any such matters in so far as the Contractor is responsible therefore.

74. Contractor's Liability and Insurance

74.1 From commencement to completion of the works, the Contractor shall take full responsibility for the care thereof and for taking precaution to prevent loss or damage and to minimize loss or damage to the greatest extent possible and shall be liable for any damage or loss that may happen to the works or any part thereof from any cause whatsoever (save and except the Excepted Risks and shall at his own cost repair and make good the same so that at completion, the works shall be in good order and condition, and in conformity in every respect with the requirements of the Contract and instructions of the Director, Urban Development.

74.2 Without limiting his obligations and responsibilities under clause 74.1 the contractor shall insure in the joint name of the Government and the Contractor against all loss or damage from whatsoever cause other than the excepted risk for which he is responsible under the terms of the contract and in such manner that the Government and the Contractor are recovered during the period of construction of the works and the defects liability period for loss or damage arising from a cause occurring prior to the commencement of the damage caused by the Contractor in the course of any operation carried out by him for the purposes of complying with his obligations under clause 67 thereof:-

- i) the works and the temporary works to the full value of such works executed from time to time.
- ii) the materials constructional plant and other things brought to site by the Contractor to the full value of such materials constructional plant and other things.

DAMAGE TO PERSONS AND PROPERTY

74.3 Damage To persons and property- The contractor shall indemnify and keep indemnified the department against all losses and claims for injuries or damage to any



person or any property whatsoever which may arise out of or in consequence of other construction and maintenance of the works and against shall claims demands, proceedings, damages, costs, charges and expenses whatsoever in respect of or in relation there to, Provided always that nothing herein contained shall be deemed to render the Contractor liable for or in respect of or to indemnify the department against any compensation or damage caused by Expected Riskø

74.4 Before commencing execution of the work, the Contractor shall, without in any way limiting his obligations and responsibilities under the conditions, insure against any damage, loss or injury which may occur to any property (excluding that of the Department) or to any person(including any employee or department) by or arising out of carrying out of the Contract.

74.5 Where a Departmental building or a part thereof is rented by the Contractor he shall ensure the entire building if the building or any part thereof is used by him for the purpose of storing or using materials of combustible nature. In case of doubt in the matter the decision of the Director, Urban Development shall be final and binding on the Contractor.

74.6 The Contractor shall at all times indemnify the Department against all claims, damages or compensation under the provisions of payment of wage Act,1936,minimum Wages Act,1948,Employer's Liability Act,1938, Industrial Disputes Act 1947 and the Maternity Benefit Act 1961 or any modifications there of any other law relating there to and rules made there under from time to time or as a consequence of any accident of injury to any workman or other person in or about the works, whether in the employment of the Contractor or not, save and except where such accident or injury has resulted from any act of the Department, there agents or servants, and also against all costs, charges and expenses of any suit, action or proceedings arising out of such accidents or injury and against all sum or sums which may with the consent of the Contractor be paid to compromise or compound any such claim. Without, limiting his obligations and liabilities as above provided the Contractor shall insure against all claims, damages or compensation payable under the workman Compensation Act,1923 or any modification there of or any other Law relating there to.

74.7 All the aforesaid insurance policies shall provided that they shall not be cancelled till the Director, Urban Development has agreed to their cancellation.

74.8 The Contractor shall prove to the Director, Urban Development or his authorized representatives from time to time that he has taken out all the insurance policies referred to above and have paid the necessary premium for keeping the policies alive till the expiry of the Defects Liability period.

74.9 The Contractor shall ensure that similar insurance policies are taken out by his sub contractor (if any) and shall be responsible for any claims or losses to Department resulting from their failure to obtain adequate insurance protection in connection thereof. The Contractor shall produce or cause to be produced by his sub contractor (if any) as the case may be, the relevant policy or policies and premium receipts as and when required by the Director, Urban Development.



REMEDY ON CONTRACTORS'S FAILURE TO INSURE

74.10 Remedy on Contractor is failure to insure.- If the Contractor and/ or his sub-contractors(if any) shall fail to effect and keep in force the insurance referred to above or any other insurance which he/they may be required to effect under the terms of the Contract then and in any such case Department may without being bound to, effect and keep in force any such insurance and pay such premium or premia as may be necessary for that purpose and from time to time deduct the amount so paid by the department from any moneys due or which may become due to the contractor or recover the same as a debt due from the Contractor.

74.11 Insurance to be taken with- All insurances to be effected by the contractor and/or his sub-contractor (if any) should be taken out only with the insurance company or companies approved by the department and this approval to any particular insurance company shall not be unreasonably withheld.

75. Training Apprentices

75.1 (DELETED) The contractor shall during the currency of the contract when called upon by the Engineer-in-charge engage and also ensure engagement by sub contractors and others employed by the Contractor in connection with the works, such number of apprentices in the categories mentioned in (cl.) 75.3 and for such periods as may be required by the Engineer-in-charge.

75.2 (DELETED) The Contractor shall train them as required under the Apprentices Act 1961 and shall be responsible for all obligations of the employer under the Act including the liability to make payment to Apprentices as required under the Act.

75.3 (DELETED) The number of apprentices to be engaged in different categories shall be as under:-

	Category	Number to be engaged.
(a)		
(b)		
(c)		
(d)		
	etc.	

The ratio of apprentices is given as under:-

Industries Group No.40, Construction minor Trade Group;400.

TRADE

1. Blacksmith	1:7	3years.
2. Sheet metal	1:7	3years.
3. Welders	1:7	2years
4. Electrician	1:7	3years



5. Wireman	1:7	3years.
6. Carpenter	1:7	3years.
7. Building Construction (mason)	1:7	1years
8. Brick Layer	1:2	3years.
9 Plumber	2:3	3years.

The apprentice may be engaged for such period as required for training in the relevant trade under the Apprentices Act as maintained above.

LEGAL JURISDICTION OF COURTS.

75.4 In the event of dispute of any kind arising of this contract the law court at the district head quarter of the concerned ULB or the High court of Himachal Pradesh, Shimla shall have to legal jurisdiction. This condition will, however, not interfere with the arbitration clause of this document.



..... months from the seventh day after the date on which the Director, Urban Development issues written orders to commence the work

- iii) agree that the amount of earnest money shall be appropriated towards the security deposit; and
- iv) undertake to furnish, within 21 days of the date of issue of the letter of acceptance by the Accepting Authority, the performance bond as specified in clause 13 of Chapter II- Award of Work,

(DELETED) EXEMPTION OF PAYMENT OF EARNEST MONEY

I/We have already furnished security to Department in lieu of Earnest Money and have deposited with the Chief-Engineer, the lump sum amount of Rs.

(Rupees)..... only) and I/We, therefore, claim exemption in terms of the Bond executed by me/us and bearing No. dated the day of 19..... against the necessity of depositing earnest money in respect of this tender.

I/We agree that should the Department decide to forfeit earnest money as aforesaid in para 4, in case a sum equal to the earnest money (specified in Clause 7.1 of Chapter-I General Conditions of Tender Notice) is not paid by me/ forthwith Department may, as its option, recover it out of any other moneys due to me/us or otherwise.

Witness

Signature

In the capacity of

Date

Address

Duly authorized to sign
the Tender on behalf
Of (in Block Capitals)

Postal Address

Telegraphic Address

Telephone No.

Balance to be filled by the Tenderer while Tendering.



ACCEPTANCE OF TENDER

The above tender(as contractor vide special conditions agreed to by him during post tender clarifications and enclosed herewith vide Annexure XVI to form a part of these documents) is accepted by on behalf of the Governor of the State of Himachal Pradesh for the sum of Rsí í í í í í í í (Rupees í í í í í í í í í í í í í í í
í ..)

For and on behalf of the Governor
The State of Himachal Pradesh.

Signatureí í í í í í í í í í í
Designationí í í í í í í í í í
Dated this day of í í í í 20í í



CHAPTER V (DELETED)

SITE CONDITION

76. Work site

76.1 The location of the work and the general site particulars are shown in the site plan/index plan enclosed vide Chapter VII of these documents.

76.2 The Project site is about KM from í í í í í ...

Blanks in the Chapter shall be filled before issue of tender documents.

76.3 Right of way to the work site will be provided to the contractor.

76.4 Sign Board:- The contractor shall provide board indicating complete name of work date of start, date of completion, cost, name of department, name of the Executive Engineer, with office address and telephone number, name of the executive agency at his own cost at the site of work.

77. Environmental conditions

77.1 The area in which the work lies is mostly plain/rolling/hilly.

Strike out portion not applicable.

77.2 The climate in this region is í í í í í í í í í í í í í

77.3 The variations in daily temperatures in the region are as under:-

- i. During summer months, from about minimum of í í í í Degree Celsius to a maximum of í í í í í í . degree Celsius and
- ii. During winter months, from about a minimum of í í í í í í í Degree Celsius to a maximum of í í í í í í .. Degree Celsius.

77.4 The average annual rainfall in the area is of the order of í í í í í í í í .. a good portion of which is concentrated in the month of

.....

77.5 The additional information about flooding or other environmental features where necessary

í í

78. Market facilities

The nearest marketing center for daily necessities is a

79. Postal and rail facilities

The nearest Post Office is located at The nearest Telegraph Office is located at

80. The nearest Railway Station is located at

81. Material Source

81.1 The quarry charts enclosed vide Chapter VII of these document indicate the location of quarries and other sources from which naturally occurring materials are available. The leads indicated in the said charts are as per chapter No.7.



The tender shall make their own independent investigations into the availability as well as suitability of the various materials required for construction as referred in this para.

82. Bench Marks and Reference Pillars

A number of permanent bench marks have been established along the alignment. The location and reduced levels of the same have been indicated on the drawings enclosed vide Chapter VII of these documents. Levels shown on the drawing are with reference to these bench marks.

CHAPTER VI

DESIGN DATA AND SPECIFICATIONS

The Bidder to submit his drawing on Pre-Fab technology conforming to planning requirement of architectural drawing attached separately.

1. The brief layout plan will be as per architectural drawing issued by Urban Development Department attached separately.
2. The plinth area of the building for four floors including Community Centre is 3613.30 SqMtr.
3. The rates are to be quoted per unit plinth area.
4. The structure design shall be approved from IITs/ NITs/CBRI.
5. The structure shall be designed based on the structural and functional requirements specified and keeping in view the soil bearing capacity and geological report to be provided by Urban Development Department.
6. The following are the tentative specifications:-
7. (a) **Foundation:-** The foundation shall be designed on the basis of soil condition of the site and requirement of structural system under consideration by constructing RCC **isolated footings**, columns and beams upto plinth level. Site development to be done by the constructor including retaining walls etc.
(b) **Pillar/Structure:** Steel structure system consisting of columns ,beams ,and other components made of suitable HR structural sections /MS plate of thickness 16mm shall be designed and erected as per provisions of IS800:2007. The structure shall be designed for stability and serviceability for worst loading conditions including seismic loads as per latest IS 875(Part1-5) and IS 1893(Part1) :2002
Light gauge steel structure may also be used independently or in combination with steel structure .Light gauge steel structure shall be designed for stability and



serviceability for worst loading conditions including seismic loads as per latest IS 875 (Part1-5) and 1893(Part1).The studs ,track and other members used for structure shall be machine made using cold formed structural quality sheet of thickness ranging from 0.84mm to 2.0 mm for structural members and 0.7mm to 2.0mm for non-structural members and with hot dip galvanizing of minimum 275gsm conforming to IS 277:1992 or equivalent standard . Jointing of the members and the erection shall be done as per the manufacturer's specification and recommendation using special self-driven screws, fasteners, stiffeners etc. Jointing details shall be submitted with structural drawing in advance.

(c)**Stairs:-** Steel staircase shall be designed and fabricated using HR steel sheet of thickness 3mm/4mm with MIG welding process. Staircase shall be pretreated for surface cleaning using steel cleaning agent and painted with two coats of anticorrosion epoxy paint up to required finish..

(d) **Walls:-** Walling shall be completed using factory made EPS based electro welded wire mesh 3D panels. Wire mesh used for the panel shall be made of galvanized with minimum 60gsm hot dip coating and minimum dia of 2.5 mm for longitudinal and transverse wire(min Yield stress 600N/mm^2 with 100mmX100mm spacing and 0.3mm cross wire (approx. 39 nos / m^2) having minimum yield stress of 680N/mm^2 Expanded polystyrene Core used shall be self-extinguishing grade with minimum density of 15 KG/m^3 and of minimum thickness of 80 mm to fix properly in the system. Sprayed fiber reinforced concrete of thickness 35mm shall be done using required pneumatic device from both side by trained artisans. The composition of sprayed shall be such as to give minimum characteristic strength of 25 N/mm^2 .Recommended Aggregate / cement ratio is 4.5and w/c ratio of 0.5. Jointing of the panel with the structure shall be ensured as per the specification of the constructor in such a way to make it safe from lateral loads and impact .Panels shall be connected in the wall by overlapping one row of electro welded mesh and tying using 16 guage wire

For light gauge steel structure walling may also be completed using heavy duty fire resistant CP Board of thickness 12.5 mm in the outer wall and combination of 12mm gypsum board and 12mm heavy duty CP board for internal wall to ensure fire resistant property stipulated in NBC 2005.Jointing shall be sealed properly using sealant. Rockwool insulation of appropriate grade density 100 kg/m^3 shall be used between two layers of the wall paneling.

Wall cladding shall be designed to resist wind loads and shall be fixed accordingly using proper screws and spacing.



- (e) **Flooring:-** Intermediate floor shall be composite of steel decking and PCC of grade M25 for total depth of 76 mm and shall be designed for combined effect of dead load and imposed loads. Finishing shall be IPS in all the floors.
- (g) **Roof:** Roof shall be made using engineered steel trusses and pre painted roofing sheet of required quality laid with proper slopes. Sheets shall be fixed to resist wind loads. It shall be screwed to the joist/ purlin with minimum spacing of 300mm/c. All the longitudinal joints require a minimum lap of 150mm.
- (h) **Ceiling:-** False ceiling shall be made using 8 mm thick CP Board or gypsum board conforming to relevant Indian Standard.
- (h) **Doors:-** ISI marked wooden (deodar) flush door shutters with pressed steel frame (pre coated) made of 1.2mm thick sheet shall be used except in the bathroom and toilet. Factory made UPVC doors conforming to IS 15931:2012 shall be used in bathroom and toilet. Doors and window frames shall be fixed with required reinforcement in the corner in case of Polystyrene panel system to avoid cracks.
- (i).**Windows:** Pressed steel frames (percolated) with wooden (deodar) glazed shutters shall be used .Steel grill with preapproved design shall be used..
- (j) **Bathroom and Kitchen:** The Bathroom and Kitchen shall have ISI marked tiles upto 4'6" feet and 2'6" feet respectively. Green marble shall be used for the kitchen slab. Steel sink may be provided.
- Note:** Dry distemper and oil based paints shall be used for all finishing works.

(j) Sanitary specification:-

GENERAL TOILET: -

FIXTURES

W.C. SEAT

ORISSA PAN POPULAR 20043 (58 X44 CM) IN WHITE SHADE OF HINDWARE OR ITS EQUIVALENT NO. 60002 SIZE 59 X 39 X 37.5 OF HINDWARE OR ITS EQUIVALENT WITH AUTO CISTERN NO. 61002.

WASH BASIN

WASH BASIN NO. 10001 OF SIZE 55 X 40 CM OF HINDWARE OR ITS EQUIVALENT WITH PVC WASTE PIPE. WITHOUT PEDESTAL.

NOTES:-

1. LOWEST CAPACITY LOW LEVEL CISTERNS WITH DUAL FLUSHING SYSTEM SHOULD BE PROVIDED IN THE WC's SO THAT WHEREVER REQUIRED ONLY HALF TANK CAN BE FLUSHED.



2. ALL SANITARY FITTINGS SHALL BE OF WHITE SHADE.

FITTINGS

1. CHROMIUM PLATED I.S.I. MARKED NOS. I.S: 8931 & 8934 / PVC WASTE WATER DISPOSAL PIPE SHALL BE OF 10 CM DIA AND SEWERAGE DISPOSAL SHALL BE THROUGH 15 CM DIA PIPE IN TOILETS.

2. PVC WATER STORAGE TANKS TO BE PROVIDED

3. TOWEL RING, TOWEL RAIL & TAPS OF KITCH OR ITS EQUIVALENT .

4. FITTINGS POINTS FOR GYSER FOR HOT WATER & MIRROR.

5. NO DEPRESSION WILL BE PROVIDED IN THE FLOORS FOR TOILET .

6. 8MM TH. EVEREST CEILING OVER HEAVY DUTY POWDER COATED G.I. FRAME WORK.

7. 10/15 CM P.V.C. HEAVY DUTY KITEC PIPES FIXED WITH SOLVENTS.WATER PROOFING

8. 15 MM DIA . HEAVY DUTY KITEC PIPES FIXED WITH SOLVENTS.WATER PROOFING

INTERNAL WATER:- SHALL BE OF 12 MM DIA. POLYETHELENE
SUPPLY PIPES COMPOSITE PIPES OF KITEC/SANT OR ITS EQUIVALENT.

SOIL WASTE PIPES:- SHALL BE OF 110 MM DIA. WITH THE WALL THICKNESS OF 3.8MM SWR PIPES OF UPVC OF FINOLEX / KISSAN/ SUPREME OR ITS EQUIVALENT. SEPARATE PIPES UPTO SEPTIC TANK SHALL BE PROVIDED.

RAIN WATER PIPES:- SHALL BE OF 110 MM DIA AND 3.8 MM THK.

DRAINAGE SYSTEM:- DRAINS SHALL BE CONSTRUCTED UPTO NALLAH.

(k) Electrical installation specification:-

ELECTRICAL INSTALLATIONS

SPECIAL CONDITIONS

General

1. These Special Conditions are part of the Contract and the contractor shall go through it as he shall not have any right to claim at any time for delays or for expenditure incurred by him in fulfilling the following special conditions.



2. Special Conditions of Contract (SCC) shall be read in conjunction with Technical Specifications, Schedule of Quantities, Tender Drawings and any other document forming part of this contract Agreement.

1.1 Electrical License

The tenderer shall employ licensed supervisors and skilled workers having valid permits as per the regulations of Indian Electricity Rules and local Electrical Inspectors requirements.

1.2 Conformity to IE Act, IE Rules, and BIS standards

1.2.1 All Electrical works shall be carried out in accordance with provisions of Indian Electricity Act, 1910 and Indian Electricity Rules, 1956 amended up to date (Date of call of tender unless specified otherwise).

1.2.2. The definition of terms shall be in accordance with IS: 732-1989 (Indian standard Code of Practice for Electrical wiring), except for the definitions of point, circuit and sub main wiring which are defined in the **General specifications for Electrical Works Part-1 Internal 2013**.

1.3.3. All components shall conform to relevant Indian Standard (BIS) Specifications, wherever existing. Material with ISI certification mark shall be preferred.

1.3 Statutory Clearance (s)

- Approval /Clearance of the complete installation shall be obtained by the contractor from Local bodies and other licensing authorities, wherever required. However, application shall be made by the Department and any statutory fee, as applicable, shall be paid by the Department directly to the Govt. authorities concerned.
- Pay any licensing fee/submission fee/inspection fee payable to statutory authorities for obtaining above approvals.
- Complying with observations, if any, of Electrical Inspector /or any other Statutory Authority after completion of work in order to obtain a categorical clearance to start beneficial use.

2.0 Tender Drawings, Drawings for Approval & Completion Drawings

2.1 Tender Drawings

The drawings appended separately are intended to show space allotted for various equipments. The equipments offered shall be suitable for installation in the spaces shown in these drawings.

i) The work shall be carried out in accordance with the drawings enclosed with the tender documents and also in accordance with modification thereto from time to time as approved by the Director, Urban Development or his representative.

ii) All wiring diagrams shall be deemed to be Drawings within the meaning of the term as used in clause 11 of the conditions of contract (PWD 7 or PWD 8). They shall indicate the main switch board, the distribution boards (with circuit numbers controlled by them), the runs of various mains and sub mains and the position of all points with their controls.

iii) All circuits shall be indicated and numbered in the wiring diagram and the points shall be given the same number as the circuit to which they are electrically connected.

2.2 Shop Drawings/ Details

The contractor to supply all shop drawings, wiring & cabling drawing as per site conditions for mounting of said systems within ten days of receipt of the Order & further get them approved before starting the work.

2.3 Drawings/Documents to be furnished on completion of Installation

Three sets of the completion drawings shall be submitted by the contractor while handing over the installation to the Department. Out of these three, one set shall be laminated on a hard base for display in the electric control room/room where main panel is installed. One set shall be displayed in Junior Engineer's room.



In addition:

- (a) Drawings giving complete details of all the equipments, including line diagram and layout of all electrical panels giving switchgear ratings and their disposition, cable feeder sizes and their layout.
- (b) Control wiring drawings with all control components and sequence of operations to explain the operation of control circuits, including
 - (i) Manufacturer's technical catalogues of all equipments and accessories.
 - (ii) Operation and maintenance manual of all major equipments, detailing all adjustments, operation and maintenance procedure.

3.0 Structural Alterations to building

- i) No structural member in the building shall be damaged / altered, without prior approval from the competent authority through the Engineer-in-Charge.
- ii) Structural provisions like openings, cutouts, if any, provided by the department for the work shall be used. Where these require modifications, or where fresh provisions are required to be made, such contingent works shall be carried out by the contractor at his cost.
- iii) All such openings in floors provided by the Department shall be closed by the contractor after installing the cables / conduits / rising mains etc. as the case may be, by means as approved by the Director, Urban Development without any extra cost.
- iv) All chases required in connection with the electrical works shall be provided and filled by the contractor at his own cost to the original architectural finish of the buildings.

4.0 Guarantee period

The installation will be guaranteed by the contractor, of 12 months for complete work and equipments from the date of satisfactory handing over of the site as certified by the Department/Consultant/Client after correction of faulty/bad workmanship, defective design, manufacturing defects in works. The contractor shall guarantee the works to maintain quality on the basis of design/scheme. They shall also guarantee that the performance of the work executed shall meet the requirement as specified in work specifications.

5.0 Completion plan and completion certificate

On completion of the electrical installation a certificate shall be furnished by the Contractor countersigned by the Licenced Supervisor, under whose direct supervision the installation was carried out. This certificate shall be in the prescribed form as required by the local supply authority. The Contractor shall be responsible for getting the electrical installation inspected and approved by the local and statutory authorities/Electrical Inspector concerned and expenses if any shall be borne by the contractor.

- a) Completion certificate including the Performa for test results and completion plan (as per the provisions contained in the respective specifications) shall be prepared by the contractor and submitted to the Director, Urban Development after completion of work, before final payment is made.
- b) Completion plan (in case of external EI works) drawn to a suitable scale in tracing cloth with ink indicating the following along with three blue print copies of the same shall also be submitted:
 - i) General layout of the site showing therein routes of cables and lines.
 - ii) Schedule of lengths, type and size of cables and overhead conductors.
 - iii) Position of all cable joints type wise, supports, stays, struts, lightning arrestors, feeder pillars and pipes or closed ducts.
 - iv) Positions of cable route markers and joint markers with respect to permanent land marks available at site.



6.0 Workmanship

- a) The work shall be carried out under the direct supervision of a first class licensed foreman or of a person holding a certificate of competency issued by the State Govt. Licensing authority for the type of work involved, employed by the contractor, who shall rectify then and there the defects and modifications pointed out by the Engineer-in-Charge during the progress of work.
- b) Fabrication of panels in a CPRI approved workshop. Unless otherwise specified, switchboards/LT panels etc. will be fabricated by a fabricating workshop having CPRI Certificate for short circuit withstand capability for manufacture/ fabrication for the rating of switch boards specified. The workshop should have reasonable quality control and testing facilities, besides having a proper 7 tank process for proper treatment and painting of metal parts.

7.0 Completeness of tender

All sundry fittings, assemblies, accessories, hardware items, foundation bolts, terminal lugs for electrical connections as required, and items which are useful and necessary for proper assembly and efficient working of various components shall be deemed to have been included in the tender, whether such items are specifically mentioned in the tender documents or not.

TECHNICAL SPECIFICATIONS

A. GENERAL

1. REGULATIONS AND STANDARDS

The following Indian Standard Specifications and Codes of Practice, currently applicable and updated, shall apply to the equipments and the work covered by this contract. In addition to General Specifications for Electrical works (Part-I- Internal)-2013 & Part-II-External-1994, the relevant clauses of the Indian Electricity Act 1910 and Indian Electricity Rules 1956 as amended upto date, Factories Act- 1948, Workmen's compensation Act- 1923, Statutory norms prescribed by local bodies shall also apply. In general, all materials, equipment and workmanship shall conform to the Indian Standards, specifications and code. Wherever appropriate Indian Standards are not available, relevant British and/or IEC Standards shall be applicable. BIS certified equipment shall be used as a part of the Contract.

The installation shall conform in all respects to Indian Standard Code of Practice for Electrical wiring installation IS: 732-1963 and IS: 2274-1963. It shall also be in conformity with National Electric Code and National Building Code.

Electrical work in general shall be carried out as per following General Specifications for Electrical works with as amended upto date:

1. General Specifications for Electrical Works. (Part I - Internal) - 2013.
2. General Specifications for Electrical Works. (Part II - External) - 1994.
3. General Specifications for Electrical Works. (Part IV . Sub-Station)-2007.
4. General Specifications for Electrical Works. (Part VII . DG Sets) - 2006.

Wherever these specifications calls for a higher standard of material and or workmanship than those required by any of the above mentions regulations and specification then the specification here under shall take precedence over the said regulations and standards.



B. WORKS MATERIALS SPECIFICATIONS

This part of the tender documents is to be read in conjunction with general conditions of contract, as applicable to civil work, electrical work and other allied jobs and other articles forming part of this document.

1.0 Strict Colour Coding

Following colour coding shall be followed in wiring:-

Phase	: Red/Yellow/Blue. (3-Phase)
Live	: Red (Single phase wiring)
Neutral	: Black
Earth	: Yellow/Green.

Colour code for circuit & sub main wiring:

Colour code for circuit and sub main wiring installation shall be Red, Yellow, and Blue for three phases. Black for neutral and yellow/green or green only for earth in case of insulated earth wire.

2.0 Conduit System

- 1.The wall thickness of metallic conduits shall not be less than 1.6mm (16SWG) for conduits up to 32mm dia and shall not be less than 2mm (14SWG) for conduits above 32 mm dia.
- 2.All non-metallic conduit pipes and accessories shall be of suitable material complying with IS: 3419-1989 for rigid conduits and IS:9537 (Part5) 2000 for flexible conduits.
- 3.MS hot dip galvanised factory fabricated sheet boxes with wall thickness not less than 1.2mm (18gauge) for sizes of 20cm x 30cm, and above this size 1.6mm (16gauge).
- 4.The clear depth of the box shall not be less than 60 mm with an earth stud inside.
- 5.3mm thick synthetic phenolic resin bonded laminated sheet conforming IS:-2036-1974.

3.0 Wiring Conductor

- 3.1 Wiring shall be carried out with Copper conductor cable PVC insulated, Fire retardant, low smoke (FRLS) type conforming to BIS Specification IS: 694-1990.
- 3.2 Multi stranded cables are permitted to be used.
- 3.3 Minimum size of wiring: Light wiring: 1.5sq.mm (22/0.30) mm; General Power point wiring: 4.0 sq.mm (56/0.30) mm. Power circuit rated: more than 1 KW, size as per calculation.
- 3.4 The minimum size of wire within the prewired fitting shall be flexible with PVC insulation and 14/0.193 mm (min) copper conductor.

4.0 Distribution Boards

- 4.1 Distribution boards shall be standard type as per the CPWD specifications. All distribution boards shall be of three phases (415 Volts) or single phase (240 volts) type with incoming isolator or MCB as in schedule of quantities. Distribution boards shall contain plug in or bolted type miniature circuit breaker mounted on bus bars. Miniature circuit breakers shall be quick make and quick break type with trip free mechanism. MCB shall have thermal and magnetic short circuit protection. MCB shall conform with IS 8828-1978. Neutral bus bars shall be provided with the



same number of terminals as there are single ways on the board, in addition to the terminals for incoming mains. An earth bar of similar size as the neutral bar shall also be provided. Phase barrier shall be fitted and all live parts shall be screened from the front. Ample clearance shall be provided between all live metal and the earth case and adequate space for all incoming and outgoing cables. All distribution board enclosures shall have an etched zinc base stove painted followed by synthetic stoved enamel, colour light gray.

A circuit identification card in clear plastic cover shall be provided for each distribution board. Miniature Circuit Breakers for lighting circuits shall be of "B" curve where as 'C' curve MCB's shall be invariably used for motor loads, halogen lamps fitting, sodium/mercury discharge lamps and for all power circuits. All miniature circuit breakers shall be of 10 KA rated rupturing capacity.

4.2. The DBs shall be separate for light and power.

4.3. Essential/non-essential/UPS distribution each will have a completely independent and separate system starting from the main switch board up to final wiring for each system.

5.0 Lighting Fixture and Fans

a. The Contractor shall supply and install lighting fixtures including but not limited to lamps, ballasts, accessories fixing hardware necessary for installations, as shown on the Drawings, as required, and as specified.

b. All fixtures shall be delivered to the building complete with suspension accessories, canopies, hanging devices, sockets, holders, reflectors, ballasts, diffusing material, louvers, plaster frames, recessing boxes, etc. all wired and assembled as required, and as specified.

c. Full size shop detail drawings of special fixture or lighting equipment, where called for in the fixtures schedule, shall be submitted to the Engineer in-charge for approval.

d. Fixtures, housing, frame or canopy, shall provide a suitable cover for fixture outlet box or fixture opening.

e. Fixtures shall comply with all applicable requirements as outlined unless otherwise specified or shown on the Drawings.

f. Manufacturer's name and catalogue number of lighting fixtures are given for general reference only. It shall be understood that the actual fixtures supplied shall meet all the requirements of the specification, and, if necessary, the standard fixture indicated for reference, shall be modified accordingly.

g. Fixtures shall bear manufacturer's name and the factory inspection label.

h. Fixtures shall be completely wired and constructed to comply with the IEE wiring regulations requirements for lighting fixtures, unless otherwise specified.

i. Revamping the fixture shall be possible without having to remove the fixture from its place.

6.0 Cubical panel

Cubical panel shall be floor mounted (on base frame) totally enclosed and extensible type. Degree of IP protection shall be IP-42 for indoor application and IP-54 for outdoors, unless and otherwise specified.

The panel shall be compartmentalized type having space and arrangement for incoming and outgoing cables/bus ducting, switchgear, insulated and properly supported compartmentalized bus-bars, interconnection between bus bars and switchgear with auxiliary bus bars/insulated conductors/strips etc.



There shall be a clear space of 1m in front of the switch board. The space behind the switch board shall be either less than 20cm or more than 75 cm. If there are any attachment or bare connections at the back of the switch board, Rule 51 (c) of Indian Electricity Rules shall apply.

For tap-off connections from bus bars, FRLS wiring cables may be used for current carrying capacities up to 100A, and for higher current capacities, solid conductors/ strips suitably insulated with PVC sleeves/ tape shall be used.

Depth of cubical will be decided according to depth of main incomer and the face area according to number and size of outgoing switchgears, their suitable arrangement. The size of auxiliary bus bars will be as per the required current ratings of outgoing feeders.

7.0 Mains and Sub-mains

Mains and sub-main cable where called for shall be of the rated capacity and approved make. Every main and sub-main shall be drawn into an independent adequate size conduit. Adequate size draw boxes shall be provided at convenient locations to facilitate easy drawings of the sub-main & main cables. Cost of junction box/drawn box is deemed to be included in the rates of sub main wiring. An independent earth wire of proper rating shall be provided for every sub-main. Single phase sub main shall have single earth wire whereas three phase sub main shall be provided with two earth wire. The earth wire of proper rating shall be drawn inside the conduits and fixed to cables by means of suitable M.S. clips at not more than 1m distance.

Where mains and sub-mains cables are connected to the switchgear, sufficient extra lengths of sub main and mains cable shall be provided to facilitate easy connections and maintenance. For termination of cables creeping type cable socket/lugs shall be provided. Same color code as for circuit wiring shall be followed.

8.0 Load Balancing

Balancing of circuits in three phase installation shall have to be planned before the commencement of wiring and shall be strictly adhered to.

9.0 Earthing

Every circuit/sub-main will have its earth continuity conductor to run along with wiring. In case of 3- sub-main wiring two earth conductors shall be provided. Looping of earth is allowed only in case of point wiring. The size of earthing conductor from earth electrode up to main earthing terminal/earth bus shall not be less than:

- i) 5mm dia. (6SWG) for G.I. wire.
- ii) 4mm dia. (8SWG) copper wire.
- iii) 25mmx4mm in case of GI strip.
- iv) 20 mmx3 mm in case of copper strip.

Minimum acceptable size of a protective conductor shall be 2.5sq.mm if protected mechanically and 4sq.mm otherwise.

The earthing conductor from the electrode up to the building shall be protected from mechanical injury by medium class, 15 mm dia. GI pipe in the case of wire, and by 40 mm dia. medium class GI pipe in case of strip.

The protective pipe in ground shall be buried at least 30cm deep (to be increased to 60cm in case of road crossing and pavements). The portion within the building shall be recessed in walls and floors to adequate depth in due co-ordination with the civil work.

The Non-current carrying metal parts of all apparatus utilizing power supply at voltage exceeding 250 Volts shall be earthed by two separate and distinct connections to the earth bus, or two



separate and distinct earthing sets. Two protective conductors shall be provided for a switch board carrying a 3-phase switchgear. Separate earth electrodes shall be provided for lightning arrestor/ lightning conductors.

C. TESTING AND COMMISSIONING OF INSTALLATION

1.0 Testing of Wiring

All the wiring system shall be tested for continuity of circuits, short circuits and earthing after the wiring is completed and before energising. All tests prescribed in the General Specifications, to be done before, during and after installation, shall be carried out and the test results shall be submitted to Engineer-in-Charge in prescribed Performa (Annexure-E), forming part of the completion certificate.

- 1) Insulation resistance test: Insulation resistance shall be not less than 12.5 mega ohms subject to a minimum of 1 M .
- 2) Polarity test of switch.
- 3) Earth continuity test.
- 4) Earth electrode resistance test: Earth resistance shall be m5 ohms can be relaxed up to 8 ohms in rocky soil.

2.0 Testing of Lighting Fixtures

After all lighting fixtures are installed and are connected to their respective switches; all fixtures shall be tested to ensure operation on their correct switch in the presence of the engineer.

All un-operating fixtures or ones connected to the wrong or inconveniently located switch shall be correctly connected as directed by the Engineer In-charge.

D. CABLES AND CONTROL CABLES

1.0 General

MV cables shall be supplied, inspected laid tested and commissioned in accordance with drawings, specifications, relevant Indian Standards Specifications, IS:1255-1983 and cable manufacturer`s instructions.

2.0 Material

- a) The cables for application for Low and Medium voltage (up to and including 1.1KV) supply shall be:
 - i) PVC insulated PVC sheathed, Aluminum conductor armoured cable conforming to IS: 1554 - 1988 (Part - I).
 - ii) Cross linked polyethylene insulated, PVC sheathed (XLPE), conforming to IS: 7098 (Part-1)- 1988.
- b) The cables for application for High voltage (above 1.1 KV but up to and including 11KV) supply shall be:



- i) PVC insulated PVC sheathed, Aluminum conductor armoured cable conforming to IS: 1554 - 1988 (Part - II).
- ii) Cross linked polyethylene insulated, PVC sheathed (XLPE), conforming to IS: 7098 (Part-2)- 1985.

All cables shall be inspected upon receipt at site and checked for any damage during transit.

- c) Short runs of cables laid in pipes, closed masonry trenches and similar protected or secured enclosures need not be armoured.
- d) PVC and XLPE cables, when armoured, shall have galvanized steel wires (flat or round) for armouring.



FORM OF COMPLETION CERTIFICATE

(Clause 9.3.2.6)-NBC-2005

I/We certify that the installation detailed below has been installed by me/us and tested and that to the best of my/ our knowledge and belief, it complies with *Indian Electricity Rules, 1956*.

Electrical Installation at -----

Voltage and system of supply -----

Particulars of Works:

a) Internal Electrical Installation

No.	Total Load	Type of system of wiring
i) Light point		
ii) Fan point		
iii) Plug point		
3-pin 6 A		
3-pin 16A		

b) Others

Description	hp/Kw	Type of starting
-------------	-------	------------------

1) Motors:

i)

ii)

iii)

2) Other plants:

c) If the work involves installations of over head line and/or underground cable

1) i) Type and description of overhead line.

ii) Total length and number of spans.

iii) No. of street lights and its description.

2) i) Total length of underground cable and its size:

ii) No. of joints:

End joint:

Tee joint:

Straight through joint:

Earthing:

i) Description of earthing electrode

ii) No. of earth electrodes

iii) Size of main earth lead

Test Results:

a) Insulation Resistance

i) Insulation resistance of the whole system of conductors to earth ----- Megaohms.

ii) Insulation resistance between the phase conductor and neutral

Between phase R and neutral..... Megaohms.

Between phase Y and neutral Megaohms.

Between phase B and neutral Megaohms.

iii) Insulation resistance between the phase conductors in case of polyphase supply.

Between phase R and phase Y Megaohms

Between phase Y and phase B Megaohms

Between phase B and phase R Megaohms

Director (UD)

Contractor

65



b) Polarity test:

Polarity of non-linked single pole branch switches

c) Earth continuity test:

Maximum resistance between any point in the earth continuity conductor including metal conduits and main earthing lead ohms.

d) Earth electrode resistance:

Resistance of each earth electrode.

i) Ohms.

ii) Ohms.

iii) Ohms.

iv) Ohms.

e) Lightning protective system.

Resistance of the whole of lightning protective system to earth before any bonding is effected with earth electrode and metal in/on the structureOhms.

Signature of Supervisor
Name and Address

Signature of Contractor
Name and Address

.....
.....
.....
.....

.....
.....
.....
.....

- Note :-** (i) The above mentioned specifications are indicative of our minimum requirement. However, individual bidder can give its own Pre-Fab specification conforming to BIS codes.
- (ii) The structural design should be based on BIS code and guidelines.
- (iii) The structural design to be given by the selected bidder should be approved from recognized IITs/ NITs/CBRI.
- (iv) The structural design should cater for seismic condition as per BIS Codes.



CHAPTER VII

ENCLOSURES THAT FORM A PART OF CONTRACT DOCUMENTS

List of Annexures

1.	Tender/Quotation Letter	:	Annexure I
2	Form of letter of Acceptance of Tender	:	Annexure II
3.	Performance Bond	:	Annexure III
4.	Schedule of Works	:	Annexure IV
5.	Schedule of items for which rates are to be quoted by the Contractor	:	Annexure V
6	Materials for issue to the Contractor	:	Annexure VI
7	Tools and Plant for hire to the Contractor	:	Annexure VII
8	Schedule of rates for work items for interim payment	:	Annexure VIII
9	Schedule of Minimum Wages	:	Annexure IX
10	Schedule for assessment of cost due to variation in prices	:	Annexure X
11.	Contractor's Labour Regulations	:	Annexure XI
12.	Model Rules for Labour Welfare	:	Annexure XII
13.	Safety Code	:	Annexure XIII
14.	Particular specifications	:	Annexure XIV
15	List of clauses requiring action before issue of tender documents	:	Annexure XV
16	Special conditions(to be added before award of work) :		Annexure XVI
17	Architectural Drawings		(attached)
18	Electrical Drawings		(attached)
19	(DELETED) Index Plan/Site Plan	:	Drg.No
20	(DELETED) Cross section of river at bridge site with bore details		Drg No to
21	(DELETED) Quarry Charts	:	Drg.No. to
22	(DELETED) Project Drawings	:	Drg.No. to
23	Other enclosures, if any	:	-----



Annexure-I
QUOTATION LETTER
(See Clause 6.17)

I/We (Name of the tender)

Undertake (s) to construct the work: -
.....

.....
.....

.....
.....

at.....**on** road
near.....

In the state of Himachal Pradesh at a cost of
Rs.....

Rupees.....only (in Indian currency)
subject

to the stipulations made in the accompanying tender documents .

Stamped signature of the tenderer
or his authorized representative.

In Words:

Notes for tenderers:-

- i) The amount to be given in the above letter, should be rounded off to the nearest rupee.
- ii) special care should be taken to give the amount in such a way that manipulation is not possible



Annexure-II

Form of letter of acceptance of tender

(See Clause 11.1)

From:

The Director,
Urban Development Department
Shimla H.P.
India

To

(Insert the name and address of the contractor)

No. _____ dated _____
_____ ..
Name _____ of _____ work:-
_____ ..
_____ ..
_____ ..

Dear Sir (s),

Your tender for the above mentioned work (as per normalization condition accepted by you) has been accepted by me on behalf of the Governor of the State of Himachal Pradesh for the sum of Rs. _____ (Rupees _____ only).

2. You are requested to furnish the performance security, prescribed by the Department for a sum of Rs. _____ (Rupees _____ only) within _____ days of the date of issue of this letter.
3. You are also requested to commence the work at once. Please note that the time allowed for carrying out the work as entered in the tender shall be reckoned from the fifteenth day of this order to commence the work.

Signature

(Designation of Accepting Authority)



Annexure-III

PERFORMANCE BOND

(See Clause 11.3)

Whereas the Governor of the state of Himachal Pradesh called the Department, has awarded the contract for the work:-

2. AND WHEREAS THE contractor is bound by the said contractor to submit to the Department a performance Bond for a total amount of

3. NOW WE UNDERWRITERS responsible and representatives of the Bank/Insurance Companyí í í í í í í í ..iní í í í í í í í .hereinafter called the Bank/insurance Company and fully authorized to sign and to incur obligations in the name of the Bank/ Insurance Company, hereby declare that this Bank/Insurance Company will guarantee the Department the full amount of í í í í í í í í í í í í í í í í .

4. The Bank/Insurance Company shall pay to the Department any amount up to and inclusive of the aforementioned full amount upon written order from the Director, Urban Development for any liability or damage resulting from the defects or shortcomings of the contractor or the debts he may have incurred to any parties involved in the works under the contract mentioned above, whether these are actual or estimated or expected. The Bank/Insurance Company shall pay to the Department the above amount immediately without delay and without the necessity of a previous notice or of judicial or administrative procedures and without it being necessary to prove to the Bank/Insurance Company to the defects or shortcoming or debts of the contractors.



5. It shall not be necessary for the Department to proceed against the contractor before proceeding against the Bank/Insurance Company and the Guarantee herein contained shall be enforceable against the Bank Insurance Company, notwithstanding any security which the Department may have obtained or obtain from the contractor, at the time when proceedings are taken against the Bank/Insurance Co., hereunder be outstanding or unrealized.
6. This Guarantee is valid for a period of í í í í í í í í í í í .. () calendar months after the date of signing. (The initial period in which this guarantee is still valid shall be at least 6 months longer than the time of completion stated in the contract).
7. Until the Department has issued to the Bank/Insurance Co., to the effect that this Guarantee can be released, the Bank/Insurance Co., undertakes, notwithstanding the validity period as stated under 5 above, to extend the validity under the same conditions for successive periods of six (6) calendar months at a time and to forward the appropriate extension sheets to the department.
8. As a declaration of good faith for the Guarantee the legal representatives of the Bank/Insurance Company hereby sign and seal this Bond on the í í í í í í í í day of í í í í í í í í

í í í í í í í í í í ..
 í í í í í í í í í í ..

(Witness)

(Guarantor)

í í í í í í í í í í ..
 í í í í í í í í í í ..

(Wittiness)

(Guarantor)



ANNEXURE .IV
SCHEDULE OF WORKS
(See Clause 28)

Serial No	Description of Various Items of Works	Remarks if any
	Covered by contract	

The Bidder to submit his drawing on Pre-Fab technology conforming to planning requirement of architectural drawing attached separately.

1. The brief layout plan will be as per architectural drawing issued by Urban Development Department attached separately.
2. The plinth area of the building for four floors including Community Centre is 3613.30 SqMtr.
3. The rates are to be quoted per unit plinth area.
4. The structure design shall be approved from IITs/ NITs/CBRI.
5. The structure shall be designed based on the structural and functional requirements specified and keeping in view the soil bearing capacity and the geological report to be provided by Urban Development Department.
6. The following are the tentative specifications:-

7. (a) **Foundation:-** The foundation shall be designed on the basis of soil condition of the site and requirement of structural system under consideration by constructing RCC **isolated footings**, columns and beams upto plinth level. Site development to be done by the constructor including retaining walls etc.

(b) **Piller/Structure:** Steel structure system consisting of columns ,beams ,and other components made of suitable HR structural sections /MS plate of thickness 16mm shall be designed and erected as per provisions of IS800:2007.The structure shall be designed for stability and serviceability for worst loading conditions including seismic loads as per latest IS 875(Part1-5) and IS 1893(Part1) :2002

Light guage steel structure may also be used independently or in combination with steel structure .Light gauge steel structure shall be designed for stability and serviceability for worst loading conditions including seismic loads as per latest IS 875 (Part1-5) and 1893(Part1). The studs ,track and other members used for structure shall be machine made using cold formed structural quality sheet of thickness ranging from 0.84mm to 2.0 mm for structural members and 0.7mm to 2.0mm for non-structural members and with hot dip galvanizing of minimum



275gsm conforming to IS 277:1992 or equivalent standard . Jointing of the members and the erection shall be done as per the manufacturer's specification and recommendation using special self-driven screws, fasteners, stiffeners etc. Jointing details shall be submitted with structural drawing in advance.

(c) **Stairs:-** Steel staircase shall be designed and fabricated using HR steel sheet of thickness 3mm/4mm with MIG welding process. Staircase shall be pretreated for surface cleaning using steel cleaning agent and painted with two coats of anticorrosion epoxy paint up to required finish..

(d) **Walls:-** Walling shall be completed using factory made EPS based electro welded wire mesh 3D panels. Wire mesh used for the panel shall be made of galvanized with minimum 60gsm hot dip coating and minimum dia of 2.5 mm for longitudinal and transverse wire(min Yield stress 600N/mm^2 with 100mmX100mm spacing and 0.3mm cross wire (approx. 39 nos / m^2) having minimum yield stress of 680N/mm^2 Expanded polystyrene Core used shall be self-extinguishing grade with minimum density of 15 KG/m^3 and of minimum thickness of 80 mm to fix properly in the system. Sprayed fiber reinforced concrete of thickness 35mm shall be done using required pneumatic device from both side by trained artisans. The composition of sprayed shall be such as to give minimum characteristic strength of 25 N/mm^2 . Recommended Aggregate / cement ratio is 4.5 and w/c ratio of 0.5. Jointing of the panel with the structure shall be ensured as per the specification of the constructor in such a way to make it safe from lateral loads and impact .Panels shall be connected in the wall by overlapping one row of electro welded mesh and tying using 16 gauge wire

For light gauge steel structure walling may also be completed using heavy duty fire resistant CP Board of thickness 12.5 mm in the outer wall and combination of 12mm gypsum board and 12mm heavy duty CP board for internal wall to ensure fire resistant property stipulated in NBC 2005. Jointing shall be sealed properly using sealant. Rockwool insulation of appropriate grade density 100 kg/m^3 shall be used between two layers of the wall paneling.

Wall cladding shall be designed to resist wind loads and shall be fixed accordingly using proper screws and spacing.

(e) **Flooring:-** Intermediate floor shall be composite of steel decking and PCC of grade M25 for total depth of 76 mm and shall be designed for combined effect of dead load and imposed loads. Finishing shall be IPS in all the floors.

(g) **Roof:** Roof shall be made using engineered steel trusses and pre painted roofing sheet of required quality laid with proper slopes. Sheets shall be fixed to resist wind loads. It shall be screwed to the joist/ purlin with minimum spacing of 300mm/c. All the longitudinal joints require a minimum lap of 150mm.



(h) **Ceiling:-** False ceiling shall be made using 8 mm thick CP Board or gypsum board conforming to relevant Indian Standard.

(h) **Doors:-** ISI marked wooden (deodar) flush door shutters with pressed steel frame (pre coated) made of 1.2mm thick sheet shall be used except in the bathroom and toilet. Factory made UPVC doors conforming to IS 15931:2012 shall be used in bathroom and toilet. Doors and window frames shall be fixed with required reinforcement in the corner in case of Polystyrene panel system to avoid cracks.

(i). **Windows:** Pressed steel frames (percolated) with wooden (deodar) glazed shutters shall be used .Steel grill with preapproved design shall be used..

(j) **Bathroom and Kitchen:** The Bathroom and Kitchen shall have ISI marked tiles upto 4'6" feet and 2'6" feet respectively. Green marble shall be used for the kitchen slab. Steel sink may be provided.

Note: Dry distemper and oil based paints shall be used for all finishing works.

(j) Sanitary specification:-

GENERAL TOILET: -

FIXTURES

W.C. SEAT

ORISSA PAN POPULAR 20043 (58 X44 CM) IN WHITE SHADE OF HINDWARE OR ITS EQUIVALENT NO. 60002 SIZE 59 X 39 X 37.5 OF HINDWARE OR ITS EQUIVALENT WITH AUTO CISTERN NO. 61002.

WASH BASIN

WASH BASIN NO. 10001 OF SIZE 55 X 40 CM OF HINDWARE OR ITS EQUIVALENT WITH PVC WASTE PIPE. WITHOUT PEDESTAL.

NOTES:-

1. LOWEST CAPACITY LOW LEVEL CISTERNS WITH DUAL FLUSHING SYSTEM SHOULD BE PROVIDED IN THE WC's SO THAT WHEREVER REQUIRED ONLY HALF TANK CAN BE FLUSHED.
2. ALL SANITARY FITTINGS SHALL BE OF WHITE SHADE.

FITTINGS

1. CHROMIUM PLATED I.S.I. MARKED NOS. I.S: 8931 & 8934 / PVC WASTE WATER DISPOSAL PIPE SHALL BE OF 10 CM DIA AND SEWERAGE DISPOSAL SHALL BE THROUGH 15 CM DIA PIPE IN TOILETS.



2. PVC WATER STORAGE TANKS TO BE PROVIDED

3. TOWEL RING, TOWEL RAIL & TAPS OF KITCH OR ITS EQUIVALENT .

4. FITTINGS POINTS FOR GYSER FOR HOT WATER & MIRROR.

5. NO DEPRESSION WILL BE PROVIDED IN THE FLOORS FOR TOILET .

6. 8MM TH. EVEREST CEILING OVER HEAVY DUTY POWDER COATED G.I. FRAME WORK.

7. 10/15 CM P.V.C. HEAVY DUTY KITEC PIPES FIXED WITH SOLVENTS.WATER PROOFING

8. 15 MM DIA . HEAVY DUTY KITEC PIPES FIXED WITH SOLVENTS.WATER PROOFING

INTERNAL WATER:- SHALL BE OF 12 MM DIA. POLYETHELENE SUPPLY PIPES COMPOSITE PIPES OF KITEC/SANT OR ITS EQUIVALENT.

SOIL WASTE PIPES:- SHALL BE OF 110 MM DIA. WITH THE WALL THICKNESS OF 3.8MM SWR PIPES OF UPVC OF FINOLEX / KISSAN/ SUPREME OR ITS EQUIVALENT. SEPARATE PIPES UPTO SEPTIC TANK SHALL BE PROVIDED.

RAIN WATER PIPES:- SHALL BE OF 110 MM DIA AND 3.8 MM THK.

DRAINAGE SYSTEM:- DRAINS SHALL BE CONSTRUCTED UPTO NALLAH.

(k) Electrical installation specification:-

ELECTRICAL INSTALLATIONS

SPECIAL CONDITIONS

General

1. These Special Conditions are part of the Contract and the contractor shall go through it as he shall not have any right to claim at any time for delays or for expenditure incurred by him in fulfilling the following special conditions.

2. Special Conditions of Contract (SCC) shall be read in conjunction with Technical Specifications, Schedule of Quantities, Tender Drawings and any other document forming part of this contract Agreement.

1.1 Electrical License

The tenderer shall employ licensed supervisors and skilled workers having valid permits as per the regulations of Indian Electricity Rules and local Electrical Inspectors requirements.

1.2 Conformity to IE Act, IE Rules, and BIS standards



1.2.1 All Electrical works shall be carried out in accordance with provisions of Indian Electricity Act, 1910 and Indian Electricity Rules, 1956 amended up to date (Date of call of tender unless specified otherwise).

1.2.2. The definition of terms shall be in accordance with IS: 732-1989 (Indian standard Code of Practice for Electrical wiring), except for the definitions of point, circuit and sub main wiring which are defined in the **General specifications for Electrical Works Part-1 Internal 2013**.

1.3.3. All components shall conform to relevant Indian Standard (BIS) Specifications, wherever existing. Material with ISI certification mark shall be preferred.

1.3 Statutory Clearance (s)

- Approval /Clearance of the complete installation shall be obtained by the contractor from Local bodies and other licensing authorities, wherever required. However, application shall be made by the Department and any statutory fee, as applicable, shall be paid by the Department directly to the Govt. authorities concerned.
- Pay any licensing fee/submission fee/inspection fee payable to statutory authorities for obtaining above approvals.
- Complying with observations, if any, of Electrical Inspector /or any other Statutory Authority after completion of work in order to obtain a categorical clearance to start beneficial use.

2.0 Tender Drawings, Drawings for Approval & Completion Drawings

2.1 Tender Drawings

The drawings appended separately are intended to show space allotted for various equipments. The equipments offered shall be suitable for installation in the spaces shown in these drawings.

- i) The work shall be carried out in accordance with the drawings enclosed with the tender documents and also in accordance with modification thereto from time to time as approved by the Director, Urban Development or his representative.
- ii) All wiring diagrams shall be deemed to be Drawings within the meaning of the term as used in clause 11 of the conditions of contract (PWD 7 or PWD 8). They shall indicate the main switch board, the distribution boards (with circuit numbers controlled by them), the runs of various mains and sub mains and the position of all points with their controls.
- iii) All circuits shall be indicated and numbered in the wiring diagram and the points shall be given the same number as the circuit to which they are electrically connected.

2.2 Shop Drawings/ Details

The contractor to supply all shop drawings, wiring & cabling drawing as per site conditions for mounting of said systems within ten days of receipt of the Order & further get them approved before starting the work.

2.3 Drawings/Documents to be furnished on completion of Installation

Three sets of the completion drawings shall be submitted by the contractor while handing over the installation to the Department. Out of these three, one set shall be laminated on a hard base for display in the electric control room/room where main panel is installed. One set shall be displayed in Junior Engineer's room.

In addition:

- (a) Drawings giving complete details of all the equipments, including line diagram and layout of all electrical panels giving switchgear ratings and their disposition, cable feeder sizes and their layout.
- (b) Control wiring drawings with all control components and sequence of operations to explain the operation of control circuits, including
 - (i) Manufacturer's technical catalogues of all equipments and accessories.
 - (ii) Operation and maintenance manual of all major equipments, detailing all adjustments, operation and maintenance procedure.



3.0 Structural Alterations to building

- i) No structural member in the building shall be damaged / altered, without prior approval from the competent authority through the Engineer-in-Charge.
- ii) Structural provisions like openings, cutouts, if any, provided by the department for the work shall be used. Where these require modifications, or where fresh provisions are required to be made, such contingent works shall be carried out by the contractor at his cost.
- iii) All such openings in floors provided by the Department shall be closed by the contractor after installing the cables / conduits / rising mains etc. as the case may be, by means as approved by the Director, Urban Development without any extra cost.
- iv) All chases required in connection with the electrical works shall be provided and filled by the contractor at his own cost to the original architectural finish of the buildings.

4.0 Guarantee period

The installation will be guaranteed by the contractor, of 12 months for complete work and equipments from the date of satisfactory handing over of the site as certified by the Department/Consultant/Client after correction of faulty/bad workmanship, defective design, manufacturing defects in works. The contractor shall guarantee the works to maintain quality on the basis of design/scheme. They shall also guarantee that the performance of the work executed shall meet the requirement as specified in work specifications.

5.0 Completion plan and completion certificate

On completion of the electrical installation a certificate shall be furnished by the Contractor countersigned by the Licensed Supervisor, under whose direct supervision the installation was carried out. This certificate shall be in the prescribed form as required by the local supply authority. The Contractor shall be responsible for getting the electrical installation inspected and approved by the local and statutory authorities/Electrical Inspector concerned and expenses if any shall be borne by the contractor.

- a) Completion certificate including the Performa for test results and completion plan (as per the provisions contained in the respective specifications) shall be prepared by the contractor and submitted to the Director, Urban Development after completion of work, before final payment is made.
- b) Completion plan (in case of external EI works) drawn to a suitable scale in tracing cloth with ink indicating the following along with three blue print copies of the same shall also be submitted:
 - i) General layout of the site showing therein routes of cables and lines.
 - ii) Schedule of lengths, type and size of cables and overhead conductors.
 - iii) Position of all cable joints type wise, supports, stays, struts, lightning arrestors, feeder pillars and pipes or closed ducts.
 - iv) Positions of cable route markers and joint markers with respect to permanent land marks available at site.

6.0 Workmanship

- a) The work shall be carried out under the direct supervision of a first class licensed foreman or of a person holding a certificate of competency issued by the State Govt. Licensing authority for the type of work involved, employed by the contractor, who shall rectify then and there the defects and modifications pointed out by the Engineer-in-Charge during the progress of work.
- b) Fabrication of panels in a CPRI approved workshop. Unless otherwise specified, switchboards/LT panels etc. will be fabricated by a fabricating workshop having CPRI Certificate for short circuit withstand capability for manufacture/ fabrication for the rating of switch boards



specified. The workshop should have reasonable quality control and testing facilities, besides having a proper 7 tank process for proper treatment and painting of metal parts.

7.0 Completeness of tender

All sundry fittings, assemblies, accessories, hardware items, foundation bolts, terminal lugs for electrical connections as required, and items which are useful and necessary for proper assembly and efficient working of various components shall be deemed to have been included in the tender, whether such items are specifically mentioned in the tender documents or not.

TECHNICAL SPECIFICATIONS

A. GENERAL

1. REGULATIONS AND STANDARDS

The following Indian Standard Specifications and Codes of Practice, currently applicable and updated, shall apply to the equipments and the work covered by this contract. In addition to General Specifications for Electrical works (Part-I- Internal)-2013 & Part-II-External-1994, the relevant clauses of the Indian Electricity Act 1910 and Indian Electricity Rules 1956 as amended upto date, Factories Act- 1948, Workmen's compensation Act- 1923, Statutory norms prescribed by local bodies shall also apply. In general, all materials, equipment and workmanship shall conform to the Indian Standards, specifications and code. Wherever appropriate Indian Standards are not available, relevant British and/or IEC Standards shall be applicable. BIS certified equipment shall be used as a part of the Contract.

The installation shall conform in all respects to Indian Standard Code of Practice for Electrical wiring installation IS: 732-1963 and IS: 2274-1963. It shall also be in conformity with National Electric Code and National Building Code.

Electrical work in general shall be carried out as per following General Specifications for Electrical works with as amended upto date:

1. General Specifications for Electrical Works. (Part I - Internal) - 2013.
2. General Specifications for Electrical Works. (Part II - External) - 1994.
3. General Specifications for Electrical Works. (Part IV . Sub-Stations)-2007.
4. General Specifications for Electrical Works. (Part VII . DG Sets) - 2006.

Wherever these specifications calls for a higher standard of material and or workmanship than those required by any of the above mentions regulations and specification then the specification here under shall take precedence over the said regulations and standards.

B. WORKS MATERIALS SPECIFICATIONS

This part of the tender documents is to be read in conjunction with general conditions of contract, as applicable to civil work, electrical work and other allied jobs and other articles forming part of this document.

1.0 Strict Colour Coding

Following colour coding shall be followed in wiring:-



Phase : Red/Yellow/Blue. (3-Phase)
Live : Red (Single phase wiring)
Neutral : Black
Earth : Yellow/Green.

Colour code for circuit & sub main wiring:

Colour code for circuit and sub main wiring installation shall be Red, Yellow, and Blue for three phases. Black for neutral and yellow/green or green only for earth in case of insulated earth wire.

3.0 Conduit System

1. The wall thickness of metallic conduits shall not be less than 1.6mm (16SWG) for conduits up to 32mm dia and shall not be less than 2mm (14SWG) for conduits above 32 mm dia.
2. All non-metallic conduit pipes and accessories shall be of suitable material complying with IS: 3419-1989 for rigid conduits and IS:9537 (Part5) 2000 for flexible conduits.
3. MS hot dip galvanised factory fabricated sheet boxes with wall thickness not less than 1.2mm (18gauge) for sizes of 20cm x 30cm, and above this size 1.6mm (16gauge).
4. The clear depth of the box shall not be less than 60 mm with an earth stud inside.
5. 3mm thick synthetic phenolic resin bonded laminated sheet conforming IS:-2036-1974.

3.0 Wiring Conductor

- 3.1 Wiring shall be carried out with Copper conductor cable PVC insulated, Fire retardant, low smoke (FRLS) type conforming to BIS Specification IS: 694-1990.
- 3.2 Multi stranded cables are permitted to be used.
- 3.3 Minimum size of wiring: Light wiring: 1.5sq.mm (22/0.30) mm; General Power point wiring: 4.0 sq.mm (56/0.30) mm. Power circuit rated: more than 1 KW, size as per calculation.
- 3.4 The minimum size of wire within the prewired fitting shall be flexible with PVC insulation and 14/0.193 mm (min) copper conductor.

4.0 Distribution Boards

4.1 Distribution boards shall be standard type as per the CPWD specifications. All distribution boards shall be of three phases (415 Volts) or single phase (240 volts) type with incoming isolator or MCB as in schedule of quantities. Distribution boards shall contain plug in or bolted type miniature circuit breaker mounted on bus bars. Miniature circuit breakers shall be quick make and quick break type with trip free mechanism. MCB shall have thermal and magnetic short circuit protection. MCB shall conform with IS 8828-1978. Neutral bus bars shall be provided with the same number of terminals as there are single ways on the board, in addition to the terminals for incoming mains. An earth bar of similar size as the neutral bar shall also be provided. Phase barrier shall be fitted and all live parts shall be screened from the front. Ample clearance shall be provided between all live metal and the earth case and adequate space for all incoming and outgoing cables. All distribution board enclosures shall have an etched zinc base stove painted followed by synthetic stoved enamel, colour light gray.



A circuit identification card in clear plastic cover shall be provided for each distribution board. Miniature Circuit Breakers for lighting circuits shall be of "B" curve where as 'C' curve MCB's shall be invariably used for motor loads, halogen lamps fitting, sodium/mercury discharge lamps and for all power circuits. All miniature circuit breakers shall be of 10 KA rated rupturing capacity.

4.2. The DBs shall be separate for light and power.

4.3. Essential/non-essential/UPS distribution each will have a completely independent and separate system starting from the main switch board up to final wiring for each system.

5.0 Lighting Fixture and Fans

a. The Contractor shall supply and install lighting fixtures including but not limited to lamps, ballasts, accessories fixing hardware necessary for installations, as shown on the Drawings, as required, and as specified.

b. All fixtures shall be delivered to the building complete with suspension accessories, canopies, hanging devices, sockets, holders, reflectors, ballasts, diffusing material, louvers, plaster frames, recessing boxes, etc. all wired and assembled as required, and as specified.

c. Full size shop detail drawings of special fixture or lighting equipment, where called for in the fixtures schedule, shall be submitted to the Engineer in-charge for approval.

d. Fixtures, housing, frame or canopy, shall provide a suitable cover for fixture outlet box or fixture opening.

e. Fixtures shall comply with all applicable requirements as outlined unless otherwise specified or shown on the Drawings.

f. Manufacturer's name and catalogue number of lighting fixtures are given for general reference only. It shall be understood that the actual fixtures supplied shall meet all the requirements of the specification, and, if necessary, the standard fixture indicated for reference, shall be modified accordingly.

g. Fixtures shall bear manufacturer's name and the factory inspection label.

h. Fixtures shall be completely wired and constructed to comply with the IEE wiring regulations requirements for lighting fixtures, unless otherwise specified.

i. Revamping the fixture shall be possible without having to remove the fixture from its place.

6.0 Cubical panel

Cubical panel shall be floor mounted (on base frame) totally enclosed and extensible type. Degree of IP protection shall be IP-42 for indoor application and IP-54 for outdoors, unless and otherwise specified.

The panel shall be compartmentalized type having space and arrangement for incoming and outgoing cables/bus ducting, switchgear, insulated and properly supported compartmentalized bus-bars, interconnection between bus bars and switchgear with auxiliary bus bars/insulated conductors/strips etc.

There shall be a clear space of 1m in front of the switch board. The space behind the switch board shall be either less than 20cm or more than 75 cm. If there are any attachment or bare connections at the back of the switch board, Rule 51 (c) of Indian Electricity Rules shall apply.

For tap-off connections from bus bars, FRLS wiring cables may be used for current carrying capacities up to 100A, and for higher current capacities, solid conductors/ strips suitably insulated with PVC sleeves/ tape shall be used.



Depth of cubical will be decided according to depth of main incomer and the face area according to number and size of outgoing switchgears, their suitable arrangement. The size of auxiliary bus bars will be as per the required current ratings of outgoing feeders.

7.0 Mains and Sub-mains

Mains and sub-main cable where called for shall be of the rated capacity and approved make. Every main and sub-main shall be drawn into an independent adequate size conduit. Adequate size draw boxes shall be provided at convenient locations to facilitate easy drawings of the sub-main & main cables. Cost of junction box/drawn box is deemed to be included in the rates of sub main wiring. An independent earth wire of proper rating shall be provided for every sub-main. Single phase sub main shall have single earth wire whereas three phase sub main shall be provided with two earth wire. The earth wire of proper rating shall be drawn inside the conduits and fixed to cables by means of suitable M.S. clips at not more than 1m distance.

Where mains and sub-mains cables are connected to the switchgear, sufficient extra lengths of sub main and mains cable shall be provided to facilitate easy connections and maintenance. For termination of cables creeping type cable socket/lugs shall be provided. Same color code as for circuit wiring shall be followed.

8.0 Load Balancing

Balancing of circuits in three phase installation shall have to be planned before the commencement of wiring and shall be strictly adhered to.

9.0 Earthing

Every circuit/sub-main will have its earth continuity conductor to run along with wiring. In case of 3- sub-main wiring two earth conductors shall be provided. Looping of earth is allowed only in case of point wiring. The size of earthing conductor from earth electrode up to main earthing terminal/earth bus shall not be less than:

- i) 5mm dia. (6SWG) for G.I. wire.
- ii) 4mm dia. (8SWG) copper wire.
- iii) 25mmx4mm in case of GI strip.
- iv) 20 mmx3 mm in case of copper strip.

Minimum acceptable size of a protective conductor shall be 2.5sq.mm if protected mechanically and 4sq.mm otherwise.

The earthing conductor from the electrode up to the building shall be protected from mechanical injury by medium class, 15 mm dia. GI pipe in the case of wire, and by 40 mm dia. medium class GI pipe in case of strip.

The protective pipe in ground shall be buried at least 30cm deep (to be increased to 60cm in case of road crossing and pavements). The portion within the building shall be recessed in walls and floors to adequate depth in due co-ordination with the civil work.

The Non-current carrying metal parts of all apparatus utilizing power supply at voltage exceeding 250 Volts shall be earthed by two separate and distinct connections to the earth bus, or two separate and distinct earthing sets. Two protective conductors shall be provided for a switch board carrying a 3-phase switchgear. Separate earth electrodes shall be provided for lightning arrestor/ lightning conductors.

C. TESTING AND COMMISSIONING OF INSTALLATION

1.0 Testing of Wiring

All the wiring system shall be tested for continuity of circuits, short circuits and earthing after the wiring is completed and before energising. All tests prescribed in the General Specifications, to



be done before, during and after installation, shall be carried out and the test results shall be submitted to Engineer-in-Charge in prescribed Performa (Annexure-E), forming part of the completion certificate.

- 1) Insulation resistance test: Insulation resistance shall be not less than 12.5 mega ohms subject to a minimum of 1 M .
- 2) Polarity test of switch.
- 3) Earth continuity test.
- 4) Earth electrode resistance test: Earth resistance shall be m5 ohms can be relaxed up to 8 ohms in rocky soil.

2.0 Testing of Lighting Fixtures

After all lighting fixtures are installed and are connected to their respective switches; all fixtures shall be tested to ensure operation on their correct switch in the presence of the engineer.

All un-operating fixtures or ones connected to the wrong or inconveniently located switch shall be correctly connected as directed by the Engineer In-charge.

D. CABLES AND CONTROL CABLES

1.0 General

MV cables shall be supplied, inspected laid tested and commissioned in accordance with drawings, specifications, relevant Indian Standards Specifications, IS:1255-1983 and cable manufacturer`s instructions.

2.0 Material

a) The cables for application for Low and Medium voltage (up to and including 1.1KV) supply shall be:

- iii) PVC insulated PVC sheathed, Aluminum conductor armoured cable conforming to IS: 1554 - 1988 (Part - I).
- iv) Cross linked polyethylene insulated, PVC sheathed (XLPE), conforming to IS: 7098 (Part-1)- 1988.

b) The cables for application for High voltage (above 1.1 KV but up to and including 11KV) supply shall be:

- iii) PVC insulated PVC sheathed, Aluminum conductor armoured cable conforming to IS: 1554 - 1988 (Part - II).
- iv) Cross linked polyethylene insulated, PVC sheathed (XLPE), conforming to IS: 7098 (Part-2)- 1985.

All cables shall be inspected upon receipt at site and checked for any damage during transit.

c) Short runs of cables laid in pipes, closed masonry trenches and similar protected or secured enclosures need not be armoured.

d) PVC and XLPE cables, when armoured, shall have galvanized steel wires (flat or round) for armouring.



FORM OF COMPLETION CERTIFICATE

(Clause 9.3.2.6)-NBC-2005

I/We certify that the installation detailed below has been installed by me/us and tested and that to the best of my/ our knowledge and belief, it complies with *Indian Electricity Rules, 1956*.

Electrical Installation at -----

Voltage and system of supply -----

Particulars of Works:

a) Internal Electrical Installation

	No.	Total Load	Type of system of wiring
i) Light point			
ii) Fan point			
iii) Plug point			
3-pin 6 A			
3-pin 16A			

b) Others

Description	hp/Kw	Type of starting
-------------	-------	------------------

1) Motors:

i)

ii)

iii)

2) Other plants:

c) If the work involves installations of over head line and/or underground cable

1) i) Type and description of overhead line.

 ii) Total length and number of spans.

 iii) No. of street lights and its description.

2) i) Total length of underground cable and its size:

 ii) No. of joints:

 End joint:

 Tee joint:

 Straight through joint:

Earthing:

i) Description of earthing electrode

ii) No. of earth electrodes

iii) Size of main earth lead

Test Results:

a) Insulation Resistance

i) Insulation resistance of the whole system of conductors to earth ----- Megaohms.

ii) Insulation resistance between the phase conductor and neutral

Between phase R and neutral..... Megaohms.

Between phase Y and neutral Megaohms.

Between phase B and neutral Megaohms.

iii) Insulation resistance between the phase conductors in case of polyphase supply.

Between phase R and phase Y Megaohms

Between phase Y and phase B Megaohms

Between phase B and phase R Megaohms

b) Polarity test:

Polarity of non-linked single pole branch switches

Director (UD)

Contractor

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c) Earth continuity test:

Maximum resistance between any point in the earth continuity conductor including metal conduits and main earthing lead ohms.

d) Earth electrode resistance:

Resistance of each earth electrode.

i) Ohms.

ii) Ohms.

iii) Ohms.

iv) Ohms.

e) Lightning protective system.

Resistance of the whole of lightning protective system to earth before any bonding is effected with earth electrode and metal in/on the structure Ohms.

Signature of Supervisor
Name and Address

Signature of Contractor
Name and Address

.....
.....
.....
.....

.....
.....
.....
.....

- Note :-** (i) The above mentioned specifications are indicative of our minimum requirement. However, individual bidder can give its own Pre-Fab specification conforming to BIS codes.
- (ii) The structural design should be based on BIS code and guidelines.
- (iii) The structural design to be given by the selected bidder should be proof checked from recognized National Technical Institute like Indian Institute of Technology.
- (v) The structural design should cater for seismic condition as per BIS Codes.



Annexure-V
SCHEDULE OF ITEMS FOR WHICH RATES ARE TO BE QUOTED BY THE
CONTRACTOR FOR
VARIATION SCHEDULE IN % AGE
(SEE CLAUSE- 31)

SR. No.	Item of work	Tendered rate in figure	Tendered rate in words	Unit	Remarks if any
1	2	3	4	5	6

Signature of the _____ ..

Contractor _____

_____ .

Date _____

_____ .

Signature of Accepting

Authority

Date

Note:- The blanks in this annexure shall be filled by the Department before issue of the tender documents.



Annexure-VI

Materials for issue to the contractor

(SEE CLAUSE- 36.1):-

S.No	Particulars	Rate at which material will be issued (Unit)	Quality Department is prepared issue	Place of issue	Special conditions if any
NIL					

Signature of Issuing Officer

Date 1 1 1 1 1 1 1 1 1 ..

Signature of Contractor

Date 1 1 1 1 1 1 1 1 1 .

Director (UD)

Contractor



ANNEXURE-VII
TOOLS AND PLANT FOR HIRE TO THE CONTRACTOR
(SEE CLAUSE- 42.1)
HIRE CHARGES PER UNIT

Sr No	Particulars	No. avail- able	Per idle day	Per work- ing day	Per work- ing hour	Frequency of maintenanc e	Value per unit	Place of issue	Special condit- ions, if any
1.	2.	3.	4.	5.	6.	7.	8.	9	10.
NIL									

(To be filled by Departmental)

(To be filled by contractor)

Signature of issuing Officer

Signature of Contractor

Date í í í í í í í í í

Dateí í í í í í í í í

Note:- The tenderer shall indicate in column 11, the number required by him, subject to the maximum indicated in column 3.

Director (UD)

Contractor

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ANNEXURE-VIII

SCHEDULE OF RATES FOR WORK ITEM FOR INTERIM PAYMENTS

(ONLY PERCENTAGE TO BE MENTIONED)

PAYMENT SCHEDULE

Sr.No.	Item of work	Unit	Rate (as percentage of total Cost tendered)
1	2	3	4
1.	Mobilization advance against Bank Guarantee of equivalent amount		10%
2.	On completion upto plinth level		20%
3.	On completion of fabrication of steel structure Upto roof level for G+3 stories including CGI sheet roof		20%
4.	On completion of EPS based concrete panel Walls in all floors	-	20%
5.	Completion of flooring including decking slab Including water supply, sanitary installation and electrical installations.	-	20%
6.	Handing over of project complete in all respect-		10%

Signature of contractor

Date

Contractor

Director, UD



ANNEXURE .IX

(See Clause 60.3)

Fair Wages Clause

No labourer below the age eighteen shall be employed on the work. No amount of commission or otherwise shall be deducted or recovered from the wages of work man.

Payment of wages to Labourer

Fair wages shall be applicable as notified by the H.P. Govt. and applicable on the date of opening of the tender.

The rates of daily wages in respect of various categories of daily wages engaged in various Department in H.P. are revised as shown in below. The per hour rate of part-time workers is also revised from Rs. 17.00 per hour to Rs.19.00 per hour w.e.f. 1st September, 2012.

All those engaged on daily wages basis/part-time basis in the Scheduled Tribal Areas of the State shall be allowed 25% enhancement on the revised daily wages as per Finance Department's Office Memorandum No. FIN (PR) B(7)-1/95-II dated 17.04.1998.



EMPLOYMENT IN CONSTRUCTING / MAINTENANCE OF ROADS OR IN BUILDING OPERATIONS STONE BREAKING OF IN STONE CRUSHING. PAYMENT OF WAGES TO LABOURERS. Vide Letter No. FIN- (PR) B (7) - 33/2010 Dated Shimla-171002, the 25th August,2012.



ANNEXURE-A

Sr. No.	Designation	REVISED PER DAY RATE EFFECTIVE FROM 1 ST SEPTEMBER, 2012. (In Rupees)
A.	1. Beldar (Mazdoor)/ Casual labourer.	150.00
	2. Mate.	
	3. Cook.	
	4. Mali.	
	5. T. Mate (Electrical).	
	6. Chowkidar.	
	7. Helper.	
	8. Sweeper.	
	9. Cleaner Swereman.	
	10. Khalasi.	
	11. Electrical Beldar.	
	12. Bhisti.	
	13. Store Attendant.	
	14. Laboratory Attendant (Under Matric).	
	15. Pump Attendant.	
	16. Boat Man.	
	17. Process Server.	
	18. Whiter Washer.	
	19. Syce.	
	20. Peon.	
	21. Frash.	
	22. Chainman.	
	23. Unskilled Labourer.	
	24. Quarry Man.	
	25. Jumper Man.	
	26. Driller.	
	27. Sprayman.	
	28. Assistant Saw Mill Operator.	
	29. Feller (Garani).	
	30. Logger Dresser (Pachani).	
	31. Climber (Looper).	
	32. Zoo Animal Attendant.	
	33. Fire Watcher.	
	34. Grinder for Chips Flooring.	
	35. Calliperman.	
	36. Miscellaneous Labourer.	
	37. Charcoal Burning Labourer.	
	38. Pipe Uneman.	
	39. Survey Khalasi.	
	40. Bill Distributor.	
	41. Ferro Khalasi.	
	42. Water Guard.	
	43. Stone Dresser Keyman.	
	44. Assistant Fitter.	
	45. Valueman.	

Signature



	46	Library Attendant (Class-IV).	
	47	Luskar.	
	48	Gauge Reader.	
	49	Dhobl.	
	50	Dai.	
B.	51.	Upholster.	
	52.	Fireman.	
	53.	Pump Operator-cum-Helper.	
	54.	Plumber 2 nd Class.	
	55.	Field Assistant-cum- Operator	
	56.	Carpenter (Grade-IV).	
			162.00
C.	57.	Painter 2 nd Class.	
	58.	White Washer.	
	59.	Bar Binder.	
	60.	Sawyer (Charani).	
	61.	Muleteer.	
			165.00
D.	62.	Caneman	
			177.00
E.	63.	Security Guard	
			180.00
F.	64.	Telephone Attendant.	
	65.	Electrical Mistry	
	66.	Refrigerator Mechanic	
	67.	Fitter Grade-II	
	68.	Fitter Grade-I	
	69.	Turner	
	70.	Fitter Structural	
	71.	Black Smith	
	72.	Welder	
	73.	Mechanic	
	74.	Electrical Chorgeman	
	75.	Pump Operator	
	76.	Sand Plant Operator	
	77.	Driver Oxygen Plant	
	79.	Hot Mix Plant Operator	
	80.	Plumber Grade-II	
	81.	Plumber Grade-I	
	82.	Mason Grade-II	
	83.	Mason Grade-III	
	84.	Painter Grade-I	
	85.	Blastman Grade-II	
	86.	Floor Finisher	
	87.	Pipe Fitter Grade-II	
	88.	Mortar Mate Grade-I	
	89.	Earth Work Mistry	
	90.	Work Inspector	
	91.	Ferry Inspector	
	92.	Store Munshi	
	93.	Forest Guard	
	94.	Receptionist	
			192.00

3 अर्थ रक



95.	Lab Assistant	
96.	Electrician-II	
97.	Electrician Auto	
98.	Air Compressor Operator	
99.	Operator	
100.	Carpenter Grade-III	
101.	Complaint Clerk	
102.	Assistant Operator	
103.	General Operator	
104.	Telephone Operator	
105.	Road Inspector	
106.	Work Supervisor	
107.	Store Clerk	
108.	Store Keeper	
109.	Water Works Clerk	
110.	Patwari	
111.	Cinema Projector Operator	
112.	Computer	
113.	Plumber	
114.	Data Entry Operator	
115.	Tailor	
116.	Clerk	
117.	Saw Mill Operator	
118.	Work Mistry	
119.	Wireman	
120.	Assistant Pump Operator	
121.	Price Store Ledger Clerk	
122.	Bill Clerk	
123.	Meter Reader	
124.	Assistant Store Keeper	
125.	Laboratory Technician	
126.	Instrument Mechanic	
127.	Fitter Mechanic	
128.	Loader Operator	
129.	Chargeman	
130.	Gatekeeper	
131.	Steno-typist	
132.	Library Assistant	
133.	Book Binder	
134.	Table Master	
135.	Dark Room Assistant	
136.	Library Attendant (Class-III)	
137.	Canal Inspector	
138.	Irrigation Booking Clerk	
139.	Complaint Attendant	
140.	Ferro Printer	
141.	Proof Reader	
142.	Photographer	
143.	Ledger Booking Clerk	
144.	Laboratory Attendants (Matriculate)	

192.00

G2



G.	145.	Driver (Tractor/Jeep/Car/Truck/ Buldozer/ Road Roller)	205.00
	146.	Driver Shawal	
	147.	Stone Chisler	
	148.	Carpenter 2 nd Class (Forest Department)	
	149.	Mason 2 nd Class (Forest Department)	
	150.	Painter 1st Class (Forest Department)	
	151.	Distemperer (Forest Department)	
	152.	Lineman	
H.	153.	Junior Draftsman (Tracers)	240.00
	154.	Junior Scale Steno	
	155.	Agriculture Extension Officer	
	156.	Ship Modeling Instructor	
	157.	Surveyor	
	158.	Electrician Grade-I	
	159.	Driller	
	160.	Assistant Driller	
	161.	Pipe Fitter Grade-I	
	162.	Mason Grade-IV	
	163.	Diesel Auto Mechanic	
	164.	Black Smith Grade-IV	
	165.	Carpenter Grade-II	
I.	166.	Junior Tailoring Mistress	271.00
	167.	Mason 1 st Class (Forest Department)	
	168.	Carpenter Grade-I	
	169.	Assistant Chemist	
	170.	Foreman	
	172.	Assistant Foreman	
	173.	Carpenter (1st Class) (Forest Department)	
J.	174.	Investigators	299.00
	175.	Auction Recorder	
	176.	Computer Operator	
K.	177.	Instructors	330.00
L.	178.	Junior Engineer	360.00
	179.	Draftsman	
	180.	Draftsman (Arch. Wing)	
	181.	Coach	
M.	182r	Hydrogeologist	420.00

[Handwritten signature]



Annexure –X

(DELETED)

Schedule of component percentages for assessment of costs due to
variation in prices
(See clause 60.4)

Sr.No.	Particulars of components	Percentages in terms of the cost of work (to be filled by the contractor)
1	Materials	
2	Labour	
3	P.O.L i) Petrol/Diesel ii)Oils iii)Lubricants	

Signature of Contractor

Date í í í í í í í í í .

Note:- The percentage indicated against materials shall exclude the effect of the materials to be supplied by the department, as referred to in clause 60.1.



Annexure –XI

CONTRACTORS LABOUR REGULATIONS

(1) Short Title - These regulations may be called the Himachal Pradesh Public Works Department Contractor Labour Regulations.

(2) Definitions :-In these regulations, unless otherwise expressed or indicated the following words and expression shall have the meaning hereby assigned to them respectively, that is to say:

(i) **LABOUR** means workers employed by Himachal P.W.D. Department contractor directly or indirectly through a sub contractor or other persons or by an agent on his behalf on a payment not exceeding Rs. 400 per month and will not include supervisory staff like Junior Engineer etc.

(ii) **FAIR WAGES** means wages whether for time or piece work notified at the time of inviting tenders for the work and where such wages have not been so notified, the wages prescribed by the Himachal P.W.D. Department for wages the District in which the work is done. (It will be notified/prescribed by the Himachal P.W.D. Department in consultation with the officer of the Industrial Relation Machinery located in the respective areas and will not be less than the minimum rates of wages fixed by the Government for that class of employee engaged on the same type of work in the same area).

(iii) **CONTRACTOR** shall include every person whether a sub-contractor or head-man or agent, employing labour on the work taken on contract.

(iv) **WAGES** shall have the same meaning as defined in the Payment of Wages Act and includes time and piece rate wages.

(3) Working Hours:-

(i) Normally working hours of an adult employee should not exceed 9 hours a day, and in case of a child 4 1/2 hours a day. The working day shall be so arranged that is inclusive of interval for rest, if any, it shall not spread over more than 12 hours on any day.

(ii) When an adult worker is made to work for more than 9 hours on any day or for more than 48 hours in any week, he shall be paid overtime of the extra hours put in by him at double the ordinary rate of wages. Children shall not be made to work extra hours.

(iii) Every worker shall be given a paid weekly holiday normally on Sunday.

(iv) In accordance with the provision, Minimum Wages Control Rules, 1978 as amended from time to time irrespective of whether such workers are to be governed by the Minimum Wages Act, 1948 or not.

(4) Display of notice regarding wages etc.:- The contractor shall before he commences his work on contract, display and correctly maintain and continue to display and correctly maintain in a clean and legible condition in conspicuous places on the work notices in English and in the local Indian Language spoken by the majority of the workers, giving the rate of wages, should have been certified by the Executive Engineer, the Superintending Engineer, the Chief Engineer or Regulation Labour Commissioner, as fair wages and the hours of work for which such wages are earned, and

(ii) Send a copy of such notices to the Certifying officer. The Labour Advisory Board has decided that certain clauses may be contract Labour Regulation appearing in P.W.D. Department from 7&8. Accordingly it has been decided that the following amendments may be made in the said forms under the rules mentioned against them:-

(5) Payment of wages:-

(i) The contractor shall fix the wages periods in respect of which the wages shall be payable.

(ii) No wages period shall exceed one month.

(i) Wages of every worker employed on the contract shall be paid (a) in case of establishments in which wage period is one week within 3 days from the end of the wage period



and (b) in case of other establishments before the expiry of the 7th day or 10th day from the end of the wages period accordingly as the number of workers employed in such establishments does not exceed 1,000 or exceeds 1,000.

(iv) Where the employment of any worker is terminated by or on behalf of the contractor, the wages earned by him shall be paid before the expiry of the day succeeding thereon on which his employment is terminated.

(v) All payment of wages shall be made on a working day except when the work is completed before the expiry, of the wages period, in which case final payment shall be made within 48 hours of the last working day at work site and during the working time.

(vi) Wages due to every worker shall be paid to him direct.

All wages shall be paid in current coin or currency or in both.

(6) Fines and deductions which may be made from wages:-

(i) The wages of a worker shall be paid to him without any deduction of any kind except the following:-

(a) Fines.

(b) Deductions for absence from Duty i.e. from the place or places where by the terms of his employment he is required to work. The amount of deduction shall be in proportion to the period for which he was absent.

(c) Deductions for damage to or loss of goods especially entrusted to the employed person for custody, or for loss of money or any other deduction which he is required to account where such damage or loss is directly attributable to his neglect or default.

(d) Deduction for recovery of advances or for adjustment of over payment of wages, advances granted shall be entered in register.

(e) Any other deduction which the Himachal Pradesh Government may from time to time allow.

(ii) No fine should be imposed on any worker same in respect of such acts and omission on his part as have been approved of by the Chief Labour Commissioner or any other person authorised by the Himachal Pradesh Government.

(iii) No fine shall be imposed on any worker and no deduction for damage or loss shall be made from his wages until he worker has been given an opportunity of showing cause against such fines or deductions.

(iv) The total amount of fine which may be imposed in any one wage period on a worker shall not exceed an amount equal to three paise in a rupee of the total wages, payable to him in respect of that wage period.

(v) No fine imposed on any worker shall be recovered from him by installment or after the expiry of sixty days from the date on which it was imposed.

(vi) Every fine shall be deemed to have been imposed on the day of the act or omission in respect of which it was imposed.

7. LABOUR RECORDS

i) The contractor shall maintain a **Register of persons employed** on work on contract in Form XIII of the CL (R&S) Central Rule 1971 (Appendix IV)

ii) The contractor shall maintain a **Muster Roll** register in respect of all workmen employed by him on the work under Contract in Form XVI of the CL (R&A) Rules 1971 (Appendix V).

iii) The contractor shall maintain **Wage Register** in respect of all workmen employed by him on the work under contract in Form XVII of the CL (R&A) Rules 1971 (Appendix VI).

iv) **Register of accident:-**The contractor shall maintain a register of accidents in such form as may be convenient at the work place but the same shall include the following particulars :

- | | |
|----|--|
| a) | Full particulars of the labourers who met with accident. |
| b) | Rate of Wages. |
| c) | Sex |



- d) Age
- e) Nature of accident and cause of accident.
- f) Time and date of accident.
- g) Date and time when admitted in Hospital.
- h) Date of discharge from the Hospital.
- i) Period of treatment and result of treatment.
- j) Percentage of loss of earning capacity and disability as assessed by Medical Officer.
- k) Claim required to be paid under Workmen's compensation Act.
- l) Date of payment of compensation.
- m) Amount paid with details of the person to whom the same was paid.
- n) Authority by whom the compensation was assessed.
- o) Remarks.
- v) The contractor shall maintain a **Register of Fines** in the Form XII of the CL (R&A) Rules 1971 (Appendix . XI)

The contractor shall display in a good condition and in a conspicuous place of work the approved list of acts and omissions for which fines can be imposed (Appendix-X)

- vi) The contractor shall maintain a **Register of deductions for damage or loss** in Form XX of the CL (R&A) Rules 1971 (Appendix-II)
- vii) The contractor shall maintain a **Register of Advances** in Form XIII of the CL (R&A) Rules 1971 (Appendix XIII)
- viii) The contractor shall maintain a **Register of overtime** in Form XXII of the CL (R&A) Rules 1971 (Appendix- XIV)

8. ATTENDANCE CARD-CUM-WAGE SLIP

- i) The contractor shall issue an **Attendance card-cum-wage** slip to each workman employed by him in the specimen form at (Appendix-VII)
- ii) The card shall be valid for each wage period
- iii) The contractor shall mark the attendance of each workman on the card twice each day, once at the commencement of the day and again after the rest interval before he actually starts work.
- iv) The card shall remain in possession of the worker during the wage period under reference.
- v) The contractor shall complete the wage slip portion on the reverse of the card at least a day prior to the disbursement of wages in respect of the wage period under reference.
- vi) The contractor shall obtain the signature or thumb impression of the worker on the wage slip at the time of disbursement of wages and retain the card with himself

9. EMPLOYMENT CARD

The contractor shall issue an **Employment card** in Form XIV Of the CL (R&A) Central Rules 1971 to each worker within the days of the employment of the worker (Appendix-VIII)

10. SERVICE CERTIFICATE

On termination of employment for any reason whatsoever the Contractor shall issue to the workman whose services have been terminated, a **Service certificate** in Form XV of the CL (R&A) Central Rules 1971 (Appendix-VIII)

(11) Preservation of Register :- The wages book, the wage slips, the register of unpaid wages, the register of accidents, the register of fine, deductions required to be maintained under these regulations shall be preserved for 36 months after the date of the last date entry made in them



and shall be made available for inspection by the Engineer-in-Charge, Labour Welfare Officer or any officer authorized by the Himachal Pradesh Government in this behalf.

(12) Power of Labour Welfare Officer:- To make investigation or inquiry the Welfare Officer or other persons authorized by Himachal Pradesh Government on their behalf shall have power to make inquiries with a view to ascertaining enforcing and due and proper observance of the fair wages clause and provisions of these regulations. He shall investigate into any complaint regarding the default made by the contractor or Subcontractor in regard to sub provision.

(13) Report of Labour Welfare Officer :- The Labour Welfare Officer or other persons authorized as aforesaid shall submit a report of result of his investigation or inquiry to the Executive Engineer concerned indicating the extent, if any, to which the default has committed with a notice that necessary deductions from the contractor's bill be made and the wages and other dues be paid to the labourers concerned in case an appeal is made by the after the Regional Labour Commissioner has given his decision on such appeal. The Executive Engineer shall arrange payments to the labourers concerned within 45 days from the receipt of the report of the Labour Welfare Officer or the Regional Labour Commissioner as the case may be.

(14) Appeal against the decision of the Labour Welfare Officer:- Any person aggrieved by the decision and recommendations of the Labour Welfare Officer or other person so authorised may appeal against such decision to the Regional Labour Commissioner concerned within 30 days from the date of decision, forwarding simultaneously a copy of his appeal to the Executive Engineer concerned but subject to such appeal, the decision of the officer shall be final and binding upon the contractor.

(15) Prohibition regarding representation through lawyer :-

(i) A workmen shall be entitled to be represented in any investigation or enquiry under these regulations by:

(a) An officer of a registered trade union of which he is member.

(b) An officer of federation of trade unions to which the trade union referred to in clause (a) is affiliated.

(c) Where the worker is not a member of any registered trade union, by an officer of registered union, connected with or by any other workman, employed in the Industry in which the worker is employed.

(ii) **An employer shall be entitled to be represented in any** investigation or an inquiry under these regulation by:

(a) An officer of a association of employer of which he is member.

(b) An officer of federation of association employers to which the association referred to in clause(a) is affiliated.

(c) Where the employer is not a member of any association of employer, by an officer of association or employer, connected with or by any other employer, engaged in the Industry in which the employer is engaged.

(iii) **No party** shall be entitled to be represented by a legal practitioner in any investigation or inquiry under these regulations.

(16) Inspection of books and slips:- The contractor shall allow inspection of the wage book and the slips, the register of unpaid wages, the register of accident and the register of lines and deductions to any of his workers or to his agent at convenient time and place after the notice is received or to the Labour Welfare Officer or any other person, authorised by the Himachal Pradesh Government on his behalf.

(17) Submission of returns:- The contractor shall periodical returns as may be specified from time to time.

(18) Amendments :- The H.P. Government may, from time to time, add to or amend and on any question as to the application, Interpretation or effect of those regulation the decision of the Chief Labour Commissioner or Deputy Chief Labour Commissioner to the Himachal Pradesh Government or any other Person authorised by Himachal Pradesh Government in the behalf shall be final.



MATERNITY BENEFITS (Clause 19 F)

Name and address of the contractor í í í í í í í í í í í í í í í í í í

Name and location of the work í í í í í í í í í í í í í í í í í í í .

Name of employee	Fatherø/ husbandø name	Nature of employment	Period of actual employment	Date on which notice of confinement given.
1	2	3	4	5

Date on which maternity leave commenced and ended

Date of delivery/ miscarriage.	In case of delivery		In case of miscarriage.	
	commenced	Ended	Commenced	Ended
6	7	8	9	10

Leave pay paid to the employee

In case of delivery		In case of miscarriage		Remarks.
Rate of leave pay	Amount paid	Rate of leave pay	Amount paid	
11	12	13	14	15



**SPECIMEN FORM OF THE REGISTER, REGARDING
MATERNITY BENEFIT ADMISSIBLE TO THE CONTRACTOR'S LABOUR
IN HIMACHAL PRADESH PUBLIC WORKS DEPARTMENT WORKS.**

Name and address of the contractor í í í í í í í í í í í í í í í í í í ..

Name and location of the work í í í í í í í í í í í í í í í í í í í ..

1. Name of the woman and her husband's name.
2. Designation.
3. Date of appointment.
4. Date with months and years in which she is employed.
5. Date of discharge/dismissal, if any.
6. Date of production of certificate in respect of pregnancy.
7. Date on which the woman informs about the expected delivery.
8. Date of delivery/miscarriage/death.
9. Date of production of certificate in respect of delivery/miscarriage.
10. Date with the amount of maternity/death benefit paid in advance of expected delivery.
11. Date with amount of subsequent payment of maternity benefit.
12. Name of the person nominated by the woman to receive the payment of the maternity benefit after her death.
13. If the woman dies, the date of her death, the name of the person to whom maternity benefit amount was paid, the month thereof And the date of payment.
14. Signature of the contractor authenticating entries in the register.
15. Remarks column for the use of Inspecting Officer.



LABOUR BOARD

Name of work í

Name of Contractor í

Address of Contractor í ..

Name and address of ULB í ..

Name of ULB Labour Officer í .

Address of HP.PWD, Labour Officer í

Name of Labour Enforcement Officer í .

Address of Labour Enforcement Officer.

Sl.No.	Category	Minimum wage fixed	Actual wage paid	Number present	Remarks.

Weekly holiday í .

Wage period í

Date of payment of wages í

Working hours. í

Rest interval.



REGISTER OF WORKMEN EMPLOYED BY CONTRACTOR

Name and address of contractor í .

Name and address of establishment under which contract is carried on í .

Nature and location of work í .

Name and address of Principal Employer í ..

Sl. No.	Name and Surname of workman	Age and Sex	Father's/Husband's name	Nature of employment/designation.	Permanent home address of the workman (Village and Tehsil, Taluk and District).	Local address	Date of commencement of employment .	Signature or thumb impression of the workman.	Date of termination of employment	Reasons for terminations.	Remarks.
1	2	3	4	5	6	7	8	9	10	11	12



Name and address and Principal Employerí í í í í í í í í í í í í .. For the Month of fortnight í í í ..

Sl.No.	Name of workman	Sex	Father's/Husband's name.	Dates					Remarks.
1	2	3	4	5					6
				1	2	3	4	5	



REGISTER OF WAGES

Name and address of contractor í

Name and address of establishment under which contract is carried on í í í í í í í í í í ..

Nature and location of work í ..

Name and address and Principal Employer í í í í í í í í í í í wages Period: Monthly/Fortnight.

Sl. No.	Name of workman	Serial No. in the register of workman.	Designation/ nature of work done.	No. of days worked.	Units of work done.	Daily rate of wages/ piece rate.	Amount of wages earned.					Deduct i-ns if any (indicat e nature)	Net amount paid.	Signature or thumb impressio n of the workman.	Initial of contract or or his represen tative.
							Basic wages.	Dearness allowances	Overtime	Other cash payments (indicate nature).	Total				
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

Wage Card No. í í í í í í í í í í í í í í í í í ..



WAGE CARD

Name and address of contractor í í í í í í í í í í í í Date of Issue í í í í í í í í

Name and location of work í í í í í í í í í í í í ..Designation í í í í í í í í í .

Name of workman í í í í í í í í í í í í í í í í .Month/Fortnight í í í í í í í í ..

Rate of Wages í .

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31																															
Morning																														Rate	
Evening																														Amount	
Initial																															

Received from í í í í í í í í í í í í í í í í .the sum of Rs í í í í í í í .on account of my wages

The Wage Card is valid for one month from the date of issue

Signature.



19/Form-XIX

[See rule 78(2)(b)]

WAGES SLIP

Name and address of contractor í í í í í í í í í í í í í í í í .

Name and Father's/Husband's name of workman í í í í í í í í í í ..

Nature and location of work í í í í í í í í í í í í í í í í í í í

For the Week/Fortnight/Month ending í í í í í í í í í í í í í í í í ..

1. No. of days worked í í í í í í í í í í í í í í í í í í í ..

2. No. of units worked in case of piece rate workers í í í í í í í ..

3. Rate of daily wages/piece rate í í í í í í í í í í í í í í í í .

4. Amount of overtime wages í í í í í í í í í í í í í í í í í í .

5. Gross wages payable í í í í í í í í í í í í í í í í í í í ..

6. Deduction, if any í í í í í í í í í í í í í í í í í í í ..

7. Net amount of wages paid í í í í í í í í í í í í í í í í í í .

Initials of the contractor or his representative



Form 6XIV
[See rule 76]

EMPLOYMENT CARD

Name and address of contractor í .

Name and address of establishment under which contract is carried on í í í í í í í ..

Name of work and location of work í ..

Name and address of Principal Employer í .

1. Name of the workman í ..

2. Sl. No. in the register of workman employed í í í í í í í í í í í í í í í í

3. Nature of employment/designation í .

4. Wage rate (with particulars of unit in case of piece work) í í í í í í í í í í í .

5. Wage period. í ..

6. Tenure of employment í ..

7. Remarks. í ..

Signature of contractor



Form-XV (See Rule 77)
Service Certificate

Name and address of contractor í .

Nature and location of work í .

Name and address of workmaní .

Age or date of birth í .

Identification marks í .

Father's/Husband's name í ..

Name and address of establishment in under which contract is carried oní .

Name and address of Principal Employerí ..

Sl.No.	Total Period for which employed		Nature of work done	Rate of wages (with particulars of unit in case of piece work)	Remarks.
	From	To			
1	2	3	4	5	6

Signature



LIST OF ACTS AND OMISSIONS FOR WHICH FINES CAN BE IMPOSED

In accordance with rules 7 (v) of the CPED Contractor's labour Regulations to be displayed prominently at the site of work both in English and local Language.

1. Willful insubordination or disobedience, whether alone or in combination with other.
2. Theft fraud or dishonesty in connection with the contractors beside a business or property of CPWD.
3. Taking or giving bribes or any illegal gratifications.
4. Habitual late attendance.
5. Drunkenness lighting, riotous or disorderly or indifference behavior.
6. Habitual negligence.
7. Smoking near or around the area where combustible or other materials are locked.
8. Habitual indiscipline.
9. Causing damage to work in the progress or to property of the CPWD or of the contractor.
10. Sleeping on duty.
11. Malingering on duty.
12. Giving of false information regarding name, age father's name etc.
13. Habitual loss of wage cards supplied by the employers.
14. Unauthorized use of employer's property of manufacturing or making of unauthorized particles at the work place.
15. Bad workmanship in construction and maintenance by skilled workers which is not approved by the Department and for which the contractors are compelled to undertake rectifications.
16. Making false complaints and/or misleading statements.
17. Engaging on trade within the premises of the establishments.
18. Any unauthorized divulgence of business affairs of the employees.
19. Collection or canvassing for the collection of any money within the premises of an establishment unless authorized by the employer.
20. Holding meeting inside the premises without previous sanction of the employers.
21. Threatening or intimidating any workman or employer during the working hours within the premises.



(See Rule 78(2) (d))

Register of Deduction for Damage or Loss

Name and address of contractorí ..

Name and address of establishment in under which contract is carried on í

Nature and location of work í ..

Name and address of Principal Employer: _____.

[illegible]

[illegible][illegible]



ANNEXURE XII

(See Clause No 71)

MODEL RULES FOR THE PROTECTION OF HEALTH AND SANITARY ARRANGEMENTS FOR WORKERS EMPLOYED BY HIMACHAL PRADESH PWD DEPARTMENT OR ITS CONTRACTORS

1. Application:-

These rules shall apply to all building and construction works in charge of Himachal Pradesh P.W.D. Department.

2. Definitions:-

- (i) **WORK PLACE** means a place at which at an average, fifty or more workers are employed in connection with construction works.
- (ii) **LARGE WORK PLACE** means a place at which, at an average 500 or more workers are employed in connection with construction work.

3. First Aid Facilities :-

- (i) At every work place, there shall be provided and maintained so as to be easily Accessible during working hours, first aid boxes at the rate of not less than one box for 150 contract labour or part thereof ordinarily employed.
- (ii) The first-aid box shall be distinctly marked with a red cross on white ground and shall contain the following equipment, namely:-
 - (a) For works places in which the number of contract labour employed does not exceed 50 each, first-aid box shall contain the following equipment:-

- 1. 6 small sterilized dressings.
- 2. 3 medium size sterilized dressings.
- 3. 3 large size sterilized dressings.
- 4. 3 large size sterilized burn dressings.
- 5. 1 (30ml) bottle containing a two percent alcoholic solution of iodine.
- 6. 1(30ml) bottle containing solvalite having the dose and mode of administration indicated on the label.
- 7. 1 snake bite lancet.
- 8. 1 (30gms) bottle of potassium permanganate crystal.
- 9. 1 pair scissors
- 10. 1 copy of the first aid leaflet issued by the Doctor, Health Services, Himachal Pradesh.
- 11. 1 bottle containing 100 tablets (each 5 grams) of aspirin.
- 12. Ointment of burns.
- 12. A bottle of suitable surgical antiseptic solution.

- (b) For work places in which the number of contract labour exceed 500, each first-aid box shall contain the following equipments.



- 12 small sterilized dressings.
- 6 medium size dressings.
- 6 large size sterilized burn dressings.
- 6 (15gms) packets sterilized cotton wool.
- 1 (60ml) bottle containing a two percent alcoholic solution iodine
- 1 (60ml) bottle containing salvolatile having the dose and mode of administration indication on the label
- one roll of adhesive plaster.
- 1 snake bite lancet.
- 1 (30gms) bottle of potassium permanganate crystal.
- 1 pair scissors
- 1 copy of first aid leaflet issued by the Director, Health Services of Himachal Pradesh.
- A bottle containing 100 tablets (each of 5 grams) of aspirin.
- Ointment of burns.
- A bottle of suitable antiseptic solution.

(iii) Adequate arrangements shall be made for immediate recoupment of the equipment when necessary.

(iv) Nothing except the prescribed contents shall be kept in the First-Aid box.

(v) The First-Aid box shall be kept in-charge of a responsible person who always be readily available during working hours of the work place.

(vi) A person in charge of First Aid box shall be a person trained in First-Aid treatment in work places where the number of contract labour employed is 150 or more.

(vii) In work place where the number of contract labour employed is 500 or more and hospital facilities are not available within easy distance of the work , First-aid post shall be established and run by a trained compounder. The compounder shall be on duty and shall be available at all hours when the workers are at work.

(viii) Where work places are situated in places which are not towns or cities, a suitable motor transport shall be kept readily available to carry injured person or persons suddenly taking ill to the nearest hospitals.

4. Drinking water - (i) In every work place, there shall be provided and maintained at suitable places, easily accessible to labour, a sufficient supply of cold water fit for drinking.

(ii) Where drinking water is obtained from an intermittent public water supply, each work place shall be provided with storage where such drinking water shall be stored.

(iii) Every water supply of storage shall be at distance of not less than 50 feet from any latrine, drain or other source of pollution, where water has to be drawn from an existing well which is within such proximity of latrine, drain or and other source of population, the well shall be properly chlorinated before water is drawn from it for drinking. All such wells shall be entirely closed in and be provided with a trap-door which shall be dust and water-proof.

(iv) A reliable pump shall be fitted to each covered well, the trap-door shall be kept locked and opened only for cleaning or inspection which shall be done at least one a month.

5. Washing and Bathing Places - (i) Adequate washing and bathing places shall be provided, separately for men and women . (ii) Such places shall be kept in clean and drained condition.



6. LATRINES AND URINALS - (i) Latrines shall be provided in every work place on the following scale, namely :- (a) Where females are employed, there shall be at least one latrine for every 25 females.

(ii) Where males are employed, there shall be at least one latrine for every 25 males. Provided that where the number of males or females exceeds 100, it shall be sufficient if there is one latrine for 25 males or females, as the case may be upto the first 100, and one for every 50 thereafter.

(ii) Every latrine shall be under cover and so partitioned off as to secure privacy and shall have a proper door and fastening.

(iii) Construction of Latrines: - The inside walls shall be constructed of masonry or some suitable heat resisting non-absorbent materials and shall be cement washed inside and outside at least once a year. Latrines shall not be of a standard lower than bore-whole system.

(iv) (a) Where workers of both sexes are employed there shall be displayed outside each block of latrine and urinal a notice in the language understood by the majority of workers ~~%or men Only+~~and ~~%or Women only+~~as the case may be. (b) The notice shall also bear the figure of a man or of a woman, as the case may be.

(v) There shall be atleast one urinal for male workers upto 50 and one for female workers upto fifty employed at a time. Provided that where the number of male or females workers as the case may be, exceeds 500, it shall be sufficient if there is one urinal for every 50 males or females up to the first 500 and one for every 100 or part thereof, thereafter.

(vi) (a) The latrines and urinals shall be adequately lighted and shall be maintained in a clean and sanitary condition at all times. (b) Latrines and urinals than those connected with a flush sewerage system shall comply with the requirements of the Public Health Authorities.

(vii) Water shall be provided by means of a tap r otherwise so as to conveniently accessible in or neat the latrines and urinals.

(viii) Disposal of excreta: - Unless otherwise arranged for by the local sanitary authority, arrangements for proper disposal of excreta by incineration at the work place shall be made by means of a suitable incinerator. Alternately excreta may be disposed of by putting a layer of night soil at the bottom of a pucca tank prepared for the purpose and covering it with a 15 cm layer of earth for a fortnight (When it will turn into manure).

(ix) The contractor shall, at his own expense, carry out all instructions issued to him by the Engineer-in-Charge to effect proper disposal of soil and other conservancy work in respect of the contractor's workmen or employees on the site. The contractor shall be responsible for payment of any charges which may be levied by Municipals or Cantonment Authority for execution of such work on his behalf.

7. Provision of shelters during rest - At every work place shall be provided, free of cost, two suitable sheds, one for meals and the other for rest separately for men and women for the use of labour. The height of the shelter shall not be less than 11 feet from the floor level to the lowest part of the roof. The sheds should be roofed with at least thatch and mud flooring will be provided with a dwarf wall around not less than 2 1/2 feet. Sheds should be kept clean and the space should be on the basis of at least 5 square feet per head.

8. Crèches - (i) At every work place, at which 50 or more women workers are ordinarily employed, there shall be provided two huts for the use of children under the age of 6 years, belonging to such women. One hut shall be used by infants for games and play and the others as other bedroom. The huts shall not be constructed on a lower standard than followings:-

(a) Thatched roofs: (b) mud floors and walls: (c) planks spread over the mid floor and covered with mutting.

(ii) The rooms shall be provided with suitable and sufficient opening for light and ventilation. There shall be adequate provision of sweepers to keep the places clean.

(iii) The contractors shall supply adequate number of toys and games in the playroom and sufficient number of cots and bedding in the bedroom.

(iv) The contractor shall provide one Dai to look after the children in the crèche when the number of women workers does not exceed 50 and two Dais when the number of women workers exceed 50.



(v) The use of the rooms earmarked as crèche shall be restricted to children, their attendants and mothers of the children.

9. CANTEEN

(i) In every work place where the work regarding the employment of contract labour is likely to continue for six months and where in contract labour numbering one hundred or more are ordinarily employed an adequate canteen shall be provided by the contractor for the use of such contract labour.

(ii) The Canteen shall be maintained by the contractor in an efficient manner.

(iii) The canteen shall consist of at least a dining hall, kitchen, store room, pantry and washing places separately for workers and utensils.

(iv) The canteen shall be sufficient lighted at all times when any person has access to it.

(v) The floor shall be made of smooth and impervious material and inside walls shall be lime washed or colour washed at least once in each year. Provided that the inside walls of the kitchen shall be lime washed every four months.

(vi) The presents of the canteen shall be maintained in a clean and sanitary condition.

(vii) Waste water shall be carried away in suitable covered drains and shall not be allowed to accumulate so as to cause a nuisance.

(viii) Suitable arrangements shall be made for the collection and disposal of garbage.

(ix) The dining hall shall accommodate at a time 30 percent of the contract labour working at a time.

(x) The floor area of the dining hall, excluding the area occupied by the service counter and any furniture except tables and chairs shall not be less than one square meter per dinner to be accommodated as prescribed in sub rule 9.

(xi) (a) A portion of the dining hall, service counter shall be partitioned off and reserved for women workers in proportion to their number. (b) Washing place for women shall be separate and screened to secure privacy.

(xii) Sufficient tables, stools, chairs or benches shall be available for the number of dinners to be accommodated as prescribed in sub rule 9.

(xiii) (a) [1] There shall be provided and maintained sufficient utensils, crockery, furniture and any other equipment necessary for the efficient running of the canteen.

[2] the furniture , utensils and other equipment shall be maintained in a clean and hygienic condition.

(b) [1] Suitable clean clothes for the employees serving in the canteen shall be provided and maintained

[2] A service counter, if provided shall have top of smooth and impervious material.

[3] Suitable facilities including an adequate supply of hot water shall be provided for the cleaning of utensils and equipment.

(xiv) The food stuffs and other items to be served in the canteen shall be in conformity with the normal habits of the contract labour.

(xv) The charges for food stuffs, beverages and any other items served in the canteen shall be based on ~~No~~ Profit, No Loss and shall be conspicuously displayed in the canteen.

(xvi) In arriving at the price of food-stuffs, and other articles served in the canteen the following items shall not be taken into consideration as expenditure, namely:-

(a) The rent of land and building

(b) The depreciation and maintenance charges for the building and equipment provided for in the canteen

(c) The cost of purchase, repairs and replacement of equipment including furniture, crockery, cutlery and utensils

(d) The water charges and other charges incurred for lighting and ventilation.

(e) The interest and amount spent on the provision and maintenance and equipment provided for in the canteen.



(xvii) The accounts pertaining to the canteen shall be audited once in every 12 months by registered accountants and auditors.

10. ANTI-MALARIAL PRECAUTION

The Contractor shall at his own expense, conform to all anti-malarial instructions given to him by the Engineering-Charge including the filling up of any borrow pits which may have been dug by him.

11. The above rules shall be incorporated in the contracts and in notices inviting tenders and shall form an integral part of the contracts.

12. Amendments:

Government may, from time to time add to or amend these rules and issue such directions as it may be considered necessary for the purpose of removing any difficulty which may arise in the administration.



ANNEXURE.XIII

SAFETY CODE (See Clause 72)

Safety Code:

1. Suitable scaffolds should be provided for workmen for all works that cannot safely be done from the ground, or from said construction except such short period work as can be done safely from ladders. When a ladder is used an extra Mazdoor shall be engaged for holding the ladder and if the ladder is used for carrying materials as well, suitable foot holds and land holds shall be provided on the ladder and ladder shall be given an inclination not steeper than $\frac{1}{4}$ to 1 ($\frac{1}{4}$ horizontal and 1 vertical).
2. Scaffolding or staging more than 12 feet above the ground floor, swing or suspended from an overhead support or erected with stationary support shall have a guard rail properly attached bolted, braced and otherwise secured at least 3 feet high above the floor or platform of such scaffolding or staging and extending along the entire length of the outside and ends thereof with only such opening as may be necessary for the delivery of the materials. Such scaffolding or staging shall be so fastened as to prevent it from swaying from the building or structure.
3. Working platform, gangways and stairways should be so constructed that they should not sag unduly or unequally and if the height of the platform or the gangway or the stairway is more than 12 feet above ground level or floor level, they should be closely boarded, should have adequate width and should be suitable fenced as described in (ii) above.
4. Every opening in the floor of a building or in a working platform be provided with suitable means to prevent the fall of persons or materials by providing suitable fencing or railing whose minimum height shall be 3q0q
5. Safe means of access shall be provided to all working platforms and other working places. Every ladder shall be securely fixed. No portable sing ladder shall be over 30 feet in length while the width between side rails in rung ladder shall in no case be less than 11 $\frac{1}{2}$ inches for ladder up to and including 10 feet in length. For longer ladders this width should be increased at least $\frac{1}{4}$ inch for each additional foot of length. Uniform step spacing shall not exceed 12 inches. Adequate precautions shall be taken to prevent danger from electrical equipment. No materials on any of the sites of work shall be so stacked or placed as to cause danger or inconvenience to any person or the public. The contractor shall provide all necessary fencing and lights to protect the public from accident and shall be bound to bear the expenses of defense of every suit action or other proceeding at law that may be brought by any person for injury sustained owing to neglect of the above precautions and to pay any damages and cost which may be awarded in any such suit, action or proceedings to any such persons or which may with the consent of the contractor be paid to compromise any claim by any such person.

Excavation and Trenching:

6. All trenches, four feet or more in depth shall at all times be supplied with at least one ladder for each 100 feet in length or fraction thereof. Ladder shall be extended from bottom of the trench to at least 3 feet above the surface of the ground. The site of the trenches which are 5 feet or more in depth shall be stopped back to give suitable slope or securely held by timber bracing, so as to avoid the danger of sides to collapse. The



executed material shall not be placed within 5 feet of the edges of the trench it half on the depth of the trench whichever is more. Cutting shall be done from top to bottom. Under no circumstances under mining or under cutting shall be done.

Demolition:

Before any demolition work is commenced and also during the process of the work :-

- (i) All roads and open areas adjacent to the work site shall either be closed or suitably protected.
 - (ii) No electric cable or apparatus which is liable to be a source of danger over a cable or apparatus used by the operator shall remain electrically charged.
 - (iii) All practical steps shall be taken to prevent danger to person employed from risk of the fire or explosion or flooding. No floor, roof or other part of the building shall be so over loaded with debris or materials as to render it unsafe.
8. All necessary person safety equipment as considered adequate by the Engineer-in-Charge should be kept available for the use of the person employed on the site and maintained in a condition suitable for immediate use and the contractor should take adequate steps to ensure proper use of equipment by those concerned.
- (i) Workers employed on mixing asphaltic materials, cement and lime mortars shall be provided with protective foot wear and protective goggles.
 - (ii) Those engaged in white washing and mixing stacking of cement bags or any material which is injurious to the eyes shall be provided with protective goggles.
 - (iii) Those engaged in welding works shall be provided with welders protective eye sight lids.
 - (d) Stone breakers shall be provided with protective goggles and protective clothing and seated at sufficiently safe intervals.
 - (iv) When workers are employed in sewers and manholes, which are in use, the contractor shall ensure that the manhole covers are opened and are ventilated at least for an hour before the workers are allowed to get into the manholes and the manholes so opened shall be cordoned off with suitable railing and provided, with warning signals or boards to prevent accident to the public.
9. The contractor shall not employ men and women below the age of 18 years and women on the work of painting with products containing lead in any form. Wherever men above the age of 18 are employed on the work of lead painting, the following precautions should be taken.
- i.) No paint containing lead products shall be used except in the form of paste or ready made paint.
 - ii.) Suitable face masks should be supplied for use by the workers when paint is applied in the form of spray or a surface having lead paint dry rubbed and scrapped.
 - iii.) Overalls shall be supplied by the contractors to the workmen and adequate facilities shall be provided to enable the working painters to wash during the cessation of work.
 - iv.) White lead, sulphate of lead or product containing these pigments, shall not be used in painting operation except in the form of pastes of paint ready for use.
 - v) Measurers shall be taken, where ever required in order to prevent danger arising from the application of the paint in the form of spray.
 - vi.) Measurers shall be taken, whenever practicable, to prevent danger arising out of form dust caused by dry rubbing down and scrapping.
 - vii.) Adequate facilities shall be provided to enable working painters to wash during and on cessation of work.
 - (vii) Overall shall be worn by working painters during the whole of working period.
 - (viii) Suitable arrangement shall be made to prevent clothing put off during working hour being spoiled by painting materials.
 - ix.) (a) Case of lead poisoning and of suspected lead poisoning shall be notified and shall be subsequently verified by medical man appointed by competent authority of P.W.D. Department. (b) The P.W.D. Department may require when necessary medical examination of workers.
- Inspection with regard to the special hygienic precaution to be taken in the painting trade shall be distributed to working painters.



10 When the work is done near any place where there is risk of drawing, all necessary equipments should be provided and kept ready for use and all necessary steps taken for prompt rescue of any person in danger and adequate provision should be made for prompt first aid treatment of all injuries likely to be sustained during the course of the work.

11 .Use of hoisting machines and tackle including their attachments anchorage and supports shall conform to the following standards or condition:-

1 (a) These shall be of good mechanical construction, sound materials and adequate strength and free from patent defect and shall be kept in good repair and in good working order, (b) Every rope used in hoisting or lowering materials or as a mean of suspension shall be of durable quality and adequate strength and free from patent defects.

2. Every crane driver of hoisting appliance operator shall be properly qualified and no person under the age of 21 years should be in charge of any hoisting machine including any scaffold which or give signals to operator.

3. In case of every hoisting machine and of every crane ring hook, shackle shackle and pulley block used in hoisting or as means of suspension the safe working load shall be ascertained by adequate means. Every hoisting machine and all gear referred to above, shall be plainly marked with the safe working load. In case of a hoisting machine having a variable safe working load, each safe working load of the conditions under which it is applicable shall be clearly indicated. No part of any machine or any gear referred to above in this paragraph shall be loaded beyond the safe working load except for the purpose of testing.

4. In case of departmental machines the safe working load shall be notified by the Electrical Engineer-in-Charge. As regard contractors machines the contractors shall notify the safe working load of the machine to the Engineer-in-Charge whenever he brings any machine to site of work and gets it verified by the Electrical Engineer concerned.

12 Motors, Gearing, Transmission, Electrical wiring and other dangerous part of hoisting appliances should be provided with efficient safeguards, hoisting appliances should be provided with such means as will reduce to the minimum the risk of accidental descent of the load, adequate precautions should be taken to reduce to the minimum the risk of any part of a suspended load becoming accidentally displaced. When workers employed on electrical installations which are already energized, insulated mats, wearing apparel, such as gloves, sleeves and boots as may be necessary should be provided. The workers should not wear any rings, watches and carry keys or other materials which are good conductors of electricity.

13 All scaffold, ladders and other safety devices mentioned or described herein shall be maintained in safe condition and scaffold ladder or equipment shall be altered or removed while it is in use. Adequate washing facilities should be provided at or near places of work.

14. These safety provisions should be brought to the notice of all concerned by display on notice board at a prominent place at work spot. The person responsible for compliance of the safety code shall be named therein by the contractor.

15 To ensure effective enforcement of the rules and regulation relating to safety precautions. The arrangements made by contractor shall be open to inspection by the Labour Officer, Engineer-in-Charge of the department or their representative.

16 Notwithstanding the above clause from (i) to (xiv) there is nothing in these to exempt the contractor from the operations of any other Act, or Rules in force in the H.P. Government.



Annexure – XIV

(DELETED)

PARTICULAR SPECIFICATIONS

(1) Criteria for determining the passive resistance of the soil below the maximum designated scour depth.

(2) The draft of the relevant I.R.C Sub-Committee as current on the date of öNOTICEö of tender shall be applicable.

(3) (2) Specification for Bearing to be adopted for

Sr. No	Span length and type of Structure	Type of Bearing to be Provided
1	2	3
1	Span -8 Meter (@^ feet) (floating spans executed)	NO. Bearing need be provided. Only a bituminous layer or a proper impregnated with tar of bitumen may be interposed between the sporting members an super-structure.
2	span above Meters (26 feet) (but more than teen meters (50 feet)and also floating span resting on abutment irrespective of span lengths (suspended spans in balanced cantilever type)construction fixed excluded .	Sliding M.S plate bearing at free end and fixed plate bearing with curvature in the top plate for rocking shall be provided or the end.
3	Spans over15 meter 850 feet and all articulations balance cantilever type of construction.	Metallic Rocer-cum roller bearings as free of end rock bearing at fixed end.

3. Specifications for Expansion joints

The latest specifications for expansion joints shall be indicated.

4. Specifications for Load Testing

4.1 For pills

4.1(I) General

4.1(I)(I) There shall be two categories of test of piles, namely initial test and routine test. One or more of the working piles or separate test piles shall be used as decided by the Engineer-in-charge and their driving behavior carefully observed and recorded in the presence of the Engineer-in-charge. The number of tests to be carried out shall also be decided by the Engineer-in-charge.

Note:- Initial tests are specially recommended in the case of major projects, adequate investigation or sub-soil data shall also be done in conjunction with such test.



1(1)(2) Special cycle loading tests may be adopted in cases where piles are passing through a soft compressible strata and there is likely to be negative drag on the piles or where removal of friction of the soil by scour is involved. The object of the cyclic test is to divide the load on piles into skin friction and point resistance.

1(2) Procedures of initial tests

2(2) (1) These tests shall commence as early as possible after driving of the piles.

1(2)(2) The tests shall be carried out by applying a series of loads on a RC cap over a pile or Group of piles Unaided by any other support. The load shall preferably be applied by means of hydraulic jack reacting against loaded platforms, which shall be preloaded to not less than two and a half times the estimated safe load carrying capacity of the pile. The hydraulic jack shall be of adequate capacity and shall have a pressure gauge and a remote control pump.

NOTE: - In place of the loaded platform the hydraulic jack may react against heavy R.S joints on a suitable load frame held down by anchor piles or other anchorages. The anchor piles may be working piles but they shall be sufficient in No. and adequately reinforced to take the full tension with proper factor of safety.

1(2)(3) Before any load test is performed the proposed setup and the load frame shall be got approved from the Engineer-in-Charge. Readings of settlement and rebound shall be reported with the help of at least two dial gauges (preferably four) of 0.02 mm sensitivity and resting on diametrically opposite ends of the pile cap. The dial gauges shall be fixed in a datum bar whose ends rest upon non moveable supports. The supports for datum bar with reference to which the settlement of the pile would be measured should be at least 5 ϕ away, clear from the piles, where ϕ is the diameter of the pile.

1(2)(4) The test load shall be applied in equal increments of about one fifth of the estimated safe load or as directed by the Engineer-in-Charge. Alternate loading and unloading of each load increment shall be performed and the elastic and plastic settlements recorded.

1(2)(5) Each stage of loading or unloading shall be maintained till the rate of movement of the pile top is of more than 0.02mm per hour.

1(2)(6) The loading shall be continued till the settlement of the pile cap equal one tenth of the diameter of the pile stem (one tens of the side in case of square piles) or the load is three times the estimated safe load on the piles, whichever is earlier.

1(2)(7) Assessment of Safe Load.

The safety load on pile shall be the least of the following:-

- (a) Two-thirds final load at which the total settlement attains the values of 12mm unless it is established that a total settlement different from 12mm is permissible in a given case on the basis of the nature and type of the structure, in the latter case the actual total settlement permissible shall be used for assessing the safe load instead of 12mm.
- (b) Two-thirds the final load at which the net settlement attains a value of 6mm.
- (c) 50 percent of the final load at which the total settlement equals one-tenth of the pile diameter.

1. Procedure of Routine Test.

1(3)(1) For routine test pre loading shall be not less than one and a half times the estimated safe load carrying capacity of the pile. The loading procedure in the other respects shall be the same as in clause 12. The safe load shall be the least of the following.

(a) Two-thirds the final load at which the total settlement attains a value of 12mm unless it is established that a total settlement different from 12mm is permissible in a given case on the



basis of nature and type of the structure, in the latter case the actual total settlement permissible shall be used for assessing the safe load instead of 12mm.

(b) Two-third the final load at which the net settlement increases to 6mm, unless more settlement is permissible.

1.4 Cyclic Loading Test.

1.4(1) Procedure

The load shall be applied on the test pile or group of piles by hydraulic jack assembly with pressure-gauge in increments of about one-fifth of the assumed safe load. The reaction shall be obtained against a loaded platform or heavy R.S. Joints bolted down to anchor piles.

Alternate loading and unloading shall be carried out at each stage and the subsequent elastic rebound in the pile shall be measured accurately by a minimum of two (Preferably four) settlement gauges fixed at diametrically opposite ends to a datum bar resting on immovable supports. In order to simulate the effect of future fluctuations of loading, a cycle of loading and unloading may sometimes be repeated at 5 to 10 minutes intervals, before applying the next higher load.

Loading shall be continued till there is a marked progressive settlement of the pile.

1.4(2) Assuming that there is no comprehension in the piles, plot a graph relating to total elastic recovery and load on the piles top (See Curve I in the figure).

1-4(2) Draw a straight line parallel to the straight portion of Curve 1 to divide the load into two parts, and thereby, to obtain approximate value of point resistance and skin friction.

1.4(2)(3) From the approximate value of skin friction, and knowing the loads on top of pile compute the elastic compressions of the pile corresponding to these loads, by the following formula.

$$\Delta(T-F/2) <$$

Where ΔE = elastic compression of pile in cm

T = load on pile cap in kg;

F = frictional resistance in kg;

L = length of the pile in cm;

A = cross-sectional area of the pile in cm² and

E = modulus of elasticity of the pile material in kg/cm² - an average value of 2.8×10^5 kg/cm² may be adopted for concrete piles in absence of actual test values.

1.4(2)(4). Obtain values of the elastic compression of the sub-grade by subtracting the elastic compression of the pile from the total elastic recovery of pile., and plot the graph relating these new values to the corresponding loads on pile cap (see curve II in the Figure).

1.4(2)(5) Repeat the procedure as given in clause 1.4(2)(2) to obtain new values of skin friction.

1.4(2)(6). This process may be repeated further to any desired extent, but usually the **third** curve given sufficiently accurate values for skin friction.

1.4(3) Computation of safe load

1.4(3)(1). The safe loads which the pile can take under natural condition in friction and point resistance shall be worked out by applying a factor of safety of 2 and 2/12 on the ultimate values of the effective friction and point resistance respectively.

1.4(3)(2) The effective friction shall be the total frictional resistance minus the friction over the length of the pile likely to be exposed by scour or liable to drag due to the presence of a soft compressible strata.

1.4(3)(3). The ultimate point resistance shall be the resistance corresponding to a total settlement equal to 10 percent of the pile diameter.



1.4(3)(4).The sum for the two values obtained in clauses.

1.4(2)(2) and 1.4(3)(3) shall be taken as the total safe load for the pile.

1.5 Lateral Load Tests.

1.5(1) Two or more test piles which can be working piles shall be driven to the required, depth and spacing. A hydraulic jack shall be inserted in between them to avoid the lateral load at the approximate cut off level for the site. Thrust pieces shall be inserted on either end of the jack to make up the gap. Lateral deflection shall be measured at the ground or cap level by means of pile gauges fixed to immovable supports.

1.5(2).The following shall be applied in half tonne increments till the rate of deflection reduce to 0.02mm per hour and a load deformation curve shall be plotted.

1.5(3) The safe material load on the pile shall be taken as the least of the following.

(a)Half the final load at which the total deflection increases to 12mm.

(b)Load corresponding to 5mm total deflection.

2.Load testing for superstructure.

2.1 Test load-The load for testing of any span of the superstructure shall be equal to 1.25 times the live loads plus impact. The arrangement for applying this test load and the worst positions of this load on the bridges shall be decided and marked on the span to be tested, well in advance of the load test.

2.2 Deflection measurement-Deflections shall be measured at critical locations as decided by the Engineer-in-Charge. Cymenes of dial gauges fixed on firm supports, independent of the structure to be tested.

2.3 Procedure

2.3(1) The load test shall be done during such period of the day when the variation in the temperature is least. Preferably this could be done during the early hours of morning.

2.3(2) Prior to load testing the superstructure of the span to be tested shall thoroughly be examined for any signs of distress such as any existing hair cracks and recorded so as to differentiate them from any distress that may occur during the load test.

2.3(3) The position of the wheels for the critical vehicle and the worst positioning on the deck shall be **predetermined** and the position indicated. The initial observations without load shall be observed.

2.3(4) The test load shall be applied to the structure at the predetermined position by increments of 25%. The load shall be applied in minimum of time with an interval of only 5 **minutes** between load stages, for purposes of deflection readings.

2.3(5) The deflections shall be observed at every load stage and in the final loaded position.

2.3(6) The load shall then be removed by equal decrements of 25% and the record of deflections made as before.

2.3(7).Should there be any doubt about the observations made during a load test, the process of loading and unloading in stages with deflection observations shall be respected.

2.4 Criteria for acceptance.

The load test shall be treated as satisfactory, if.

(i)the actual deflections are equal to or less than the theoretical deflections,

(ii) The recovery of deflection on removal of load is not less than 80% and

(iii) the structure shows no signs of distress or defects during the load test.



ANNEXURE XV

LIST OF CLAUSES REQUIRING FILLING OF BLANKS OR ANY OTHER ACTION BY THE DEPARTMENT BEFORE ISSU OF TENDER DOUCMENTS

Chapter No.	Clause Numbers and Other items.	Pages	Chapter No	Clause No and Other items.	Page
Chapter 1	1,2,3.5,Chapter 6.3,6.1,6.2 6.5,7.1 8.2 8.7,9.1 10.1,10.5		VII		
			Annuxures		
Chapter II	12.4		IV		
Chapter III	7.1,17.4 20 49 56.3 64.1 67.3 75.3		V(Particulars vide col,2 for items 2,3 & 4)		
			VI		
			VII		
			IX		
			XIV		
			(Detailed specifications to be indicated for items I and 3		
Chapter IV	Name of work/ Amount etc.				
Chapter V	76.77.78 79.80				
Chapter VI	83.1,83.2 84.1,84.3 84.4,84.5, 84.6,84.7,85.1 85.1,85.2, 85.3,85.4 88.2(2)				
	86.3(1)	71			



ANNEXURE XVI
SPECIAL CONDITIONS OF CONTACT
(Agreed to during post tender clarifications)

GENERAL SPECIFICATION AND CONDITIONS

All charges releasing to laving of service lined and installation of transformer including the expenses involved in energisation any other charges connected with the electric lines as claimed by a HPSEB shall be born by the firm including the energy consumption charged and demand charges. These payments shall be made by the firm direct to HPSEB.

Letters etc., from the contractor found in the tender box for raising/lowering rates or dealing with any other points will not be considered.

No mild steel for steel structural steel shall be issued for shuttering staging ancillary and allied work etc.when will be arranged by the contractor.

The contractor shall give complete postal telegraphically address in the tender and also leave a copy of the same on the office of the Engineer-in-Charge. All correspondence of telegram etc. sent on the above address and dully accepted by the postal authority shall be deemed to have received by the contractor on date of posting irrespective of the fact that the same pay by returned by the postal authorities undelivered due to any reason what so ever. Any charge in address shall be prompt intimated to the officer of the Engineer-in-charge acknowledgment received to that effect unless this as done the model address will remain effective .The royalty charged of mineral stones bajris, and etc. uses shall be deducted from the bill of the contractor at the rate prescribed vide H.P. Govt. notification No.2-53/6 SLH dated 17.3.70 with amendments upto date on the basis of quantities of such minerals required for finished work as worked out on the basis of factors mentioned in the approved analysis unless certificate from the .

District mining office concerned for the royalty having been paid for the work is produced.

In the event of the dispute of any kind arising out of the contract the law court at the district head quarters or the High Court of Himachal Pradesh Shimla shall have the legal jurisdiction. The condition will however not interfere with the arbitration clause of the contract agreement. the firm will produce manufactures certificate for H.P wire in support of values of UTS, and & used in the design .The firm shall also provide dumpy cables within the L.S quoted price, steel plates tees, sheets etc.shall be issued lengths as available in the store. No claim this account shall be entertained.

(DELETED) The recovery rate of cement is inclusive of cost of jute or paper bags. The contractor shall have to return at least 90% bags of the jute bags in serviceable conditions to the bags collecting agents. The payment for the cost of empty bags will be made to the contractor, by the based collecting agents at the prevailing rates as fixed by the D.G.S.& N.D the contractor must produce certificate on the private letter pad from the authorized bag collected agents as proof for the number of bags returned by him certificate must be produced by him while claiming payment against each running bill in case the number of service bags returned to less than 90% of the bags issued compensate the rate of Rs 2/-per bag returned short shall recovered from the contractor.

(DELETED) Note:-The contractor should send registered intimation to the bag/collecting agent of the cement factories for collecting bags within a period of 30 days if



the bags collecting agents fails to return up with in the specified period contractor shall be at liberty to dispose of bags.

(DELETED) Gap Slab over the piers

The gap over the piers between the two ends of the superstructure from the adjacent spans should be bridges by means of a slab supported on the cross girders instead of projecting the slabs cantilever.

(DELETED) Approach Slab.

The minimum thickness of approved slab be 30 cm.

The firm shall submit one copy of approved design calculations and three copies of approved drawings in addition to the design calculations and drawings submitted for getting approval.

Rock bolting if suggested by the geologist shall be done by the Contractor .

The contractor may resubmit the latest and valid tie up documents who has no in house organization with the India consultants empanelled with most as already submitted/ approved during.

Prequalifications

The firm may also give organizational set-up to checkup whether it remain unchanged as already given in the prequalified documents.

The intending firm may take into consideration the road tax applicable in Himachal Pradesh as amended vide notification No.XEN. IV (21)5/93 dated while quoting his price bid.

Two percent general sales tax will be deducted from the bill under section 12-A of GHP and commencement sales tax (Amendment) Rules 1993.

The contractor will have also to pay taken to the H.R.T.C for the period in case he use the departmental (PWD) trucks on his request for bonafide work according to the rates fixed by the corporation. The receipt for payment of taken to H.R.T.C. will have to be produced by the contractor to the Engineer-in-Charge at the time of payment for the work.

In addition to hire charged for departmental trucks the contractor will have to pay the goods tax on approval rates under Goods tax on Act 1995 to the Excise and Taxation department for the period departmental trucks/ truck are /is hire by them for bonafide use on the work . The contractor will have to produce necessary receipt in taken of having paid the goods Tax to the concerned department before receiving the payment from the Engineer-in-charge.

The contractor shall obtain impressions from the Executive Engineer for extracting stones from road side or approval quarries and Rs. 17.60 per cum will be recovered from him on account of royalty charges for the stones quarried within the acquired width charges for the stones quarried within the acquired width in the road. The royalty for stones quarried beyond the acquired width of the paid directly by the contractor to the concerned department.

The contractor shall also be responsible for watch and ward of other materials issued to him. If contractor fails to provide sufficient fencing lighting and watch to the satisfaction of the Engineer, the later, after notice to the contractor will provide sufficient fencing, lighting and watching staff. The cost of doing as shall be deducted from the contractor but such action on the part of the Engineer-in-Charge in providing sufficient fencing lighting and watch shall not relieve the contractor from responsibilities for damages caused by failure on his part.

No payment shall be made to the contractor for any damage caused by rains. Show or floods or due to any other cause what so ever, during the execution of work and no such



claim on this account shall be entertained. He will have to make good all such damages at his own cost.

The contractor shall not deposit materials on any site which will seriously cause in convenience to the public. The Engineer-in-charge may require the contractor to remove any material which is considered by him to be a danger or inconvenience to the public cause then to be removed at the contractor's cost.

Recovery for damaged materials due to defective storage of materials issued by the department will be recovered from the contractor at double the issue rate. No claim on this account shall be entertained.

The contractor shall be responsible to make good the damages caused to lands and building of private persons which are continuous or otherwise to the premises on which the work or any part of it is being executed and on his failure to do so, the same will be made good by the Engineer-in-Charge at the cost of contractor.

Any damages during the execution of work will be the responsibility of the contractor and he will have to restore such damages at his own cost and nothing will be paid by the department on this account.

When a road has to be closed to traffic a clear notice at least of 7 days shall be given by the contractor to the Executive Engineer who shall notify it to the POLICE Authorities and the Transport Department. Adequate number of sign boards for diversion of the traffic shall be arranged and fixed by the contractor at his own cost.

A notice board closed shall be placed at each barrier by day provided by three red lanterns by night. The lanterns should be of standard square pattern. A notice indicating the direction that traffic should be kept perfectly free from tools and other construction should be in through repair so long as the metalled surface is not opened for traffic.

Samples of all materials to be used on the work shall be submitted to the Engineer-in-Charge before hand. The same principle will hold good for the all items of work.

All jungle clearance such as shrubs etc will be done the contractor at his own cost but the trees big or small shall not be fallen without prior permission cost of damage to the forest or to some other Government or private properties will be made good by the contractor at his own cost or recovery shall be made from his bills.

The contractors shall remain himself keep his representative duly authorized at site during all working hours of execution to receive instructions from Engineer-in-Charge and to carry out the work accordingly.

All material brought to the work during the time of execution should be stacked properly as desired by the Engineer-in-Charge.

The Engineer-in-Charge will be at liberty to debit the contract account with any dues outstanding against him in respect of some other work entrusted to him in the Himachal Pradesh Public Works Department.

In case the contractor obtains a route permit for plying his own or hired truck for the carriage of materials the site of work shall render a full account of the carriage work by him duly supported with the log book of the vehicles weekly failing which he will be liable to pay fine at the rate of Rs. 5 per day for extra days that the truck has plied.

For testing the strength of concrete, cubes shall be prepared by the contractor under the supervision of an officer of the department not below the rank of sub-Divisional Officer, samples of concrete and its testing shall be done as per Himachal Pradesh Public Works Department specification and also as per relevant IS: codes of practice and tested in a recognized laboratory approved by the Engineer in Charge. The cost of making cubes carriage to laboratory and laboratory charge, should be borne by the contractor. The Contractor shall however, abide by the decision of the Engineer-in-Charge. In case the



result of test shows the work not upto the specified standard. Contractor will carry out any order, necessitated thereby at his own cost.

The contractor shall clear the site property after the compound off the work.

The contractor shall maintain good condition all works during execution till completion of entire work allowed to the contractor.

The contractor must take all precautions to avoid all accidents by exhibiting day and night necessary sign boardø speed limit boards, red flags and red lights and providing barriers. He shall be responsible for all damage and accidents caused due to negligence on his part. He **hind exance** shall be caused to traffic during the execution of work.

Any Department officer is authorized to have access to the godown for purpose in inspection of materials at any time any materials which inspecting officer may point out as being below the required standard will be he removed entire at once from the site of work by the contractor and not used on Government work. No claim on his accounts shall be entertained.

Bill of Quantity (BOQ)

Tender Inviting Authority: Director, Urban Development, Shimla, Himachal Pradesh						
Nature of Work: Construction of Pre-fabricated houses under IHSDP scheme at Municipal Council, Solan						
Contract No.						
Bidder Name:						
SCHEDULE OF WORK (The bidder is to enter the Bidder Name and Values only)						
Sl. No.	Description of Work	Qty.	Unit	Rate in Rs.		Amount (in Rs.)
				In Figures	In Words	
1.	Construction of four storied prefabricated building under IHSDP Scheme. 1. Block No. 2, 5 & 6 (6 DUs in each floor) 2. Block No. 3 & 4 (3 DUs in each floor) 3. Block No. 1 (Community Centre) two storied prefabricated building. As per specification mentioned in the bidding document (Layout plan attached) Residential Block Area: 3180.16 Sqm. Community Centre Area: 433.14 Sqm. Total Area: 3613.30 Sqm. Including internal and external water supply and sanitary installation, sewerage system, internal electrical installation, Storm Water Drain, construction of internal Road, Paths and Pavements including site development i.e. cutting in earth work, construction of retaining walls, breast wall and other connected developmental works required at site.	3613.30 SqMtr.	SqMtr .			
Total in Figures						
Total in Words		Rupees only				

Signature of Tenderer with seal

PRODUCED BY AN AUTODESK EDUCATIONAL PRODUCT

PROPOSED HOUSING PROJECT
UNDER IHSDP SCHEME
ON KH. NO. 851/1 AT MAUJA
AT MAUJA BASAL
TEHSIL & DISTT. SOLAN (H.P.)

SITE PLAN

SCHEDULE OF AREA

TOTAL PLOT AREA = 3779.00 SQM
TOTAL GROUND COVERAGE = 1011.61 SQM = 26.77 %
AREA UNDER PATH = 686.00 SQM = 18.48%
AREA FOR STP ETC. = 196.00 SQM = 5.00%
GREEN AREA = 690.50 SQM = 18.51%

COMMUNITY CENTRE (BLOCK-1)

GROUND FLOOR = 216.57 SQM
FIRST FLOOR = 216.57 SQM
TOTAL AREA = 433.14 SQM

RESIDENTIAL BLOCK

BLOCK-2

GROUND FLOOR = 195.92 SQM 6 DU's
FIRST FLOOR = 195.92 SQM 6 DU's
SECOND FLOOR = 195.92 SQM 6 DU's
THIRD FLOOR = 195.92 SQM 6 DU's
TOTAL AREA = 783.68 SQM 24 DU's

BLOCK-3

GROUND FLOOR = 103.64 SQM 3 DU's
FIRST FLOOR = 103.64 SQM 3 DU's
SECOND FLOOR = 103.64 SQM 3 DU's
THIRD FLOOR = 103.64 SQM 3 DU's
TOTAL AREA = 414.56 SQM 12 DU's

BLOCK-4

GROUND FLOOR = 103.64 SQM 3 DU's
FIRST FLOOR = 103.64 SQM 3 DU's
SECOND FLOOR = 103.64 SQM 3 DU's
THIRD FLOOR = 103.64 SQM 3 DU's
TOTAL AREA = 414.56 SQM 12 DU's

BLOCK-5

GROUND FLOOR = 195.92 SQM 6 DU's
FIRST FLOOR = 195.92 SQM 6 DU's
SECOND FLOOR = 195.92 SQM 6 DU's
THIRD FLOOR = 195.92 SQM 6 DU's
TOTAL AREA = 783.68 SQM 24 DU's

BLOCK-6

GROUND FLOOR = 195.92 SQM 6 DU's
FIRST FLOOR = 195.92 SQM 6 DU's
SECOND FLOOR = 195.92 SQM 6 DU's
THIRD FLOOR = 195.92 SQM 6 DU's
TOTAL AREA = 783.68 SQM 24 DU's

TOTAL NO. OF DWELLING UNITS = 96 NOS.



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OWNER'S SIGN

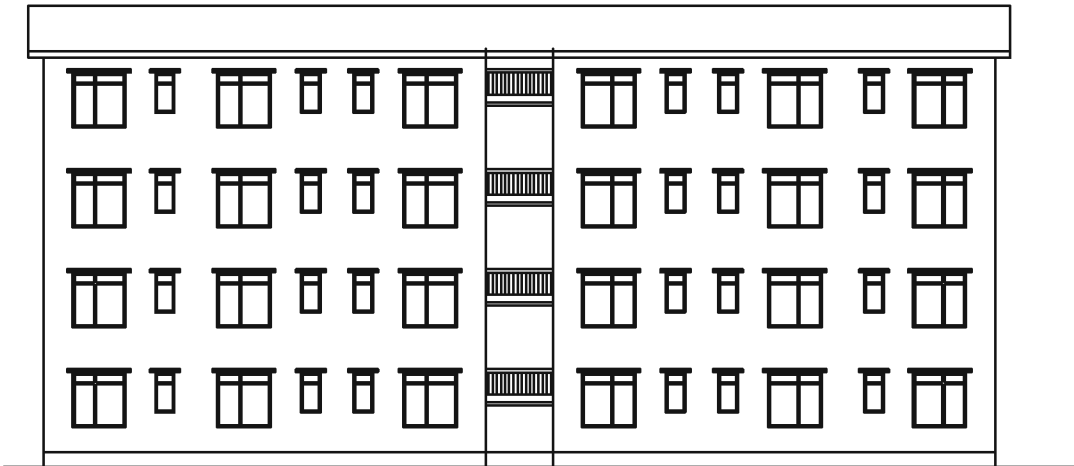
PROJECT ARCHITECT:
KAUNDAL & ASSOCIATES
ARCHITECTS, ENGINEERS & INTERIOR DESIGNER
OFF: ANUBHAV SANJALI, SHIMLA (H.P.)
PH: 0177-2842255, M: 9816241682
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ARCHITECT'S SIGN

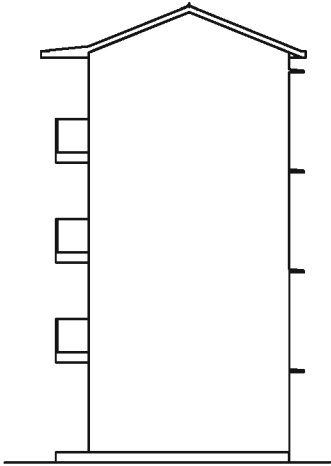
PROPOSED HOUSING PROJECT
UNDER IHSDP SCHEME
ON KH. NO. 851/1 AT MAUJA
AT MAUJA BASAL
TEHSIL & DISTT. SOLAN (H.P.)

SCHEDULE OF AREA

AREA FOR THREE D. U.
BUILT UP AREA=79.92 SQM
CIRCULATION AREA=18.08 SQM
BUILT UP AREA PER UNIT=26.64 SQM
CIRCULATION AREA PER UNIT=6.01 SQM



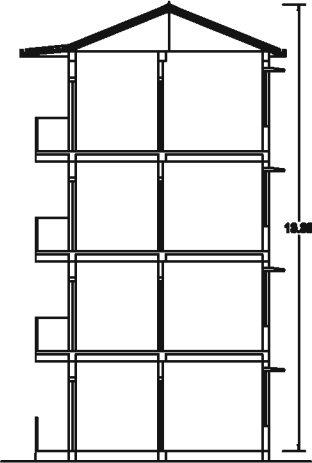
REAR ELEVATION



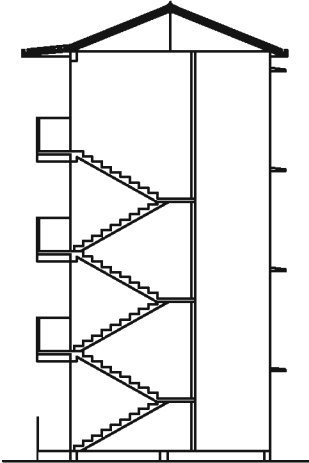
SIDE ELEVATION



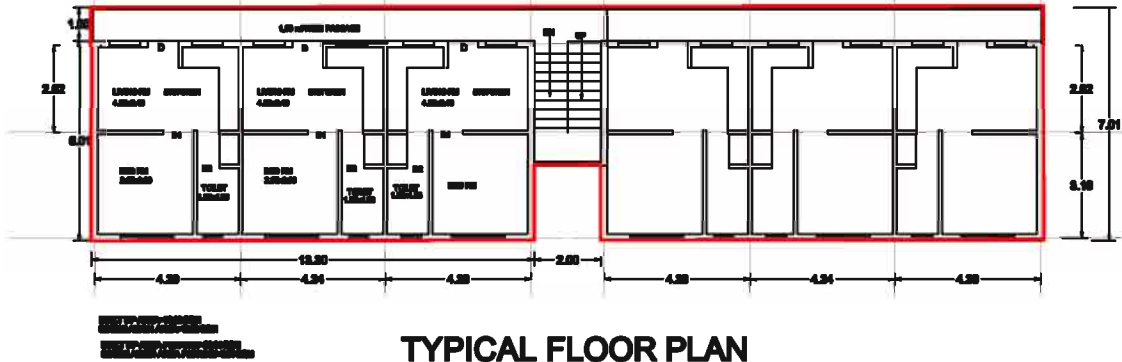
FRONT ELEVATION



SECTION AT A-B



SECTION AT C-D



TYPICAL FLOOR PLAN

PROJECT ARCHITECT:
KAUNDAL & ASSOCIATES
ARCHITECTS, ENGINEERS & INTERIOR DESIGNER
OFF: ANUBHAV SANJALI, SHIMLA (H.P.)
PH: 0177-2842255, M: 9816241682
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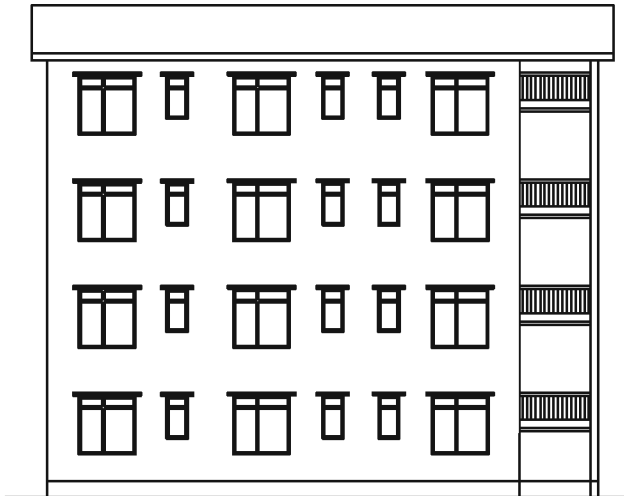
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PROPOSED HOUSING PROJECT
UNDER IHSDP SCHEME
ON KH. NO. 851/1 AT MAUJA
AT MAUJA BASAL
TEHSIL & DISTT. SOLAN (H.P.)

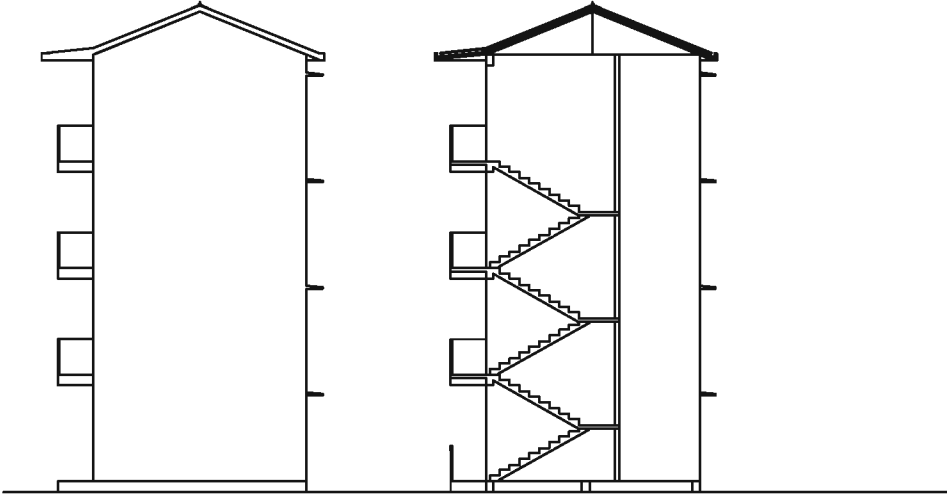
AREA FOR THREE D. U.

BUILT UP AREA=79.92 SQM
CIRCULATION AREA=18.03 SQM

BUILT UP AREA PER UNIT=26.64 SQM
CIRCULATION AREA PER UNIT=6.01 SQM



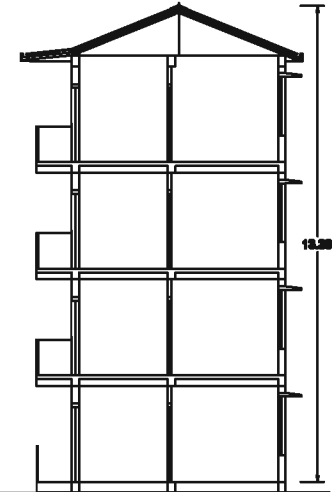
REAR ELEVATION



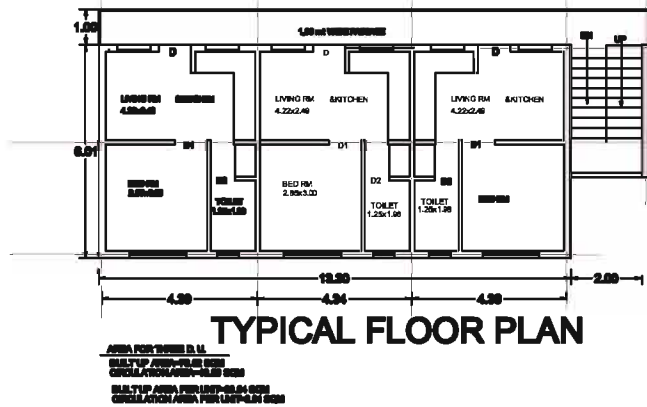
SIDE ELEVATION SECTION AT C-D



FRONT ELEVATION



SECTION AT A-B



TYPICAL FLOOR PLAN

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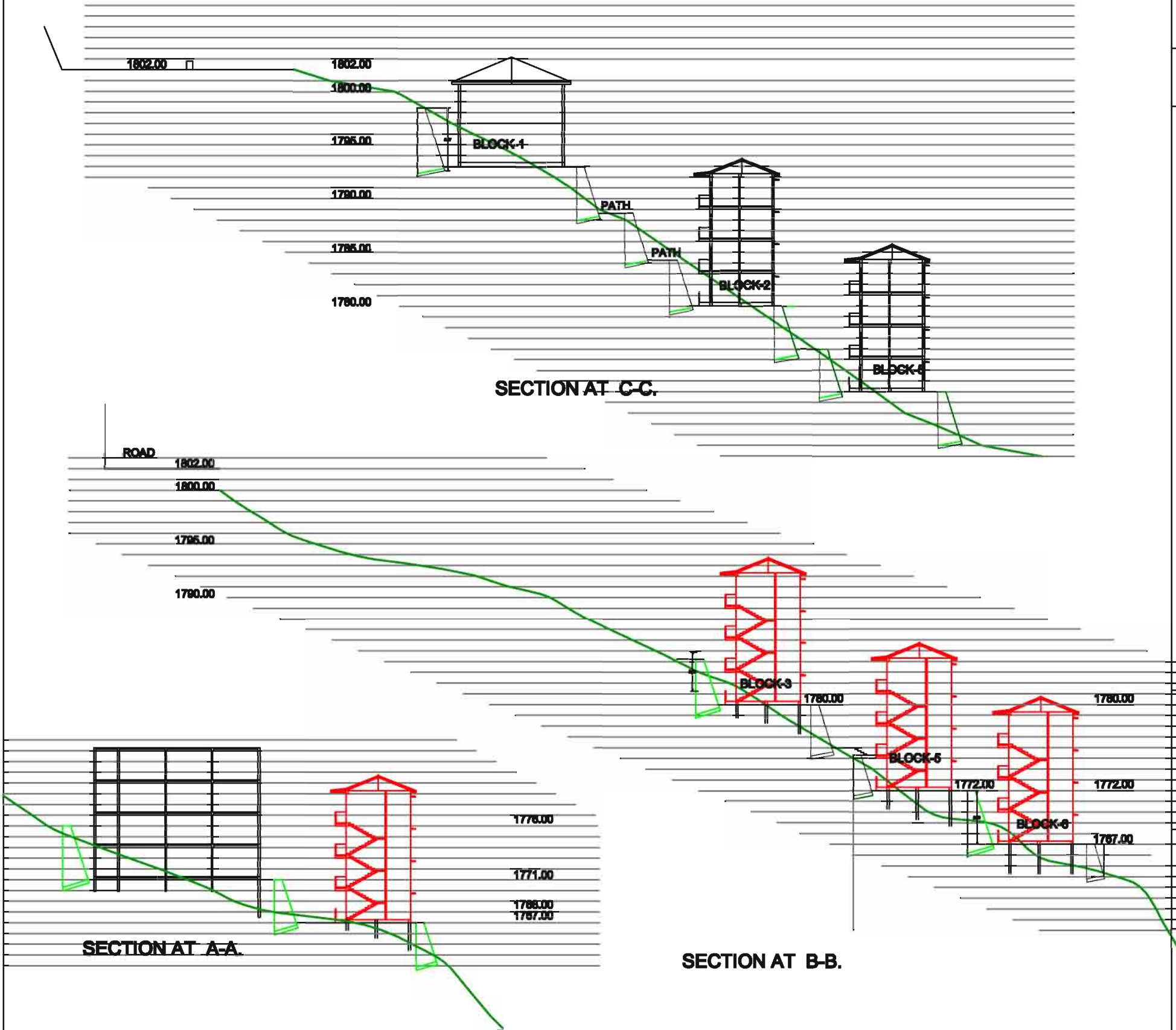
PROJECT ARCHITECT:
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X-SECTION



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