

BID DOCUMENT FOR

UPGRADATION OF EXISTING FIRE FIGHTING SYSTEM IN
CHANDIGARH HOUSING BOARD OFFICE BUILDING BLOCK
'A' & 'C' IN SECTOR 9-D, CHANDIGARH

Date of release/ publishing of Tender 01.07.2021

Last Date of
Submission of document : 13.07.2021

Price Rs.1180/-

Website: <http://chandigarh.gov.co.in>
<http://etenders.chd.nic.in/nicgep>

Tel: 0172-4601707

INDEX

Sr. No.	DESCRIPTION	PAGE NO.
PART-I		
1.	Press Notice	4
2.	Detail regarding Tendering Process	5-6
3.	List of Documents to be uploaded by the tenderer.	7
4.	Check List	8-9
5.	Notice Inviting Tender	10-16
PART-II		
	Post Qualification application form and document related to eligibility criteria and other related document	17-36
6.	Section – I Information & Instructions for applicants.	18-21
7.	Section – II Forms and Annexure	22
	i. Letter of Transmittal Form 'A'	23
	ii. Form 'B' – Details of works completed during last 7 years	24
	iii. Form 'C' Performance Report of works given in Form 'B'	25
8.	Specimen Proforma for Affidavit regarding No criminal proceeding. Annexure-I	26
9.	Format for Power of Attorney by Applicant in case of Non Consortium members - Annexure-II	27
10.	Proforma for submission of Performance Guarantee- Annexure-III.	28-29
11.	Forms related to integrity- Annexure-IV, IV-A & IV-B	30-36
PART-III		
	Financial Bid, Special conditions and other related documents for submission of financial Bid	37-63
12.	Instructions for Contractors.	38
13.	Part-A	39-63
	i. Form 7	40-47
	ii. Approved makes of various items	48
	iii. Abstract of cost	49
	iv. Schedule of Quantities	50-61
	v. Milestone	62-63
14.	Part-B General/Specific Conditions, Specifications	64-93
	i. General/Specific Conditions	65-79
	ii. Specifications	80-89
	iii. Format for Guarantee Bond	90-92
	iv. Format of Indemnity bond	93
15.	Financial Bid for quoting rates	94



PART-I

CHANDIGARH HOUSING BOARD

PRESS NOTICE

(To be issued for Publication in Newspapers)

Notice Inviting e-Tenders

Executive Engineer-V (Elect.) on behalf of Chairman, Chandigarh Housing Board invites sealed Percentage rate Tenders through e-Procurement process from the Agencies/ Firms Contractors / Tenderers enlisted in the **UT Engineering Department/Municipal Corporation Chandigarh/ CPWD / MES / Punjab PWD/ Haryana PWD / Himachal PWD / other State Government Departments, Board/Corporations and public Sector Undertakings** enlisted for specialized works of Fire Fighting System for the work of Upgradation of existing Fire Fighting System in Chandigarh Housing Board Office Building Block 'A' & 'C' in Sector 9-D, Chandigarh

Estimated Cost :- Rs. 35,23,806/- Earnest Money:- Rs.70,500/-, Period of Completion:- 04 Months, Last date of submission of bid online is 13/07/2021, Last date of physical submission of bid & date of opening bid is 16/07/2021.

Time and Date of Pre-bid meeting at 11:00 AM on 05/07/2021

For detail Milestone dates of Electronic Tendering are given at the website <http://etenders.chd.nic.in/nicgep>

Detail Regarding Tendering Process

Name of work	Upgradation of existing Fire Fighting System in Chandigarh Housing Board Office Building Block 'A' & 'C' in Sector 9-D, Chandigarh.	
Estimated composite cost (Rs. In Lakh)	Total Cost: Rs.35.24 Lakh	
Period of Contact	4 Months	
Name of the Employer	Chandigarh Housing Board	
Address of the Employer	8 Jan Marg, Sector 9 D Chandigarh	
Mode	E-Tendering	
Website	https://etenders.chd.nic.in/nicgep/app	
Document Fee (Non Refundable)	<p>Rs. 1180/- (non-refundable/non adjustable) inclusive of GST to be submitted on line through e-tendering portal i.e. https://etenders.chd.nic.in</p> <p>Bidder can submit their bid only after depositing online.</p> <p>The payment may be deposited by bank to bank transfer using SBI MOPS or RTGS/NEFT transfer through https://etenders.chd.nic.in portal.</p> <p><i>The bidder must upload the copy of UTR No/ Transaction slip on the web site. The hard copy shall be placed in Envelop 'A'.</i></p>	
Milestone Dates		
Downloading of e-tender document	Start date:	01.07.2021 at 1000 Hrs
	End date:	13.07.2021 at 1700 Hrs
Clarification regarding plans specifications schedule of quantities & set of terms	Start date:	01.07.2021 at 1000 Hrs
	End date:	13.07.2021 at 1000 Hrs
Pre-bid meeting to be held on	05-07.2021 at 1100 Hrs	
Date of submission of e-tender	Start date:	07.07.2021 at 1000 Hrs
	End date:	13.07.2021 at 1700 Hrs
Physical submission of Tender including EMD, Tender Document Fee, Documents required for eligibility & other necessary documents.	Start date:	13.07.2021 at 1000 Hrs
	End date:	16.07.2021 at 1530 Hrs

Opening of technical bid (Online)	16.07.2021 at 1600 Hrs
Opening of price bid (Online)	To be intimated to all eligible Bidders separately
Bid validity period	Seventy Five (75) days from the last day of receipt of Technical Bid.
Earnest Money Deposit	<p>The EMD required for placing the e-bid shall be Rs. 70,500/- to be submitted on line through e-tendering portal i.e. https://etenders.chd.nic.in</p> <p>Bidder can submit their bid only after depositing EMD online.</p> <p>The payment may be deposited by bank-to-bank transfer using SBI MOPS or RTGS/NEFT transfer through https://etenders.chd.nic.in portal</p> <p>The amount of EMD is refundable and adjustable.</p> <p>The EMD shall be refunded online to the bidder account in case of all unsuccessful e-bids, provided it is not forfeited.</p> <p>The bidder must upload the copy of UTR No/ Transaction slip on the web site. The hard copy shall be placed in Envelop 'A'.</p>
Proformance Security	<p>The bidder, whose tender has been accepted, will be required to furnish 'Performance Guarantee' of 3% (Three percent) of the tendered amount within the period specified in Schedule 'F'. This guarantee shall be in form of cash (in case guarantee amount is less than Rs.10000/-) or Deposit at call Receipt of any scheduled bank/ Banker's Cheque of any scheduled Bank/ Demand draft of any scheduled bank/ Pay Order of any scheduled bank (in case guarantee amount is less than Rs.100000/-) or Govt. security or fixed deposit receipt or Guarantee Bonds of any scheduled bank or State Bank of India in accordance with the prescribed form. In case the contractor fails to deposit the said performance guarantee within the period as indicated in Schedule 'F', including the extended period if any, the Earnest Money deposited by the contractor shall be forfeited automatically without any notice to the contractor.</p>

EE-V (Elect.)

LIST OF DOCUMENT TO BE UPLOADED BY THE BIDDERS

1.	Fee
	i) EMD
	ii) Document Fee
	iii) Check List
2.	Post Qualification /Technical
	i. Form 'A' Letter of Transmittal as per attached proforma in Section-II.
	ii. Form 'B' Similar works during the last seven years
	iii. Form 'C' Performance Report of works given in Form 'B'.
	iv. Affidavit as per Annexure-I regarding no criminal proceedings and confirmation that eligible similar works have not been got executed on back to back basis
	v. Certificate of Registration under GST and acknowledgement of up to date filed return
	vi. Copy of PAN
	vii. Certificate of registration with EPFO, ESIC and labour license
	viii. Declaration of the integrity Agreement Annexure IV, IV-A & IV-B
	ix. Any other document as specified in the bid document.
3.	Finance
	Financial Bid

NOTE: - Hard copies of the documents except Financial Bid listed at Sr. No.3 above shall be submitted by the bidders.

[Signature]
EE-V (Elect.)

CHECK LIST TO ACCOMPANY THE 'ELIGIBILITY DOCUMENTS'

S. No.	Description	Remarks
1.	Whether the Earnest Money as per the Press Notice has been attached?	Yes / No
2.	Whether the cost of Document as per the Press Notice has been appended?	Yes / No
3.	Whether definite proof from appropriate authority of having satisfactorily completed similar works during the last seven years ending last day of the month previous to the one in which tender is invited has been attached?	Yes / No
4.	Whether the Form 'A' Letter of Transmittal as per attached proforma in Section-II has been submitted?	Yes / No
5.	Whether the Form 'B' – Details of similar works completed during last 7 years has been submitted?	Yes / No
6.	Whether the Form 'C' – Performance Report of works referred to in Form-B has been submitted?	Yes / No
7.	Whether the Affidavit as per Annexure-I have been submitted?	Yes / No
8.	Whether the Power of Attorney as per Annexure-II has been submitted?	Yes / No
9.	Whether any additional condition in tender has been quoted?	Yes / No
10.	Whether the Scanned copies of self attested documents related to E.M.D., cost of Document & other eligibility document has been uploaded along with the Bid?	Yes / No
11.	Whether all the statements, documents, certificates, uploaded owning responsibility for their correctness/ authenticity have been signed?	Yes / No
12.	Whether the certificate of registration of GST with UT, Chandigarh & acknowledgement of filed GST returns have been submitted/ Uploaded?	Yes/ No
13.	Whether the Copy of PAN has been submitted/ Uploaded?	Yes / No
14.	Whether the Certificate of registration with EPFO, ESIC and labour license has been submitted/ Uploaded?	Yes / No

DECLARATION

1. I/We _____ have carefully gone through all the conditions mentioned in the Bid Document and solemnly declare and affirm that I/we will abide by any penal action of CHB for disqualification or of black listing or determination of contract or any other action as deemed fit, taken by, the Department against me/us, in the event of any of the contents of our this application, the statements, documents, and certificates produced by me/us have been found/declared to be false/fabricated without any liability on CHB.

2. I/We hereby further declare that the Tender has been completed and submitted by us in the manner prescribed in the document and consider myself/ourselves eligible and in possession of all the documents required.

3. I/We hereby also declare that, I/We have not been blacklisted/ debarred/ Suspended/ demoted by any department of Chandigarh Administration or in of any state/Union Territory of the Republic of India for any reasons what so ever.

Date

Signature of the Bidder (s)
(Full name in capitals)
Designation

**CHANDIGARH HOUSING BOARD
NOTICE INVITING TENDER**

(To be uploaded on website as Press Notice also)

1. Executive Engineer-V (Elect.) on behalf of Chairman, Chandigarh Housing Board ¹²⁻invites sealed Percentage rate Tenders through e-Procurement process from the Agencies/ Firms Contractors / Tenderers enlisted in the UT Engineering Department/Municipal Corporation Chandigarh/ CPWD / MES / Punjab PWD/ Haryana PWD / Himachal PWD / other State Government Departments, Board/Corporations and public Sector Undertakings enlisted for specialized works of Fire Fighting System for the work of Upgradation of existing Fire Fighting System in Chandigarh Housing Board Office Building Block 'A' & 'C' in Sector 9-D, Chandigarh for the following work:

Name of work and location.	Estimated cost put to Bid (in Lakh)	Earnest Money	Document Fee	Period of completion	Last date & time of submission of Bid, copy of receipt of deposition of original EMD & other documents as specified in the NIT	Time & date of opening of Technical Bid.
Upgradation of existing Fire Fighting System in Chandigarh Housing Board Office Building Block 'A' & 'C' in Sector 9-D, Chandigarh	Rs. 35.24	Rs. 70,500/-	Rs. 1180/-	04 Months	16.07.2021	16.07.2021

*Website for detail of Milestones dates of Electronic Tendering please refer <http://etenders.chd.nic.in/nicgep>

Initial criteria for Eligibility for tender.

1.2 Applicants who fulfill the following requirements shall only be eligible to apply.

- Should have valid Enlistment certificate issued by any one of the above specified departments.
- Should have satisfactorily completed similar works during the last seven years ending last day of the month previous to the one in which tender is invited.

Three similar works each costing not less than Rs.14.10 Lakh or two similar works each of costing not less than Rs.21.15 Lakh or one similar work of costing not less than Rs. 28.20 Lakh

Similar work shall mean " Providing Fire Fighting System "

Components of work executed other than those included in definition of similar work shall be deducted while calculating cost of similar work. Bidder shall submit abstract of cost of work in support of this.

The value of executed works shall be brought to current costing level by enhancing the actual value of work at simple rate of 7% per annum; calculated from the date of completion to the last date of submission of bid.

- c) Firm(s)/Contractors against whom any criminal proceedings are pending in any court of law relating to any project executed by the firm, shall not be considered for post-qualification.

To become eligible, for e-tendering, the tenderer shall have to furnish an affidavit as per Annexure-I.

- d) GST registration Certificate is to be obtained by the bidder.

If the bidder has not obtained GST registration as applicable then he shall scan and upload following undertaking along with other bid documents.

"If work is awarded to me, I/we shall obtain GST registration Certificate as applicable within one month from the date of receipt of award letter or before release of any payment by CHB, whichever is earlier, failing which I/We shall be responsible for any delay in payments which will be due towards me/us on a/c of the work executed and/or for any action taken by CHB or GST department in this regard.

Note: All the documents shall be duly attested & counter signed by the Bidders.

2. Agreement shall be drawn with the successful Tenderer on the prescribed Format of CPWD Form 7/8, which is available for sale in the market. Tenderers shall quote their rates as per various terms and conditions of the said form which will form part of the agreement. However the definitions contained therein with regard to CPWD Department and other designated authorities may be read as under:-

As per General Conditions of Contract for Central P.W.D Works	To be read as
CPWD	CHB
President of India	Chairman, CHB
Govt. of India	Chandigarh Housing Board
Director General	Chairman, CHB
Additional Director General	Chief Executive Officer, CHB
Department	Chandigarh Housing Board

3. The time allowed for carrying out the work will be 4 Months from the date of start as defined in Schedule 'F' of Financial Bid in Part-III of this document or from the first day of handing over of the site, whichever is later in accordance with the phasing, if any, indicated in the Tender

Document. In case of non-handing over of any part of site, the extension in time limit for the proportional delay shall be allowed as per the agreement.

4. The Site for the work is available.
5.
 - i) Bid document consisting of plans, specifications, the schedule of quantities of the various classes of work to be done and the set of terms and conditions of the contract to be complied with by the Contractor whose bid may be accepted and other necessary documents, can be seen in the office of the Executive Engineer-V (Elect.) between 11.00 AM & 3.00 PM from 01.07.2021 to 13.07.2021 everyday except on Saturdays, Sundays and Public Holidays.
 - ii) Bid document excluding 'General Condition of Contract for Central PWD Works' (available in market for sale) for this work contract, can be downloaded from Chandigarh Administration web site <http://chandigarh.gov.in>. Bid document shall not be available on Chandigarh Administration website after the stipulated date & time for downloading.

The cost of Tender document i.e. Rs. 1180/- will have to be deposited as mentioned in detail regarding tendering process. The hard copy shall be placed in Envelop 'A'.

- iii) Earnest money amount will have to be deposited as mentioned in detail regarding tendering process in shape as prescribed shall also be placed in Envelop 'A' along with Check List.
6.
 - (a) Downloading and submission of Tender including Financial Bid will be done by e-Procurement process through the web site of Chandigarh Administration web site: <http://etenders.chd.nic.in/nicgep>
The agency shall upload Scanned copy of documents (duly attested and counter signed by agency) related to Earnest Money Deposit, Cost of Tender Document and 'Eligibility Documents'.
 - (b) Hard copies of the complete e-Tender i. e. 'Eligibility Documents' (except 'Financial Bid') are also to be submitted in sealed 'Envelopes B' duly labeled 'Name of Work', 'Name of Agency' and last date of submission of tender. Envelop 'A' and Envelop 'B' shall be submitted together in another sealed Envelop 'C' labeled with 'Name of Work', 'Name of Agency' and last date of submission of tender.

Envelop 'C' as mentioned above must be submitted to the Superintendent(Admn.), in Room Number-39, upto 3.30 PM at CHB Block 'A' Chandigarh with in four working days i.e. by 16.07.2021 from the last date of submission of Online e-Tender mentioned above. Failure to furnish the said original documents will entail rejection of Bid.

Any Tender submitted through e- Procurement process but without physical submission of document mentioned above and without the acknowledgement of Superintendent (Admn.) will be treated as invalid and shall be rejected without opening. There will not be any

liability on CHB on this account.

- (c) Before proceeding further with the e-Procurement process, the envelope 'A' containing earnest money, cost of document & check list shall be opened first and Envelop 'B' containing 'Eligibility Document' of those agencies whose earnest money & cost of document found in order shall be opened in the office of EE-V (Elect.), CHB by the committee on the 16.07 2021 at 4.00 P.M.
- i) Pre-Bid Conference shall be held on the date mentioned in Detail Rergarding Tendering Process in the CHB Board Room in Block-'C', CHB Office Building Complex at 8 Jan Marg, Sector 9, Chandigarh.
- ii) The department reserves the right to reject any or all the prospective applications without assigning any reason and/or to restrict the list of qualified contractors to any number as deemed suitable by it, if too many bids satisfying the laid down criteria have been received.
7. The bidder, whose tender has been accepted, will be required to furnish 'Performance Guarantee' of 3% (Three percent) as mentioned in Detail Rergarding Tendering Process.

This guarantee shall be in form of cash (in case guarantee amount is less than Rs.10000/-) or Deposit at call Receipt of any scheduled bank/ Banker's Cheque of any scheduled Bank/ Demand draft of any scheduled bank/ Pay Order of any scheduled bank (in case guarantee amount is less than Rs. 100000/-) or Govt. security or fixed deposit receipt or Guarantee Bonds of any scheduled bank or State Bank of India in accordance with the prescribed form. In case the contractor fails to deposit the said performance guarantee within the period including the extended period if any, the Earnest Money deposited by the contractor shall be forfeited automatically without any notice to the contractor.

The contractor whose bid is accepted will also be required to furnish either copy of applicable licenses/registrations or proof of applying for obtaining labour licenses, registration with EPFO, ESIC and BOCW (Building & Other Construction Workers) Welfare Board and Programme chart (Time and Progress) within the period specified in Schedule F.

8. The description of the work is as follows:

Upgradation of existing Fire Fighting System in Chandigarh Housing Board Office Building Block 'A' & 'C' in Sector 9-D, Chandigarh

Copies of other drawings and documents pertaining to the works will be opened for inspection by the Tenderers at the office of the concerned EE of CHB. Tenderers are also advised to carefully inspect and examine the site and its surroundings and satisfy themselves, before submitting their tenders, as to the nature of the ground and sub-soil (so far as is practicable), the form and nature of the site, the means of access to the site, the accommodation they may require and in general shall themselves obtain all necessary information as to risks, contingencies and other circumstances which may influence or affect their tender. A tenderer shall be deemed to have full knowledge of the site whether he inspects it or not. CHB will not accept any liability arising later on consequent to any misunderstanding or otherwise on the part of the tenderer. The tenderer shall be responsible for arranging and maintaining, at his own cost all materials, tools & plants, water, electricity access, facilities for workers and all other services required for execution of

the work unless otherwise specifically provided for in the contract document. Submission of a tender by a tenderer implies that he has read this notice and all other contract documents and has made himself aware of the scope and specifications of the work to be done and of conditions and rates at which stores, tools and plant, etc. if any are issued to him by the CHB and local conditions and other factors having a bearing on the execution of the work.

9. The competent authority on behalf of the Chairman, CHB does not bind itself to accept the lowest or any other tender and reserves to itself the authority to reject any or all the tenders received without assigning any reason. **All tenders in which any of the prescribed condition is not fulfilled or any condition including that of conditional rebate is put forth by the tenderer, the same shall be summarily rejected.**
10. Canvassing whether directly or indirectly, in connection with tenders is strictly prohibited and the tenders submitted by the contractors who resort to canvassing will be liable for rejection.
11. The competent authority on behalf of the Chairman, Chandigarh Housing Board reserves with 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. The contractor shall not be permitted to tender for works in the CHB. (responsible for award and execution of contracts) in which his near relative is posted as Divisional Accountant or as an 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 the Chandigarh Housing Board. Any breach of this condition by the contractor would render him liable to be removed from the approved list of contractors of this Department.
13. No Engineer of Gazetted rank or other Gazetted officer employed in the Engineering or Administrative duties in an Engineering Department of the Government of India is allowed to work as a contractor for a period of one year after his retirement from Government service, without the previous permission of the Chairman, CHB in writing. This contract is liable to be cancelled if either the contractor or any of his employees is found at any time to be such a person who had not obtained the permission of the Chairman, CHB as aforesaid before submission of the tender or engagement in the contractor's service.
14. The tenders for the work shall remain open for acceptance for a period of **Seventy Five (75) days** from the last day of receipt of Technical Bid. If any tenderer withdraws his tender before the said period or issue of letter of acceptance, whichever is earlier, or makes any modifications in the terms and conditions of the tender which are not acceptable to the department, then the Chairman, CHB shall, without prejudice to any other right or remedy, be at liberty to forfeit 50% of the said earnest money as aforesaid. Further the tenderer shall not be allowed to participate in the re-tendering process of the work.
15. This '**Bid Document**' shall form a part of the contract document. The successful tenderer/Bidder/contractor, on acceptance of his tender by the Accepting Authority, shall, within 15 days from the stipulated date of start of the work, sign the contract consisting of:
 - a) The Notice Inviting Tender, all the documents including additional conditions, specifications and drawings, if any, forming part of the tender as up loaded at the time of invitation of tender and the rates quoted on line at the time of submission

- of the Bid and acceptance thereof together with any correspondence leading there to.
- b) General condition of contract for Central PWD works 2020, tender form of CPWD 7/8 as amended from time to time.
16. In case any discrepancy is noticed between the documents as uploaded at the time of submission of the bid online and hard copies as submitted physically in the office of Executive Engineer, then the bid submitted shall become invalid and the Government shall, without prejudice to any other right or remedy, be at liberty to forfeit 50% of the said earnest money as aforesaid. Further the tenderer shall not be allowed to participate in the re-tendering process of the work.
 17. Any incorrectness / deviation if noticed in the documents submitted by the agency, the same shall be viewed seriously and apart from cancellation of the work/tender, forfeiture of EMD, Criminal action will be initiated including suspension of business.
 18. The tenderer is liable to be blacklisted and the EMD forfeited if he has been found to have misled or has furnished false information in the forms/ statements / certificates submitted by him as proof in support of qualification requirements or record of performance such as abandoning of work not properly completed in earlier contracts, inordinate delays in completion of the works etc. etc.
 19. Any contractor offering lower rates after the opening of tenders shall be liable to be black-listed.
 20. All disputes concerning in any way with this work are subject to Chandigarh jurisdiction only.
 21. Before the last date for submission of Tenders, the Tender Inviting Officer may modify any of the Contents of the Tender Notice, Tender documents by issuing amendment / Addendum.
 22. Any addendum/amendments issued by the Tender Inviting Officer shall be part of the Tender Document.
 23. To give prospective Tenderer reasonable time to take an addendum into account in preparing their bids, the Tender Inviting Officer may extend if necessary, the last date for submission of tenders.
 24. The Executive Engineer will evaluate whether each Tenderer is satisfying the eligibility criteria prescribed in the tender document and declares them as a qualified Tenderer and selected for next stage of opening of Price Bid.
 25. If the technical bid of a Bidder is not satisfying any of the eligibility criteria it will be rejected by the Executive Engineer.
 26. If any alteration is made by the Bidder in the Bid documents, the conditions of the contract, the drawings, specifications or statements / formats or quantities the tender will be rejected.
 27. Bidder shall be scrutinized in accordance with the conditions stipulated in the Tender document. In case of any discrepancy of non-adherence Conditions the Tender accepting authority shall communicate the same which will be binding both on the tender Opening authority and the tenderer. In case of any ambiguity, the decision taken by the Tender

Accepting Authority on tenders shall be final:

28. The Executive Engineer will evaluate and compare the price bids of all the qualified Tenderer.
29. The Bidder is advised to attach any additional information, which he thinks to be necessary in regard to his capabilities. No further information will be entertained after submission of application unless it is called for by the Board. The Board reserves the right to call for additional information & clarification of information submitted by the Tenderer.
30. The cost incurred by the Bidder in preparing this application, in providing clarifications or attending discussions/ conferences in connection with this document shall be borne by the Tenderer and the Board in no case will be responsible or liable for these costs, regardless of the conduct or out come of the process.
31. While execution of the work, if found that the contractor had produced false/ fake certificates of experience he will be black listed and the contract will be terminated.
32. The department reserves the right to reject any prospective application without assigning any reason.

Executive Engineer-V (Elect.),
Chandigarh Housing Board
Chandigarh

PART-II

**DOCUMENT RELATED
TO
ELIGIBILITY CRITERIA
AND
OTHER RELATED DOCUMENTS**



SECTION – I

INFORMATION & INSTRUCTIONS FOR BIDDERS

SECTION – I
INFORMATION & INSTRUCTIONS FOR BIDDERS

1.0 GENERAL:

- 1.1 Letter of transmittal and forms for deciding eligibility are given in Section III.
- 1.2 All information called for in the enclosed forms should be furnished against the relevant columns in the forms. If for any reason, information is furnished on a separate sheet, this fact should be mentioned against the relevant column. Even if no information is to be provided in a column, a "nil" or "no such case" entry should be made in that column. If any particular / query is not applicable in case of the Bidder, it should be stated as "Not Applicable". The Bidders are cautioned that not giving complete information called for in the application forms or not giving it in clear terms or making any change in the prescribed forms or deliberately suppressing the information may result in the applicant being summarily disqualified. Bids made by telegram or telex and those received late will not be entertained.
- 1.3 **The physical form of 'Eligibility Documents' should be scanned before uploading and duly self attested.**
- 1.4 Overwriting should be avoided. Correction, if any, should be made by neatly crossing out, initialing, dating and rewriting. Pages of the Post-qualification document are numbered. Additional sheets, if any added by the contractor, should also be numbered by him. They should be submitted as a package with signed letter of transmittal.
- 1.5 References, information and certificates from the respective clients certifying suitability, technical know-how or capability of the applicant should be signed by an officer not below the rank of Executive Engineer or equivalent.
- 1.6 The Bidder may furnish any additional information which he thinks is necessary to establish his capabilities to successfully complete the envisaged work. He is, however, advised not to furnish superfluous information. No information shall be entertained after submission of post-qualification document unless it is called for by the Employer.
- 1.7 The tenderer is liable to be blacklisted and the EMD forfeited if he has been found to have misled or has furnished false information in the forms / statements / certificates submitted by him as proof in support of qualification requirements or record of performance such as abandoning of work not properly completed in earlier contracts, inordinate delays in completion of the works etc.
- 1.8 All dispute concerning in any way are subject to Chandigarh Jurisdiction only.
- 1.9 The Board is under no obligation to inform the contractor of the reasons of their selection or rejection. Employer's decision in this regard shall be final and binding.
- 1.10 If at any stage, it is found that the tenderer has misled or has furnished false

information in the forms / statements / certificates submitted by him as proof in support of qualification requirements or record of performance such as abandoning of work not properly completed in earlier contracts, inordinate delays in completion of the works, the tenderer is liable to be blacklisted & debarred from tendering in CHB and the EMD forfeited, Further, if this Contract has been awarded, the same shall be rescinded including forfeiture of EMD and Performance Guarantee.

2.0 DEFINITIONS:

In this document the following words and expressions have the meaning hereby assigned to them:

- EMPLOYER means the Chairman, Chandigarh Housing Board, acting through the Executive Engineer.
- BIDDER/TENDERER/FIRM/AGENCY/CONTRACTOR/APPLICANT means the individual, proprietary firm, firm in partnership, limited company private or public or corporation or Joint Venture Company.
- "Year" means "Financial Year" unless stated otherwise.
- CHB/ Board means "Chandigarh Housing Board"

3.0 METHOD OF APPLICATION:

- 3.1 If the Bidder is an individual, the application shall be signed by him above his full typewritten name and current address.
- 3.2 If the Bidder is a proprietary firm, the application shall be signed by the proprietor above his full typewritten name and the full name of his firm with its current address.
- 3.3 If the Bidder is a firm in partnership, the application shall be signed by all the partners of the firm above their full typewritten names and current addresses or alternatively by a partner holding power of attorney for the firm. In the latter case, a certified copy of the power of attorney should accompany the application. In both cases a certified copy of the partnership deed and current address of all the partners of the firm should accompany the application.
- 3.4 If the Bidder is a limited company or a corporation, the application shall be signed by a duly authorised person holding power of attorney for signing the application accompanied by a copy of the power of attorney. The Bidder should also furnish a copy of the Memorandum of Articles of Association duly attested by a Public Notary.

4.0 FINAL DECISION MAKING AUTHORITY.

The CHB reserves the right to accept or reject any Bid and to annul the post-qualification process and reject all Bids at any time, without assigning any reason or incurring any liability to the Bidders.

5.0 PARTICULARS PROVISIONAL

The particulars of the work given in Section-I are provisional. They are liable to change and must be considered only as advance information to assist the Bidder.

6.0 SITE VISIT

The Bidder is advised to visit the site of work, at his own cost, and examine it and its surroundings to make himself aware of all information that he considers necessary for proper assessment of the prospective assignment.

7.0 EVALUATION CRITERIA

7.1 The details submitted by the Bidders will be evaluated in the following manner :

7.1.1 The initial criteria prescribed in Part-I, Para 1.2 above in respect of experience of similar class of works completed, Valid Enlistment Certificate etc. will first be scrutinized and the bidder's eligibility for the work be determined.

7.2 Even though any Bidder may satisfy the above requirements, he would be liable to disqualification if he has:

- a) Made misleading or false representation or deliberately suppressed the information in the forms, statements and enclosures required in the eligibility criteria document.
- b) Record of poor performance such as abandoning work, not properly completing the contract, or financial failures/ weaknesses etc.

8.0 LETTER OF TRANSMITTAL

The Bidder should submit the letter of transmittal attached with document.

9.0 OPENING OF PRICE BID

After evaluation of applicants, a list of short listed agencies will be prepared. Thereafter the financial bids of only the qualified and technically accepted bidders shall be opened at the notified time, date and place in the presence of the qualified bidders or their representative. The validity of the tenders shall be reckoned Seventy Five (75) days from the last day of receipt of technical bid.

10.0 AWARD CRITERIA

10.1 The employer reserves the right, without being liable for any damages or obligation to inform the bidder, to:

- a) Amend the scope and value of contract to the bidder.
- b) Reject any or all of the applications without assigning any reason.

10.2 Any effort on the part of the bidder or his agent to exercise influence or to pressurize the employer would result in rejection of his bid. Canvassing of any kind is prohibited.



SECTION - II

INFORMATION REGARDING ELIGIBILITY

Form-A

LETTER OF TRANSMITTAL

From:

To

Executive Engineer-V (Elect.),
Chandigarh Housing Board,
Chandigarh.

Sub: Submission of Bid for the work of Upgradation of existing Fire Fighting System in Chandigarh Housing Board Office Building Block 'A' & 'C' in Sector 9-D, Chandigarh.

Sir/Madam

Having examined the details given in **Press Notice** and **Bid document** for the above work, I / we hereby submit the documents relevant information.

1. I / we hereby certify that all the statements made and information supplied in the enclosed **Forms B to C** and accompanying statement are true and correct.
2. I / we have furnished all information and details necessary for post-qualification eligibility and have no further pertinent information to supply.
3. I / We submit the Following certificates in support of our suitability, technical know how and capability for having successfully completed the following eligible similar works:-

Sr. No.	Name of work/Project and location	Certificate from
1		
2		
3		

Certificate:-

It is certified that the information given in the enclosed eligibility bids are correct. It is also certified that I/we shall be liable to be debarred, disqualified/ cancellation of enlistment in case of any information furnished by me /us found to be incorrect.

Enclosures:

Seal of bidder

Date of submission

SIGNATURE(S) OF BIDDER(S)

FORM 'B'

Details of eligible similar natures of works completed during the last seven years ending last day of the month previous to the one in which tenders are invited.

S. No.	Name of work / project and location	Owner or sponsoring organisation	Cost of work in crores of rupees	Date of commencement as per contract	Stipulated date of completion	Actual date of completion	Litigation/ arbitration cases pending /in progress with details*	Name and address/ telephone number of officer to whom reference may be made
1	2	3	4	5	6	7	8.	9

*Indicate gross amount claimed and amount awarded by the Arbitrator. For details attached separate sheet.

SIGNATURE OF BIDDER(S)

EE-V (Elect.)

FORM 'C'

PERFORMANCE REPORT OF WORKS REFERRED TO IN FORM "B"

1.	Name of work/ Project & Location	
2.	Agreement No.	
3.	Estimated Cost	
4.	Tendered Cost	
	i. Allotted Amount	
	ii. Actual completed cost	
5.	Date of Start	
6.	Date of completion	
(i)	Stipulated date of completion	
(ii)	Actual date of completion.	
7.	a) Whether case of levy of compensation for delayed has been decided or not.	
	b) If decided, amount of compensation levied for delayed completion if any.	
8.	Performance Report	
	1) Quality of Work	Outstanding/Very Good/ Good / Poor
	2) Financial soundness	Outstanding/Very Good/ Good / Poor
	3) Technical Proficiency	Outstanding/Very Good/ Good / Poor
	4) Resourcefulness	Outstanding/Very Good/ Good / Poor
	5) General behavior	Outstanding/Very Good/ Good / Poor

Dated:

Executive Engineer or Equivalent

ANNEXURE-I

SPECIMEN PROFORMA FOR THE AFFIDAVIT TO BE SUBMITTED BY THE APPLICANT ALONGWITH OTHER DOCUMENTS.

(On Judicial Stamp paper duly attested by 1st class Magistrate or Notary Public)

I, _____ S/o Sh. _____ authorized representative of _____ with its office at _____ solemnly affirm and declare as under on behalf of the firm:-

1. I/We in the name and style of _____ had applied for the work **Upgradation of existing Fire Fighting System in Chandigarh Housing Board Office Building Block 'A' & 'C' in Sector 9-D, Chandigarh.**
2. The undersigned hereby certify that there is no criminal proceedings pending/ ongoing in any court of law regarding any construction project executed by me/us.
3. The undersigned hereby certify that all the documents and information submitted with the tender/Bid are 'True' & I/We stands fully responsible as per law for their genuineness and correctness.
4. I/we undertake and confirm that the eligible similar works has/have not been got executed through another contractor on back to back basis. Further that if such a violation comes to the notice of the department then I/we shall be debarred for tendering in CHB in future forever. Also if, such a violation comes to the notice of the department before the date of start of work then the CHB shall be free to forfeit the entire amount of Earnest Money Deposit/Performance Guarantee deposited.

Place: _____
Dated: _____

Authorized Signatory of
firm/Deponent

VERIFICATION:

I the above named signatory/deponent do hereby solemnly affirm & declare that the contents of this affidavit are true to the best of my knowledge & nothing has been concealed therein.

Place: _____
Dated: _____

Authorized Signatory of
firm/Deponent

ANNEXURE-II

FORMAT FOR POWER OF ATTORNEY- by all individual Applicants

(on judicial Stamp paper duly attested by First Class Magistrate/Notary)

Dated: _____

To whomsoever it may Concern

Know all men by these presents, we _____ (name and registered office address of the Applicant) do hereby constitute, appoint and authorize Mr. _____ (Name of the Person(s)), domiciled at _____ (Address), acting as _____ (Designation and the name of the firm), as Authorized Signatory and whose signature is attested below, as our attorney, to do in our name and on our behalf, all such acts, deeds and things necessary in connection with or incidental to our request for prequalification work of _____, including signing and submission of all documents and providing information and responses to clarifications/enquiries etc. as may be required by CHB and signing of agreement if awarded the said work.

We hereby agree to ratify all acts, deeds and things lawfully done by our said attorney pursuant to this Power of Attorney and that all acts, deeds and things done by our aforesaid attorney shall and shall always be deemed to have been done by us.

We hereby agree to ratify all acts, deeds and things lawfully done by our said attorney pursuant to this Power of Attorney and that all acts, deeds and things done by our aforesaid attorney shall and shall always be deemed to have been done by us.

For _____

(Signature)

(Name, Title and Address)

Accept

(Attested signature of Mr. _____)

(Name, Title and Address of the Attorney) _____

Notes:

- To be executed by the Applicant
- The mode of execution of the Power of Attorney should be in accordance with the procedure, if any, laid down by the applicable law and the charter documents of the executant(s) and when it is so required the same should be under common seal affixed in accordance with the required procedure.
- Also, wherever required, the executant(s) should submit for verification the extract of the charter documents and documents such as a resolution / power of attorney in favor of the Person executing this Power of Attorney for the delegation of power hereunder on behalf of the executant(s)

ANNEXURE-III

On non-judicial stamp paper of minimum Rs. 100
(Guarantee offered by Bank to CPWD in connection with the execution of contracts)
Form of Bank Guarantee for Earnest Money Deposit /Performance
Guarantee/Security Deposit/Mobilization Advance

1. Whereas the Executive Engineer _____ (name of division), on behalf of the Chairman, CHB (hereinafter called "The Government") has invited bids under _____ (NIT number) dated _____ for _____ (name of work) . The Government has further agreed to accept irrevocable Bank Guarantee for Rs. _____/- (Rupees _____ only) valid up to _____ (date)* _____ as **Earnest Money Deposit** from _____ (name and address of contractor) _____ (hereinafter called "the contractor") for compliance of his obligations in accordance with the terms and conditions of the said NIT.

OR**

Whereas the Executive Engineer _____ (name of division) CHB, Chandigarh on behalf of the Chairman, CHB (hereinafter called "The Government") has entered into an agreement bearing number with _____ (name and address of the contractor) _____ (hereinafter called "the Contractor") for execution of work _____ (name of work) _____ . The Government has further agreed to accept an irrevocable Bank Guarantee for Rs. _____/- (Rupees _____ only) valid up to _____ (date)* _____ as **Performance Guarantee/Security Deposit/Mobilization Advance** from the said Contractor for compliance of his obligations in accordance with the terms and conditions of the agreement.

2. We, _____ (indicate the name of the bank) _____ (herein after referred to as "the Bank"), hereby undertake to pay to the Government an amount not exceeding Rs. _____/- (Rupees _____ only) on demand by the Government within 10 days of the demand.
3. We, _____ (indicate the name of the Bank) _____ do here by undertake to pay the amount due and payable under this guarantee without any demur, merely on a demand from the Government stating that the amount claimed is required to meet the recoveries due or likely to be due from the said contractor. Any such demand made on the Bank shall be conclusive as regards the amount due and payable by the Bank under this Guarantee. However, our liability under this guarantee shall be restricted to an amount not exceeding Rs. _____/- (Rupees _____ only).
4. We, _____ (indicate the name of the Bank) _____, further undertake to pay the Government any money so demanded notwithstanding any dispute or disputes raised by the contractor in any suit or proceeding pending before any court or Tribunal, our liability under this Bank Guarantee being absolute and unequivocal. The payment so made by us under this Bank Guarantee shall be a valid discharge of our liability for payment there under and the contractor shall have no claim against us for making such payment.
5. We, _____ (indicate the name of the Bank) _____ further agree that the Government shall have the fullest liberty without our consent and without affecting in any manner our obligation here under to vary any of the terms and conditions of the said agreement or to extend time of performance by the said Contractor from time to time or to postpone for any time or from time to time any of the powers exercisable by the

Government against the said contractor and to forbear or enforce any of the terms and conditions relating to the said agreement and we shall not be relieved from our liability by reason of any such variation or extension being granted to the said contractor or for any forbearance, act of omission on the part of the Government or any indulgence by the Government to the said contractor or by any such matter or thing whatsoever which under the law relating to sureties would, but for this provision, have effect of so relieving us.

6. We, _____ (indicate the name of the Bank) _____ further agree that the Government at its option shall be entitled to enforce this Guarantee against the Bank as a principal debtor at the first instance without proceeding against the contractor and notwithstanding any security or other guarantee the Government may have in relation to the Contractor's liabilities.
7. This guarantee will not be discharged due to the change in the constitution of the Bank or the Contractor.
8. We, _____ (indicate the name of the Bank) _____, undertake not to revoke this guarantee except with the consent of the Government in writing.
9. This Bank Guarantee shall be valid up to _____, unless extended on demand by the Government. Notwithstanding anything mentioned above. Our liability against this guarantee is restricted to Rs. _____/- (Rupees _____ only) and unless a claim in writing is lodged with us within the date of expiry or extended date of expiry of this guarantee, all our liabilities under this guarantee shall stand discharged.

Date _____

Witnesses:

1. Signature _____
Name and address _____

Authorized signatory
Name
Designation
Staff code no.
Bank seal

2. Signature _____
Name and address _____

*Date to be worked out on the basis of validity period of 90 days where only financial bids are invited and 180 days for two/three bid system from the date of submission of tender.

** In paragraph 1, strike out the portion not applicable. Bank Guarantee will be made either for earnest money or for performance guarantee/Security deposit/mobilization advance, as the case may be.

ANNEXURE-IV

To,

The Bidder.....,

.....,
.....

Subject: NIT No. _____ for the work **Upgradation of existing Fire Fighting System in Chandigarh Housing Board Office Building Block 'A' & 'C' in Sector 9-D, Chandigarh.**

Dear Sir,

It is here by declared that CHB is committed to follow the principle of transparency, equity and competitiveness in public procurement.

The subject Notice Inviting Tender (NIT) is an invitation to offer made on the condition that the Bidder will sign the integrity Agreement, which is an integral part of tender/bid documents, failing which the tenderer/bidder will stand disqualified from the tendering process and the bid of the bidder would be summarily rejected.

This declaration shall form part and parcel of the Integrity Agreement and signing of the same shall be deemed as acceptance and signing of the Integrity Agreement on behalf of the CHB.

Yours faithfully

Executive Engineer

**ANNEXURE-IV-A
Integrity Pact**

To,
Executive Engineer-V (Elect.),
Chandigarh Housing Board
Chandigarh

Sub: Submission of Tender for the work **Upgradation of existing Fire Fighting System in Chandigarh Housing Board Office Building Block 'A' & 'C' in Sector 9-D, Chandigarh.**

Dear Sir,

I/We acknowledge that CHB is committed to follow the principles thereof as enumerated in the Integrity Agreement enclosed with the tender/bid document.

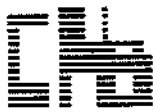
I/We agree that the Notice Inviting Tender (NIT) is an invitation to offer made on the condition that I/We will sign the enclosed integrity Agreement, which is an integral part of tender documents, failing which I/We will stand disqualified from the tendering process. I/We acknowledge that **THE MAKING OF THE BID SHALL BE REGARDED AS AN UNCONDITIONAL AND ABSOLUTE ACCEPTANCE** of this condition of the NIT.

I/We confirm acceptance and compliance with the Integrity Agreement in letter and spirit and further agree that execution of the said Integrity Agreement shall be separate and distinct from the main contract, which will come into existence when tender/bid is finally accepted by CHB. I/We acknowledge and accept the duration of the Integrity Agreement, which shall be in the line with Article 1 of the enclosed Integrity Agreement.

I/We acknowledge that in the event of my/our failure to sign and accept the Integrity Agreement, while submitting the tender/bid, CHB shall have unqualified, absolute and unfettered right to disqualify the tenderer/bidder and reject the tender/bid in accordance with terms and conditions of the tender/bid.

Yours faithfully

(Duly authorized signatory of the Bidder)



ANNEXURE-IV-B

To be signed by the bidder and same signatory competent/ authorised to sign the relevant contract on behalf of CHB.

INTEGRITY AGREEMENT

This Integrity Agreement is made at..... on this day of..... 20.....

BETWEEN

President of India represented through Executive Engineer,

Chandigarh Housing Board, Chandigarh, (Name of Division), (Hereinafter referred as the (Address of Division)

'Principal/Owner', which expression shall unless repugnant to the meaning or context hereof include its successors and permitted assigns)

AND

through (Name and Address of the Individual/firm/Company) (Hereinafter referred to as the (Details of duly authorized signatory) "Bidder/Contractor" and which expression shall unless repugnant to the meaning or context hereof include its successors and permitted assigns)

Preamble

WHEREAS the Principal / Owner has floated the Tender (NIT No.) (hereinafter referred to as "Tender/Bid") and intends to award, under laid down organizational procedure, contract for (Name of work) hereinafter referred to as the "Contract".

AND WHEREAS the Principal/Owner values full compliance with all relevant laws of the land, rules, regulations, economic use of resources and of fairness/transparency in its relation with its Bidder(s) and Contractor(s).

AND WHEREAS to meet the purpose aforesaid both the parties have agreed to enter into this Integrity Agreement (hereinafter referred to as "Integrity Pact" or "Pact"), the terms and conditions of which shall also be read as integral part and parcel of the Tender/Bid documents and Contract between the parties.

NOW, THEREFORE, in consideration of mutual covenants contained in this Pact, the parties hereby agree as follows and this Pact witnesses as under:

Article 1: Commitment of the Principal/Owner

- 1) The Principal/Owner commits itself to take all measures necessary to prevent corruption and to observe the following principles:
 - a. No employee of the Principal/Owner, personally or through any of his/her family members, will in connection with the Tender, or the execution of the Contract, demand, take a promise for or accept, for self or third person, any material or immaterial benefit which the person is not legally entitled to.

EE-V (Elect.)

b. The Principal/Owner will, during the Tender process, treat all Bidder(s) with equity and reason. The Principal/Owner will, in particular, before and during the Tender process, provide to all Bidder(s) the same information and will not provide to any Bidder(s) confidential / additional information through which the Bidder(s) could obtain an advantage in relation to the Tender process or the Contract execution.

c. The Principal/Owner shall endeavour to exclude from the Tender process any person, whose conduct in the past has been of biased nature.

- 2) If the Principal/Owner obtains information on the conduct of any of its employees which is a criminal offence under the Indian Penal code (IPC)/Prevention of Corruption Act, 1988 (PC Act) or is in violation of the principles herein mentioned or if there be a substantive suspicion in this regard, the Principal/Owner will inform the Chief Vigilance Officer and in addition can also initiate disciplinary actions as per its internal laid down policies and procedures.

Article 2: Commitment of the Bidder(s)/Contractor(s)

- 1) It is required that each Bidder/Contractor (including their respective officers, employees and agents) adhere to the highest ethical standards, and report to the Government / Department all suspected acts of fraud or corruption or Coercion or Collusion of which it has knowledge or becomes aware, during the tendering process and throughout the negotiation or award of a contract.
- 2) The Bidder(s)/Contractor(s) commits himself to take all measures necessary to prevent corruption. He commits himself to observe the following principles during his participation in the Tender process and during the Contract execution:
- The Bidder(s)/Contractor(s) will not, directly or through any other person or firm, offer, promise or give to any of the Principal/Owner's employees involved in the Tender process or execution of the Contract or to any third person any material or other benefit which he/she is not legally entitled to, in order to obtain in exchange any advantage of any kind whatsoever during the Tender process or during the execution of the Contract.
 - The Bidder(s)/Contractor(s) will not enter with other Bidder(s) into any undisclosed agreement or understanding, whether formal or informal. This applies in particular to prices, specifications, certifications, subsidiary contracts, submission or non-submission of bids or any other actions to restrict competitiveness or to cartelize in the bidding process.
 - The Bidder(s)/Contractor(s) will not commit any offence under the relevant IPC/PC Act. Further the Bidder(s)/Contractor(s) will not use improperly, (for the purpose of competition or personal gain), or pass on to others, any information or documents provided by the Principal/Owner as part of the business relationship, regarding plans, technical proposals and business details, including information contained or transmitted electronically.
 - The Bidder(s)/Contractor(s) of foreign origin shall disclose the names and addresses of agents/ representatives in India, if any. Similarly Bidder(s)/Contractor(s) of Indian

Nationality shall disclose names and addresses of foreign agents/representatives, if any. Either the Indian agent on behalf of the foreign principal or the foreign principal directly could bid in a tender but not both. Further, in cases where an agent participate in a tender on behalf of one manufacturer, he shall not be allowed to quote on behalf of another manufacturer along with the first manufacturer in a subsequent/parallel tender for the same item.

- e. The Bidder(s)/Contractor(s) will, when presenting his bid, disclose any and all payments he has made, is committed to or intends to make to agents, brokers or any other intermediaries in connection with the award of the Contract.
- 3) The Bidder(s)/Contractor(s) will not instigate third persons to commit offences outlined above or be an accessory to such offences.
 - 4) The Bidder(s)/Contractor(s) will not, directly or through any other person or firm indulge in fraudulent practice means a willful misrepresentation or omission of facts or submission of fake/forged documents in order to induce public official to act in reliance thereof, with the purpose of obtaining unjust advantage by or causing damage to justified interest of others and/or to influence the procurement process to the detriment of the Government interests.
 - 5) The Bidder(s)/Contractor(s) will not, directly or through any other person or firm use Coercive Practices (means the act of obtaining something, compelling an action or influencing a decision through intimidation, threat or the use of force directly or indirectly, where potential or actual injury may befall upon a person, his/ her reputation or property to influence their participation in the tendering process).

Article 3: Consequences of Breach

Without prejudice to any rights that may be available to the Principal/Owner under law or the Contract or its established policies and laid down procedures, the Principal/Owner shall have the following rights in case of breach of this Integrity Pact by the Bidder(s)/Contractor(s) and the Bidder/ Contractor accepts and undertakes to respect and uphold the Principal/Owner's absolute right:

- 1) If the Bidder(s)/Contractor(s), either before award or during execution of Contract has committed a transgression through a violation of Article 2 above or in any other form, such as to put his reliability or credibility in question, the Principal/Owner after giving 14 days notice to the contractor shall have powers to disqualify the Bidder(s)/Contractor(s) from the Tender process or terminate/determine the Contract, if already executed or exclude the Bidder/Contractor from future contract award processes. The imposition and duration of the exclusion will be determined by the severity of transgression and determined by the Principal/Owner. Such exclusion may be forever or for a limited period as decided by the Principal/Owner.
- 2) Forfeiture of EMD/Performance Guarantee/Security Deposit: If the Principal/Owner has disqualified the Bidder(s) from the Tender process prior to the award of the Contract or terminated/determined the Contract or has accrued the right to terminate/determine the Contract according to Article 3(1), the Principal/Owner apart from exercising any legal

rights that may have accrued to the Principal/Owner, may in its considered opinion forfeit the entire amount of Earnest Money Deposit, Performance Guarantee and Security Deposit of the Bidder/Contractor.

- 3) Criminal Liability: If the Principal/Owner obtains knowledge of conduct of a Bidder or Contractor, or of an employee or a representative or an associate of a Bidder or Contractor which constitutes corruption within the meaning of IPC Act, or if the Principal/Owner has substantive suspicion in this regard, the Principal/Owner will inform the same to law enforcing agencies for further investigation.

Article 4: Previous Transgression

- 1) The Bidder declares that no previous transgressions occurred in the last 5 years with any other Company in any country confirming to the anticorruption approach or with Central Government or State Government or any other Central/State Public Sector Enterprises in India that could justify his exclusion from the Tender process.
- 2) If the Bidder makes incorrect statement on this subject, he can be disqualified from the Tender process or action can be taken for banning of business dealings/ holiday listing of the Bidder/Contractor as deemed fit by the Principal/ Owner.
- 3) If the Bidder/Contractor can prove that he has resorted / recouped the damage caused by him and has installed a suitable corruption prevention system, the Principal/Owner may, at its own discretion, revoke the exclusion prematurely.

Article 5: Equal Treatment of all Bidders/Contractors/Subcontractors

- 1) The Bidder(s)/Contractor(s) undertake(s) to demand from all subcontractors a commitment in conformity with this Integrity Pact. The Bidder/Contractor shall be responsible for any violation(s) of the principles laid down in this agreement/Pact by any of its Subcontractors/sub-vendors.
- 2) The Principal/Owner will enter into Pacts on identical terms as this one with all Bidders and Contractors.
- 3) The Principal/Owner will disqualify Bidders, who do not submit, the duly signed Pact between the Principal/ Owner and the bidder, along with the Tender or violate its provisions at any stage of the Tender process, from the Tender process.

Article 6- Duration of the Pact

This Pact begins when both the parties have legally signed it. It expires for the Contractor/Vendor 12 months after the completion of work under the contract or till the continuation of defect liability period, whichever is more and for all other bidders, till the Contract has been awarded.

If any claim is made/lodged during the time, the same shall be binding and continue to be valid despite the lapse of this Pacts as specified above, unless it is discharged/determined by the Competent Authority, CPWD.

Article 7- Other Provisions

- 1) This Pact is subject to Indian Law, place of performance and jurisdiction is the Head quarters of the Division of the Principal/Owner, who has floated the Tender.
- 2) Changes and supplements need to be made in writing. Side agreements have not been made.
- 3) If the Contractor is a partnership or a consortium, this Pact must be signed by all the partners or by one or more partner holding power of attorney signed by all partners and consortium members. In case of a Company, the Pact must be signed by a representative duly authorized by board resolution.
- 4) Should one or several provisions of this Pact turn out to be invalid; the remainder of this Pact remains valid. In this case, the parties will strive to come to an agreement to their original intensions.
- 5) It is agreed term and condition that any dispute or difference arising between the parties with regard to the terms of this Integrity Agreement / Pact, any action taken by the Owner/Principal in accordance with this Integrity Agreement/ Pact or interpretation thereof shall not be subject to arbitration.

Article 8- LEGAL AND PRIOR RIGHTS

All rights and remedies of the parties hereto shall be in addition to all the other legal rights and remedies belonging to such parties under the Contract and/or law and the same shall be deemed to be cumulative and not alternative to such legal rights and remedies aforesaid. For the sake of brevity, both the Parties agree that this Integrity Pact will have precedence over the Tender/Contact documents with regard any of the provisions covered under this Integrity Pact.

IN WITNESS WHEREOF the parties have signed and executed this Integrity Pact at the place and date first above mentioned in the presence of following witnesses:

(For and on behalf of Principal/Owner)

(For and on behalf of Bidder/Contractor)

WITNESSES:

1


(signature, name and address)

2

(signature, name and address)

Place:

Dated :


EE-V (Elect.)

PART-III

FINANCIAL BID

**Special Conditions and other related documents for
submission of Financial Bid**



INSTRUCTIONS FOR CONTRACTORS

1. Tender to be witnessed at page No. 41 of Tender Documents.
2. The tender/ tenders containing conditions contrary to those specified in this document shall be summarily rejected.
3. In Schedule - 'A' appended to the Tender Documents, the Item rate must be filled both in words and figures. Accordingly, the overall quoted amount of the tender should be worked out.
4. The contractor(s) shall quote the rates keeping in mind, 'General Conditions of Contract of CPWD Works-2020' as amended from time to time, special contract conditions and particular specifications enshrined under the Bid Document etc.
5. The contractor(s) shall quote the rates keeping in mind, all taxes, GST, Excise duty, etc., etc.



PART- A

C.H.B.-C.P.W.D - 7

CHANDIGARH HOUSING BOARD

STATE	U.T., Chandigarh	CIRCLE	II
BRANCH	Electrical	DIVISION	V, CHB
ZONE	Chandigarh	SUB DIVISION

PERCENTAGE/ ITEM RATE TENDER & CONTRACTS FOR WORKS

A Tender for the work of **Upgradation of existing Fire Fighting System in Chandigarh Housing Board Office Building Block 'A' & 'C' in Sector 9-D, Chandigarh.**

- i. To be submitted by 1530.00 Hours on 16.07.2021 to Supdt. Admn., CHB.
- ii. To be opened in presence of tenderers who may be present at 1600 Hours on 16.07.2021 in the office of Executive Engineer-V (Elect.), Chandigarh Housing Board, Chandigarh.

Downloaded by _____ (contractor)

TENDER

I/We have read and examined the notice inviting tender, schedule, A, B, C, D, E & F. Specifications applicable, Drawings & Designs, General Rules and Directions, Conditions of Contract, clauses of contract, Special conditions, Schedule of Rate & other documents and Rules referred to in the conditions of contract and all other contents in the tender document for the work.

I/We hereby tender for the execution of the work specified for the Chairman, CHB within the time specified in Schedule 'F', viz., schedule of quantities and in accordance in all respects with the specifications, designs, drawings and instructions in writing referred to in Rule-1 of General Rules and Directions and in Clause 11 of the Conditions of contract and with such materials as are provided for, by, and in respects in accordance with, such conditions so far as applicable.

We agree to keep the tender open for Seventy five (75) days from the last day of receipt of technical bid and not to make any modifications in its terms and conditions.

A sum of Rs.70,500/- is hereby deposited by bank-to-bank transfer using SBI MOPS or RTGS/ NEFT transfer through [https:// etenders.chd.nic.in](https://etenders.chd.nic.in) portal. A copy of UTR No/ Transaction slip is scanned & uploaded. If I/we, fail furnish the prescribed performance guarantee within prescribed period, I/we agree that the said Chairman, CHB or his successors in office shall without prejudice to any other right or remedy, be at liberty to forfeit the said Earnest Money absolutely. Further, if I/we fail to commence work as specified, I/we agree that Chairman, CHB or the successors in office shall without prejudice to any other right or remedy available in law, be at liberty to forfeit the said Performance Guarantee absolutely, otherwise the said Performance Guarantee shall be a Guarantee to execute all the works referred to in the tender documents

upon the terms and conditions contained or referred to those in excess of that limit at the rates to be determined in accordance with the provision contained in Clause 12.2, 12.3 and 12.5 of the tender form.

Further, I/We agree that in case of forfeiture of Earnest Money or Performance Guarantee as aforesaid, I/We shall be debarred for participation in the re-tendering process of the work.

I/we undertake and confirm that the eligible similar works has/have not been got executed through another contractor on back to back basis. Further that if such a violation comes to the notice of the department then I/we shall be debarred for tendering in CHB in future forever. Also if, such a violation comes to the notice of the department before the date of start of work then the Engineer-in-charge shall be free to forfeit the entire amount of Earnest Money/ Performance Guarantee.

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

Signature of the contractor

Postal Address

Dated _____

Witness: _____

Address: _____

Occupation: _____

ACCEPTANCE

The above tender (as modified by you as provided in the letters mentioned hereunder) is accepted by me for and on behalf of the Chairman, Chandigarh Housing Board, for a sum of Rs. _____/- (Rs. _____)

The letters referred to below shall form part of this contract Agreement--

- a)
- b)
- c)

For & on behalf of the Chairman,
Chandigarh Housing Board
Chandigarh.

Signature

Dated

Designation

PROFORMA OF SCHEDULES

(Operative Schedules to be supplied separately to each of the intending tenderer)

SCHEDULE "A"		
Schedule of Quantities starts at		Page 50
SCHEDULE "D"		
Extra schedule for specific requirements/documents for the work if any:-		Nil
SCHEDULE "E"		
Reference to General Conditions of contract of 2020 with amendments upto date		
i)	Name of Work	Upgradation of existing Fire Fighting System in Chandigarh Housing Board Office Building Block 'A' & 'C' in Sector 9-D, Chandigarh.
ii)	Estimated cost of Work	Rs. 35,23,806/-
iii)	Earnest Money	Rs. 70,500/-
iv)	Performance Guarantee	3% of the tendered value
v)	Security Deposit	2.5% of tendered value
SCHEDULE "F"		
Reference to General Conditions of Contract		
GENERAL RULES AND DIRECTIONS		
Officers inviting tender :-		Executive Engineer-V (Elect.), Chandigarh Housing Board, Chandigarh.
Maximum percentage for quantity of items of work to be executed beyond which rates are to be determined in accordance with Clause 12.2, 12.3 & 12.5		Refer Clause-12.
Definitions		
2(v)	Engineer-in charge	Executive Engineer V (Elect.), Chandigarh Housing Board, Chandigarh.
2(viii)	Accepting Authority	Chandigarh Housing Board, Chandigarh.
2(x)	Percentage on cost of materials and labour to cover all overheads and profit	15 %
2(xi)	Standard Schedule of Rates	Delhi Schedule of Rates DSR (E&M)/ DSR- 2018 and DSR (Wet Riser and Sprinkler System) 2019

2(xii) Department	Chandigarh Housing Board, Chandigarh
2(xiii) Specifications	CPWD General specifications for Electrical Works Part VI (Fire Detection and Alarm system 2018, Part-V (Wet Riser and Sprinkler systems) 2006, CPWD General specifications for Electrical Works (Internal) 2013 and National Building Code 2016 and all relevant IS standards as specified in Tender Document.
9(ii) Standard CPWD Contract form	GCC 2020, CPWD form 7 as modified & corrected up to last date of receipt of tender.

Clause 1

- | | |
|---|---------|
| i) Time allowed for submission of Performance Guarantee, programme chart (Time and progress) and applicable labour licenses , registration with EPFO, ESIC and BOCW welfare board or proof of applying there offrom the date of issue of letter of acceptance | 7 Days |
| ii) Maximum allowable extension beyond the period provided in 'i.' above Maximum allowable extension with late fee @ 0.1% per day of Performance Guarantee amount beyond the period provided in (i) above | 15 days |

Clause 2

Authority for fixing compensation under clause-2	Superintending Engineer, CHB
--	------------------------------

Clause 2A

Whether Clause 2A shall be applicable	No
---------------------------------------	----

Clause 5

Authority for extending time and extension for delay and rescheduling of Mile stone. Shifting of date of start in case delay in handing over of site.	Executive Engineer
---	--------------------

Number of days from the date of issue of letter of acceptance for reckoning date of start	10 Days
---	---------

- | | |
|---|--|
| (i) Mile stone(s) | As per table of Milestone placed at Page No. 62-63 |
| (ii) Time allowed for execution of work | 04 Months |

Authority to decide:

- | | |
|--|--------------------|
| (i) Extension of time | Executive Engineer |
| (ii) Rescheduling of mile stones | Executive Engineer |
| (iii) Shifting of date of start in case of delay in handing over of site | Executive Engineer |

Clause 7

Gross work to be done together with net payment/ adjustment of advances for materials collected, if any, since the last such payment for being eligible to interim payment. Rs. 4.00 Lakh subject to one payment per month.

Clause 7A

Whether Clause 7A shall be applicable Clause 7A Yes
(No Running Account Bill shall be paid for the work till the applicable labour licenses, registration with EPFO, ESIC, whatever applicable is submitted by the contractor to the Engineer-in-Charge.)

Clause 10 A

List of testing equipments to be provided by the contractor at site lab.

Equipments for Testing of Materials & Concrete at Site Laboratory

All necessary equipment for conducting all necessary tests shall be provided at the site laboratory by the contractor at his own cost. The following minimum laboratory equipments shall be set up at site office laboratory:-

Sl. No.	Equipment	Numbers (Minimum)

Clause 10 B

- | | |
|---|----------------|
| Whether Clause 10 B (i) shall be Applicable | Applicable |
| Whether Clause 10 B (ii) shall be Applicable | Not applicable |
| Whether Clause 10 B (iii) shall be Applicable | Not applicable |

Clause 10 C

Component of labour expressed as percent of value of work Not applicable, Labour component taken in 10CC

Clause 10 CA

Not applicable

Clause 10 CC	Not Applicable
Clause 11	
Specification to be followed for execution of work.	CPWD Specifications with correction slips upto date.
Clause 12	
Authority to decide deviation upto 1.5 times of tendered amount.	Tender Approving authority.
Type of work	Original work
12.2 & 12.3	
Deviation Limit beyond which clauses 12.2 & 12.3 shall apply for Major Component i.e Building work.	100%
12.5	
i) Deviation Limit beyond which clauses 12.2 & 12.3 shall apply for foundation Work (except earth work)	100%
ii) Deviation limit for items in earth work sub head of DSR or related items	100%
Clause 16	
Competent authority for deciding reduced rates.	Supereintending Engineer, CHB
Clause 18	
List of mandatory machinery, Tools & Plants to be deployed by the contractor at site	Safety equipment/ instruments
Note: The above listed T&P can be modified as per site requirement and direction of Engineer-in-Charge.	
Clause 19	
Clause 19 C	Rs. 500/- penalty for each default
Clause 19 D	Rs. 500/- penalty for each default
Clause 19 G	Rs. 500/- penalty for each default
Clause 19 K	Rs. 500/- penalty for each default
Clause 25	
Constitution of Dispute Redressal Committee (DRC)	As prevailing in Board, presently headed by CEO, CHB
Clause 32	

Requirement of technical representative(s) and recovery rates							
Sr. No.	Minimum Qualification of Technical Representative	Discipline	Designation (Principal Technical / Technical representative)	Minimum Experience	Number	Rate at which recovery shall be made from the contractor in the event of not fulfilling provision of clause 32(i)	
						Figures Words	Figures Words
1.	Graduate Engineer		Principal Technical Representative (Project planning/Site/Billing Engineer)	2 Years	1	Rs. 15000	Rs. Fifteen thousand only
	Or Diploma Engineer			5 Years	1		
<p>Note: Technical staff for minor component/specified work will be employed by the agency at the time of execution of minor component/specified work</p> <p>Assistant Engineer retired from Government Services that are holding Diploma will be treated at par with Graduate Engineers.</p> <p>Diploma holder with minimum 10 year relevant experience with a reputed construction co. can be treated at par with Graduate Engineers for the purpose of such deployment subject to the condition that such diploma holders should not exceed 50% of requirement of degree engineers.</p> <p>Note: The contractor shall employ/ deploy on the Project, personnel having valid skill certificates issued by any Government Institution such as National Skill Development Corporation, or any constituent unit of Engineering Council of India or construction industry development council or any equivalent national/international institution.</p>							
Clause 34(i)							
Extent of GST payable by Contractor for Building and Construction works.			GST 12% Applicable. Any Increase/ decrease in the rate of GST as on the last date/ extended date of submission of tender will be adjusted accordingly				
Clause 38			Not required				

APPROVED MAKES OF VARIOUS ITEMS (WHEREVER PRESCRIBED) FOR USE UNDER THIS WORK



Sr. No.	Name of The Material	Make of The Material etc.
1.	Fire Pump	Kirloskar/ Matter and Platt/ Grundfos
2.	Fire Hose (RRL Hose)	Guards/ Superex/ Exflame/ Newage/ Life Guard
3.	Butterfly Valves	C&R/ Zoloto/ SKS
4.	Gate Valve	C&R/ Zoloto/ SKS
5.	Landing valve/ Internal Hydrant	Guards/ Superex/ Exflame/ Newage/ Life Guard
6.	M.S. Pipe	JINDAL/ TATA
7.	Pressure Gauge	H-GURU/ FEIBIG/ Emerald
8.	PVC Tank	SINTEX
9.	Hose Reel (Black)	Guards/ Superex/ Exflame/ Newage/ Life Guard
10.	Motor	ABB/ Siemens/ Kirloskar
11.	Fire Extinguisher	Guards/ Superex/ Exflame/ Newage/ Life Guard
12.	Swing Check Valves (NRV)	C&R/ Zoloto/ SKS
13.	Ball Valve	C&R/ Zoloto/ SKS
14.	Cables	Finolex/ Polycab/ RR Kabel/ KEI
15.	Sprinklers	Tyco/ HD/ G Tech

The Agency is required to get prior approval of Engineer-in-charge for the make of the material to be used in the work. In case of non-availability of material from these manufacturers, the Chief Engineer may allow use of alternative BIS approved manufacturer makes.

ABSTRACT OF COST

● Name of Work: - Upgradation of existing Fire Fighting System in Chandigarh Housing Board
Office Building Block 'A' & 'C' in Sector 9-D, Chandigarh

S. No.	DESCRIPTION	TOTAL AMOUNT (Rs.)
1	SUB HEAD - I - (DOWN COMER SYSTEM - PUMPING EQUIPMENTS)	174872.00
2	SUB HEAD - II - (HYDRANTS SYSTEM)	915961.00
3	SUB HEAD - III - (PIPING, VALVES AND ACCESSORIES)	1998008.00
4	SUB HEAD - IV - (FIRE EXTINGUISHERS)	164601.00
5	SUB HEAD - V - (MOTOR CONTROL PANELS)	55750.00
6	SUB HEAD - VI - (CABLE TRAY, CABLING AND EARTHING)	12635.00
7	SUBHEAD VII (FIRE ALARM SYSTEM)	201979.00
	TOTAL	3523806.00


Executive Engineer-V(Elect.),
Chandigarh Housing Board,
Chandigarh 

SCHEDULE OF QUANTITIES FOR WORK: UPGRADATION OF EXISTING FIRE FIGHTING SYSTEM IN CHANDIGARH HOUSING BOARD OFFICE BUILDING BLOCK 'A' & 'C' IN SECTOR 9-D, CHANDIGARH.

S. No.	Description of Item	Qty.	Unit	Rate (In Rs.)	Amount (In Rs.)
	SUB HEAD - I - (DOWN COMER SYSTEM - PUMPING EQUIPMENTS)				
1	Supplying, installation, testing and commissioning of electric driven terrace pump suitable for automatic operation and consisting of following, complete in all respects, as required: (Terrace Pump)				
	Horizontal type, multistage, centrifugal, split casing pump of cast iron body & bronze impeller with stainless steel shaft, mechanical confirming to IS : 1520				
	Suitable HP squirrel cage induction motor TEFC type suitable for operation on 415 volts, 3 phase, 50 Hz, AC supply with IP55 class of protection for enclosure, horizontal foot mounted type with Class-'F' insulation, conforming to IS-325.				
	M. S. fabricated common base plate, coupling, coupling guard, foundation bolts etc. as required.				
	Suitable cement concrete foundation duly plastered and with anti vibration pads.				
	450 lpm at 35 m Head	2 Sets	Set	87436.07	174872.00
	TOTAL SUB HEAD - I				174872.00

Upgradation of existing Fire Fighting System in Chandigarh
Housing Board Office Building Block 'A' & 'C' in Sector 9-D,
Chandigarh -Bid Document

SUB HEAD - II - (HYDRANTS SYSTEM)					
2	Supplying and fixing single headed internal hydrant valve with instantaneous Gunmetal/Stainless Steel coupling of 63 mm dia with cast iron wheel ISI marked conforming to IS 5290 (Type -A) with blank Gunmetal/Stainless Steel cap and chain as required : Single headed Stainless steel	12 Sets	Set	6,137.58	73651.00
3	Supplying and fixing 63 mm dia, 15 m long RRL hose pipe with 63 mm dia male and female couplings duly bound with GI wire, rivets etc. conforming to IS 636 (type-A) as required : Stainless Steel (Grade 304)	24 Sets	Set	4,545.52	109092.00
4	Supplying & fixing 63 mm dia gun metal short branch pipe with 20 mm nominal internal diameter size nozzle conforming to IS 903 suitable for instantaneous connection to interconnect hose pipe coupling as required : Stainless Steel (Grade 304)	12 Nos.	Each	1,689.45	20273.00
5	Supplying and fixing first-aid Hose Reel with MS construction spray painted in post office red; conforming to IS 884 complete with the following as required.				
(a)	20 mm nominal internal dia water hose thermoplastic (Textile reinforced) type -2 as per IS: 12585				
(b)	20 mm nominal internal dia gun metal globe valve & nozzle.				
(c)	Drum and brackets for fixing the equipments on wall.				
(d)	Connections from riser with 25 mm dia stop gun metal valve & M.S. Pipe and socket. (40m)	12 Sets	Set	10,345.81	124150.00

Upgradation of existing Fire Fighting System in Chandigarh
Housing Board Office Building Block 'A' & 'C' in Sector 9-D,
Chandigarh -Bid Document

6	Providing, fixing, testing & commissioning of 15mm dia quartzoid bulb type sprinklers of rating 68 degree centigrade with required accessories :				
6.1	Pendent Sprinkler	459 Nos.	Each	496.17	227742.00
7	Providing & fixing flow switch in following sizes M.S. pipe including connection etc as required. (150mm dia)	2 Nos.	Each	9,092.06	18184.00
8	SITC of sprinkler installation valve				
	Providing, fixing, testing & commissioning of installation control valve of cast iron body, brass/bronze working parts comprising of water motor alarm, bronze seat clapper, clapper arm and hydraulically driven mechanical gong bell to sound continuous alarm when the wet riser/sprinkler system activates, pressure gauges, emergency releases, strainer, pressure switch, cock valve complete with drain valve and bypass, test control box, ball valves, MS pipe of required size, flanges, orifice plate, gasket etc of following sizes as required : (150mm dia)	2 Sets	Set	49,102.63	98205.00
9	SITC weather proof M.S cabinet size 1200 mm x 2100 mm x 600mm				
	Supplying, installation, testing and commissioning of weather proof M.S cabinet size 1200 mm x 2100 mm x 600mm deep fabricated from 1.6mm thick M.S. sheets and M.S angle 40mm x 40mm x 6mm complete with glass, locking arrangements to accommodate the following: -				
a)	Gunmetal single headed Hydrant valve - 1 No.				

Upgradation of existing Fire Fighting System in Chandigarh
Housing Board Office Building Block 'A' & 'C' in Sector 9-D,
Chandigarh -Bid Document

b)	Fire Hoses 63mm, 15 M long with accessories - 2 Nos.				
c)	Short branch - 1 No.				
d)	First Aid hose Reel - 1 No.				
e)	Fire Extinguisher - 3 Nos.				
f)	Fireman's Axe - 1 No.				
g)	Pressure Gauge - 1 No.				
	The cabinet shall be painted with one coat of primer and 2 coats of synthetic enamel paint of approved shade.	12 Nos.	Each	19,262.72	231153.00
10	Supplying and fixing of fire brigade connection of cast iron body with gun metal male instantaneous inlet couplings complete with cap and chain as reqd. for suitable dia MS pipe connection conforming to IS 904 as required : (2 way-100 mm dia M.S. Pipe)	2 Sets	Set	6,755.74	13511.00
	TOTAL SUB HEAD - II				915961.00
	SUB HEAD - III - (PIPING, VALVES AND ACCESSORIES)				
	SLTC of M.S. pipe on surface				
11.	Providing, laying, testing & commissioning of 'C' class heavy duty MS pipe conforming to IS 3589/IS 1239 including Welding, fittings like elbows, tees, flanges, tapers, nuts bolts, gaskets etc. and fixing the pipe on the wall/ceiling with suitable clamp/support frame and painting with two or more coats of synthetic enamel paint of required shade complete as required :				

Upgradation of existing Fire Fighting System in Chandigarh
Housing Board Office Building Block 'A' & 'C' in Sector 9-D,
Chandigarh -Bid Document

11.1	150 mm dia	137 Meter	Meter	2,115.91	289880.00
11.2	100 mm dia	70 Metre	Metre	1,536.70	107569.00
11.3	80 mm dia	45 Metre	Metre	1,150.22	51760.00
11.4	65 mm dia	97 Metre	Metre	1,029.25	99837.00
11.5	50 mm dia	293 Metre	Metre	806.80	236392.00
11.6	40 mm dia	292 Metre	Metre	667.38	194875.00
11.7	32 mm dia	186 Metre	Metre	540.26	100488.00
11.8	25 mm dia	794 Metre	Metre	482.85	383383.00
12	Supplying, Installation, Testing and Commissioning of Butterfly valves of PN 1.6 rating of following sizes with EPDM rubber lining seat and CF-8 stainless steel disc duly ISI marked and stainless steel stem with lever/gear operation and cast iron body in powder coated finish for fire fighting application complete in all respects confirming to IS: 13095 as required.				
12.1	150 mm dia	21 Nos.	Each	7,280.08	152882.00
12.2	100 mm dia	6 Nos.	Each	4,225.84	25355.00
12.3	50 mm dia	5 Nos.	Each	2,619.94	13100.00
13	Providing, Installation, Testing and Commissioning of double flanged cast iron Dual Plate Check Valve, PN 1.6 of following sizes confirming to IS : 5312 complete with EPDM rubber lining seat and stainless steel disc, rubber gasket,				

Upgradation of existing Fire Fighting System in Chandigarh
Housing Board Office Building Block 'A' & 'C' in Sector 9-D,
Chandigarh -Bid Document

	GI bolts, nuts, washers etc. as required.				
3.1	150 mm dia	2 Nos.	Each	7,696.20	15392.00
14	Providing, Installation, Testing and Commissioning of Gun Metal / Bronze Ball Valves screwed ends of following sizes as required. (For sprinkler drain)				
14.1	25 mm dia	6 Nos.	Each	1,191.80	7151.00
15	Supply, Installation, Testing and Commissioning of 100 mm dia Bourden type, Stainless Steel dial type Pressure Gauge including brass isolation valve and siphon pipe having calibration of 0-16 Kg / cm ² .	12 Nos.	Each	260.58	3127.00
16	Supplying and fixing of Fire Man's axe with heavy insulated rubber as per standard conforming to IS 926.	12 Nos.	Each	825.17	9902.00
17	Providing and fixing of Cast Iron Non Rising Spindle Gate Sluice valve PN 16 (Flanged) rating hand wheel operated, stain less steel stem with gun metal parts, Nut, bolts & washers etc. complete as required as per specification conforming to IS:14846.				
17.1	150 mm dia	2 Nos.	Each	17,828.52	35657.00
18	Providing and placing on terrace (at floor levels) polyethylene water storage tank, IS : 12701 marked, with cover and suitable locking arrangement and making necessary holes for inlet, outlet and overflow pipes but without fittings and the base support for tank. (Circular tank)	30000 Litre	Per Litre	8.78	263400.00

19	Providing and fixing ball valve (brass) of approved quality, High or low pressure, with plastic floats complete :				
19.1	25 mm nominal bore	20 Nos.	Each	392.91	7858.00
	TOTAL SUB HEAD – III				1998008.00
	SUB HEAD - IV - (FIRE EXTINGUISHERS)				
20	Supply, installation, testing and commissioning of ISI marked (IS:15683:2006) portable chemical fire extinguisher, water (gas pressure) type capacity 9 litres with gun metal cap and nozzle and complete in all respects including initial fill and wall suspension brackets as required as per specifications.	12 Nos.	Each	2,611.86	31342.00
21	Providing and fixing fire extinguisher of carbon dioxide type consisting of brand new high pressure steel cylinder bearing IS: 7285 mark and having the approval of controller of explosives Nagpur, wheel type valve bearing IS:3224 mark internal discharge tube, 1 meter long high pressure discharge hose, non conducting horn, suspension bracket, fully charged bearing IS: making fixed to wall as directed conforming IS : 15683:2006.				
21.1	4.5 kg capacity cylinder	12 Nos.	Each	8,442.59	101311.00

22	Supply, installation, testing and commissioning of ISI marked (IS:15683:2006) ABC type fire extinguisher, capacity 5 KG with gun metal cap and nozzle and complete in all respects including initial fill and wall suspension brackets as required as per specifications.	12 Nos.	Each	2,662.36	31948.00
	TOTAL SUB HEAD - IV				164601.00
	SUB HEAD - V - (MOTOR CONTROL PANELS)				
23	Fire Fighting Panel				
	Supplying, assembling, erecting, connecting, testing and commissioning of dust, damp and vermin proof free floor standing factory built sheet steel enclosed non-draw out modular type compartmentalized Panel fabricated out of 2.0 mm thick CRCA sheet hinged doors of 1.6mm thick CRCA sheet, duly painted complete with earth bus, aluminium bus bar, numbering & sign writing, interconnection & including the cost of connection through bus bar / copper conductor flexible connection with necessary interlocking with existing panel as shown in drawing as per specification and mounted with the followings.				
	Incoming				
	1 No. - 40A 4P				




	1 No. - 40A 4P MCCB of fault breaking capacity 35 kA (lcs = lcu upto 433V), fitted with interlocked door, automatic safety shutters, mechanical ON/OFF and service/ test/ isolated position indicators and frame earthing contact, conforming to IS-13947-2 1993 as amended up-to-date complete with following accessories for each MCCB.				
	Independent electrical/manual spring closing mechanism - 1 No.				
	Microprocessor releases based relay (EMI & EMC certified) for over current, earth fault & short circuit protections with trip indications for each - 1 set.				
	1 No 0-60A Ammeter with 3 no CT and selector switch as required.				
	Following indicating lamps and push buttons for each MCCB with back up 2A SP MCB.				
i)	3Nos. Phase indicating Lamps.				
	Fully automatic DOL starter suitable for operating 450 lpm (7.5HP) HP motors/fan capacity, complete with contactors, Timer, overload protection relay, current sensing type single phase preventer, ON indications, push buttons, auto / manual / off selector switch, other accessories complete as required. - 1 set.				
	Fire panel as above	2 Sets	Set	27,874.99	55750.00
	TOTAL SUB HEAD - V				55750.00
	SUB HEAD - VI - (CABLE TRAY, CABLING AND EARTHING)				

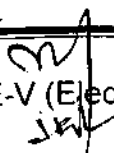
EE-V (Elect.)
10/12

24	CABLES				
	Supplying of XLPE insulated, PVC sheathed aluminium conductor 1.1 KV grade armoured U.G. Cable of following sizes on surface/in existing cable tray duly clamped as required.				
24.1	3 Core 10 Sqmm.	20 Metre	Metre	156.55	3131.00
25	Supplying and making end termination with brass compression gland and aluminum lugs for following size of PVC insulated and PVC sheathed / XLPE aluminum conductor cable of 1.1 KV grade as required.				
25.1	3 X 10 sq. mm (22mm)	10 Sets	Set	216.31	2163.00
26	Supplying and installing following size of perforated pre-painted M.S. cable trays with perforation not more than 17.5%, in convenient sections, joined with connectors, suspended from the ceiling with M.S. suspenders including bolts & nuts, painting suspenders etc as required.				
26.1	150mm Width x 50mm Depth x 1.6mm Thickness.	10 Metre	Metre	544.36	5444.00
27	Providing and fixing 6 SWG dia. GI wire on surface or in recess for loop earthing along with the existing surface / recessed conduits/ sub main wiring / cable as required.	50 Metre	Metre	37.94	1897.00
	TOTAL SUB HEAD - VI				12635.00
	SUBHEAD VII (FIRE ALARM SYSTEM)				

28	Supplying, installation, testing & commissioning of manual call boxes of MS construction in surface/recess with stainless steel chain & hammer assembly complete with glass and push button etc. as required.	12 Nos.	Each	473.62	5683.00
29	Supplying, installation, testing & commissioning fire alarm sounder with facility to make announcement, mounted in M.S. box (16 SWG) with hinged cover plate & suitable for operation with amplifier i/c line matching transformer etc. complete as required.	12 Nos.	Each	558.70	6704.00
30	Supplying, installation, testing & commissioning of fire fighter phone jack complete as required.	12 Nos.	Each	1,626.92	19523.00
31	Providing and fixing of self illuminated / auto glow "EXIT" signs printed on photo luminescent sheet containing self illuminated base chemical, of appropriate size not less than 300 x 150 mm, suspended from ceiling or fixed to the walls with accessories as required and as directed at site.	12 Nos.	Each	116.15	1394.00
32	Supplying, installation, testing & commissioning sector panel suitable for following zones, complete with visual indications for short circuit, open circuit fault, fire condition and all other standard facilities as per IS 2189 with mimic diagram for all area/zone covered, complete with all connections, interconnections as required.				
	4 zone	2 Nos.	Each	8,680.97	17362.00

33	Supplying & laying of 2x1.5 sqmm fire survival armoured cable, 600/1000V rated with annealed copper conductor having glass mica fire barrier tape covered by an extruded layer of Cross Linkable Ethylene Propylene Rubber (EPR) insulation and LSZH inner bedding, steel wire armouring & LSZH outer sheath complete as required.				
a)	2x1.5 sqmm fire survival armoured cable	450 .Metre	.Metre	336.25	151313.00
	TOTAL SUB HEAD - VII				201979.00
	GRAND TOTAL				35,23,806.00


Executive Engineer-V(Elect.),
Chandigarh Housing Board,
Chandigarh


EE-V (Elect.)

Mile stone Programmer

(In Physical Terms/Financial Terms)

S. No.	Description of Milestone (Physical)			Time allowed in Days (from date of start)	Amount to be with-held in case on non achievement of respective milestone.
1	1st Quarter			30 Days	0.63% of Tendered Amount
	Description	During the quarter	Cumulative		
	Down Comer system - pumping equipment, Piping, Valves and Accessories, Fire Extinguishers, Control Panel, Cabling & Fire Alarm	12.50%	12.50%		
	Or Gross work done i.e. 12.50% of tendered amount.				
2	2nd Quarter			60 Days	1.24% of Tendered Amount
	Description	During the quarter	Cumulative (DUs.)		
	Down Comer system - pumping equipment, Piping, Valves and Accessories, Fire Extinguishers, Control Panel, Cabling & Fire Alarm	37.50%	50.00%		
	Or Gross work done i.e. 37.50% of tendered amount.				

3		3rd Quarter			
	Description	During the quarter	Cumulative (DUs.)		
	Down Comer system - pumping equipment, Piping, Valves and Accessories, Fire Extinguishers, Control Panel, Cabling & Fire Alarm	25.00%	75.00%	90 Days	1.66% of Tendered Amount
Or Gross work done i.e. 75% of tendered amount.					
4		4th Quarter			
	Description	During the quarter	Cumulative (DUs.)		
	Down Comer system - pumping equipment, Piping, Valves and Accessories, Fire Extinguishers, Control Panel, Cabling & Fire Alarm	25.00%	100%	120 Days	1.47% of Tendered Amount
Or Gross work done of 100% of tendered amount.					

Part B

- I - General/ Specific Conditions, Specifications
- II - Financial Bid for quoting rates

General/ Specific Conditions of work as applicable

1.0 General

- 1.1 Except for the items, for which Particular Specifications are given or where it is specifically mentioned otherwise in the description of the items in the schedule of quantities, the work shall generally be carried-out in accordance with the "CPWD Specifications (Refer Para 2 (xiii) of Schedule A-F at Page No. 44 and as per instructions of Engineer-in-Charge. Wherever CPWD Specifications are silent, the latest IS Codes/ Specifications shall be followed and the rates should be all inclusive.
- 1.2 Any reference made to any Indian Standard Specifications, shall imply to the latest version of that standard, including such revisions / amendments as issued by the Bureau of Indian Standards up to last date of receipt of tenders. The Contractor shall keep at his own cost all such publications including relevant Indian Standard applicable to the work at site.
- 1.3 The work shall be executed and measured as per metric dimensions given in the Schedule of Quantities, drawings etc. (FPS units wherever indicated are for guidelines only).
- 1.4 The work should be planned in a systematic manner so that chase cuttings in the walls, ceilings and floors is minimized. The contractor shall ensure proper co-ordination of various disciplines viz. sanitary & water supply, horticulture & electrical etc.
- 1.5 All the hidden items such as water supply lines, drainage pipes, conduits, sewers etc. are to be properly tested before covering.
- 1.6 **Samples including brand/ quality of materials and fittings to be used in the work shall be got approved from the Engineer-in-Charge, well in advance of actual execution and shall be preserved till the completion of the work.**
- 1.7 The contractor, his agents/ representative, workman etc. shall strictly observe orders pertaining to fire precautions prevailing in the area.
- 1.8 Contractor(s) shall study the soil investigation report for the site, available in the office of the Engineer-in-Charge and satisfy himself about complete characteristics of soil and other parameters at site. However, no claim on the alleged inadequacy or incorrectness of the soil data supplied by the department shall be entertained.
- 1.9 The tenderer shall see the approaches to the site. In case any approach from main road is required at site or, existing approach is to be improved and maintained for cartage of materials by the contractor, the same shall be provided, improved and maintained by the contractor at his own cost.
- 1.10 **Nothin extra will be paid for executing items beyond 3.00 metre depth from the plinth level.**

- 1.11 Contractor shall take all precautionary measure to avoid any damage to adjoining property. All necessary arrangement shall be made at his own cost.
- 1.12 The contractor shall take all precautions to avoid accidents by exhibiting necessary caution boards day and night, speed limit boards, red flags, red lights and providing barriers. He shall be responsible for all damages and accidents caused due to negligence on his part. Contractor shall ensure that no hindrances shall be caused to traffic during the execution of the work.
- 1.13 The contractor shall take instructions from the 'Engineer-in-Charge regarding collection and stacking of materials at any place. No excavated earth or building rubbish shall be stacked on areas where other buildings, roads, compound wall, services etc are to be constructed.
- 1.14 The contractor shall provide at his own cost suitable weighing, surveying and leveling and measuring arrangements as may be necessary at site for checking. All such equipments shall be got calibrated in advance from laboratory, approved by the Engineer-in-Charge. Nothing extra shall be payable on this account.
- 1.15 Contractor shall provide permanent bench marks, flag tops and other reference points for the proper execution of work and these shall be preserved till the end of work. All such reference points shall be in relation to the levels and locations, given in the Architectural and plumbing drawings.
- 1.16 The work shall be carried out in accordance with the Architectural drawings and Structural drawings, to be issued from time to time, by the Engineer-in-Charge. Before commencement of any of work, the contractor shall correlate all the relevant architectural and structural drawings issued for the work, nomenclature of items. Specifications etc. and satisfy himself that the information available there from is complete and unambiguous. The figures & the written dimensions of the drawing shall supersede the measurement by scale. The discrepancy, if any, shall be brought to the notice of the Engineer-in-Charge for immediate decision before execution of the work. The contractor alone shall be responsible for any loss or damage occurring by the commencement of work on the basis of any erroneous and/ or incomplete information and no claim, whatsoever shall be entertained on this account.
- 1.17 The Architectural drawings other than those indicated in nomenclature of items are only indicative of the nature of the work and materials/fittings involved unless and otherwise specifically mentioned.
- 1.18 The contractor should submit the shop drawing of staging and shuttering for approval of Engineer-in-Charge before actually commencing the execution of work under the item. Nothing extra shall be payable on this account.
- 1.19 Other agencies may also simultaneously execute and install the works and the contractor shall afford necessary facilities for the same. The contractor shall leave such recesses, holes, openings, trenches etc. as may be required for such related works (for which inserts, sleeves, brackets; conduits, base plates, clamps

- etc. shall be available as specified elsewhere in the contract) and the contractor shall fix the same at the time of casting of concrete, stone work and brick work, if required, and nothing extra shall be payable on this account.
- 1.20 The contractor shall conduct his work, so as not to interfere with or hinder the progress or completion of the work being performed by other contractor(s) or by the Engineer-in-Charge and shall as far as possible arrange his work and shall place and dispose off the materials being used or removed so as not to interfere with the operations of other contractor or he shall arrange his work with that of the others in acceptable and coordinated manner and shall perform it in proper sequence to the complete satisfaction of others.
- 1.21 All material shall only be brought at site as per program finalized with the Engineer-in-Charge.
- 1.22 The contractor shall procure the required materials in advance so that there is sufficient time for testing of the materials and approval of the same before use in the work.
- 1.23 Existing drains, pipes, cables, over-head wires, sewer lines, water lines and similar services encountered in the course of the execution of work shall be protected against the damage by the contractor at his own expense. The contractor shall not store materials or otherwise occupy any part of the site in a manner likely to hinder the operation of such services. In case temporary supporting/ shifting of such services is required to facilitate the work, the same shall be done by the contractor at no extra cost.
- In case the existing services are to be shifted permanently, then before dismantling the existing services, alternate/diversion of service lines has to be laid by the contractor so that there is no interruption in use of existing services. The contractor has to plan the alternate suitable route for diversion/shifting of service lines and get the same approved from the Engineer-in-Charge before starting shifting of services. Nothing extra shall be paid except the payment of dismantling and laying of new service lines as per conditions of contract
- 1.24 The contractor shall be responsible for the watch and ward / guard of the, buildings, safety of all fittings and fixtures including sanitary and water supply fillings and fixtures provided by him against pilferage and breakage during the period of installations and thereafter till the building is physically handed over to the department. No extra payment shall be made on this account.
- 1.25 The contractor shall be fully responsible for the safe custody of materials brought by him/ issued to him even though the materials may be under double lock key system.
- 1.26 For construction works which are likely to generate malba / rubbish to the tune of more than a tempo / truck load, contractor shall dispose of malba, rubbish & other unserviceable materials and wastes at his own cost to the notified specified dumping ground and under no circumstances these shall be stacked / dumped even temporarily, outside the construction premises.

- 1.27 The excavated surplus earth of the building shall be disposed off by the contractor for all leads and lifts free of cost within Campus. Dumping site/ premises shall be got approved from Engineer in Charge. The contractor will not be permitted to take the surplus earth outside the Campus.
- 1.28 The contractor shall take all necessary measures for the safe flow of traffic during construction including providing / maintaining such barricades all around construction area without hindering free flow of traffic as per directions of Engineer in Charge. Nothing extra shall be payable on account of providing and maintaining the barricading in good condition. The contractor shall be responsible for all damages and accidents caused due to negligence on his part.
- 1.29 On completion of work, the contractor shall submit at his own cost four prints of "as built" drawings to the Engineer-in-Charge. These drawings shall have the following information.
- Run off of all piping and their diameters including soil, waste pipes and vertical stacks.
 - Ground and invert level of all drainage pipes together with locations of all manholes and connections, up to out fall.
 - Run off of all water supply lines with diameters, location of control valves, access panels etc.
- In case the contractor fails to supply "as built drawing" aforesaid within 30 days of the date of completion, then the recovery @ RS.10,000/- each for such set of drawings shall be made from the contractor's final bill.
- 1.30 Nothing extra shall be paid for making drip of any shape, size.
- 1.31 Nothing extra shall be paid for making groove/cut of any kind in the item/items of plastering work.
- 1.32 In case of lowering of subsoil water level/wet earth work is required as per site condition, the same will be done by the contractual agency and the rate for the same will be allowed as per agreement.
- 1.33 The contractor shall use the white cement with pigment to match the shade of flooring/ dado and for installation of P.H./ Electrical fixtures where ever required without claiming any thing extra.
- 1.34 No hand grinding shall be permitted and grinding of stone/marble wherever required shall be only through mechanical grinders.
- 1.35 In case the depts supplies 'Recron fibers' for mixing in the mortar of Plaster of top storey and external Plaster, nothing extra shall be paid.
- 1.36 The rates for all items of work shall unless clearly specified, include the cost of labour, materials and other inputs involved in the execution of the items.
- 1.37 As per provision of contract labour (Regulation & abolition (Act) 1970, the agency shall obtain license for employing labour on the work before commencement of

work and shall also display a copy of the same at the premises where the contract work is being carried out.

- 1.38 The contractors who are engaged in contract work in UT, Chandigarh are liable for registration under the provision of 'Goods & Services Tax Act 2017' as applicable in UT, Chandigarh. For non compliance they are liable to penal action under the above said Act.
- 1.39 Where the earth for filling is to be supplied by the Contractor /Agency, the rate to be quoted should include all leads and lifts whatsoever. The Contractor/Agency will arrange earth from its own source, in case the Board does not specify the source.
- 1.40 The contractor shall responsible for the implementation of all the provisions under **Rule 4 of Chandigarh Municipal Corporation (Sanitation and Public Health) Bye Laws, 1999** and bear all the fines, penalties and prosecutions in case of failures. CHB reserves the right to recover any damages/penalties imposed from the payments due to the contractor.
- 1.41 Justified amount (X) shall be worked out by the Board at the time of award of work while analyzing the bids received. The allotment amount (excluding escalation) (Y) shall be at a %age $O = (Y-X)/X$ above or below the said justified amount which will be called 'original %age above or below' as the case is.

Revised justified amt (X'), on the same parameters as worked out at the time of award of work, shall be worked out at the time of every bill with the actual quantities. The actual amount of work (excluding escalation) (Y') at the time of every Bill shall be at a %age $A = (Y'-X')/X'$ above or below the said revised justified amount which will be called "actual %age above or below" as the case is.

Suitable reduction will be made in the running/final bill, in case the "actual %age" (A) exceeds the "original %age" (O) so that the "actual % age remains at par or with in the "original %age".

- 1.42 In case the lowest tendered amount (estimated cost + amount worked on the basis of percentage above/below) of two or more contractors is same, such lowest contractors will be asked to submit sealed revised offer in the form of letter mentioning percentage above/ below on estimated cost of tender including all sub sections/sub heads as the case may be, but the revised percentage quoted above/below on tendered cost or on each sub section/ sub head should not be higher than the percentage quoted at the time of submission of tender. The lowest tender shall be decided on the basis of revised offers.

In case any of such contractor refuses to submit revised offer, then it shall be treated as withdrawal of his tender before acceptance and 50% of Earnest Money shall be forfeited.

If the revised tendered amount of two more contractors received in revised offer is again found to be equal, the lowest tender, among such contractors, shall be decided by draw of lots in the presence of SE of the circle, or CE of the zone EE(s)

in-charge of major & minor component(s) (also DDH in case Horticulture work is also included in the tender), & the lowest contractors those have quoted equal amount of their tenders.

In case all the lowest contractors those have quoted same tendered amount, refuse to submit revised offers, then tenders are to be recalled after forfeiting 50% of EMD of each contractor.

Contractor(s), whose earnest money is forfeited because of non-submission of revised offer, shall not be allowed to participate in the re-tendering process of the work.

- 1.43 The competent authority on behalf of CHB 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.
- 1.44 The Board reserves its right to bifurcate the work between one or more agencies and further reserves its right to withdraw a part of a work of a particular item at any stage during the execution of work without prejudice to the right of the Board to recover, liquidated damages under various provisions of the contract agreement.
- 1.45 The quantities of various items and the number of houses can be increased or decreased at any stage unless and otherwise specified. No claim on account of such changes will be entertained. However the payment to the contractor under running/final bills shall be governed by actual quantities of the various items executed at site at the rate prescribed in the DNIT plus or minus quoted percentage by the agency.
- 1.46 The contractor shall be liable for and shall also indemnify the CHB and its employees against all liabilities, losses, claims, demands, proceeding, damages, costs, charges and expenses and further agrees to defend, indemnify and hold the Board and its employees harmless from any penalty whatsoever in respect of any injury or damage to any property of to personals during the execution of work or by the action of any central or state or local authority for violation by the contractor or sub-contractor engaged on the work.
- 1.47 The work during its progress and subsequently at any stage can also be inspected by the Chief Vigilance Officer/Chief Technical Examiner on behalf of the Engineer-in-Charge and agency shall be responsible for compliance of the observation raised by Chief Vigilance Officer/Chief Technical Engineer and including any recoveries proposed thereof.
- 1.48 The work during its progress and subsequently at any stage shall be open for Inspection by Third Party/Quality Assurance Independent Agency appointed by CHB for Technical Examination/Audit on behalf of Engineer-In Charge and agency shall be responsible for compliance of the observation raised by it and including any compliance /recovery proposed thereof. In case of non compliance in 15 days further payment would be stopped.

- 1.49 **Supply of Water and Electric Power:** Unless otherwise provided elsewhere in the Contract, the Contractor shall be responsible for making arrangements at his own cost for obtaining supply of water and/or electrical power, necessary for the execution of the works and during defect liability period. If the agency arranges temporary water connection from MC, Chandigarh for construction purpose, the recovery of water charges shall be made as per Chandigarh Gazette notification issued on 28 September 2006. If the contractual agency arranges water through water tanker from MC, Chandigarh in case of non-availability of water supply lines at the site by the MC, then he will produce bill/payment receipt of water charges and such no water charges will be deducted provided the agency submit no objection certificate from the MC, Chandigarh in this regard. Further, it is clarified that if, receipts of water charges submitted are less than 1.5%, then the recovery of 1.5% will be made after adjusting the amount of receipt. If the contractual agency uses the water from the public stand post, through private tanker or any of the existing sources, panel rate recovery shall be made from the running bills/final bill. In the event the CHB is in a position to supply water or electrical power, or both, required for works, such supply shall be given only at one point. The cost of making necessary arrangements to the Engineer's distribution system and laying of necessary pipe line, specials, valves, meters etc. for water supply or the laying of underground/overhead conductor, circuit protection, electric power meters and transmission structures in case of electric power shall be borne by the Contractor. The Contractor shall also bear the running cost of water and power supplied, the rates for which shall be determined and notified by the Competent Authority. Presently the water charges @ 1.5% of the project cost which shall be deducted from bills of the agency instead of 1% as defined in Clause-31A (i) GCC. Any increase in water/power tariff by supplying agencies shall also be borne by the Contractor. The decision of CHB on such cost shall be final and binding. Before the release of security, the contractor will submit no due certificate from Electricity department.
- 1.50 The agency shall deposit EPF Contributions directly to RPFC on the stipulated dates and shall submit on regular basis proof of satisfactory compliance of the provisions of 'EPF & Miscellaneous Provisions Act, 1952'. The agency shall obtain inspection report for compliance from inspector RPFC office for the period of the contract for this work and shall submit to CHB as a proof of EPF contribution after which the security shall be released.
- 1.51 **Unauthorized occupation:** It shall be the responsibility of the contractor to see that the building site under construction is not occupied by anybody unauthorized during construction, or afterwards till it is handed over to the Engineer-in-charge with vacant possession of complete building site. If such building site through completed is occupied illegally, then the Engineer-in-charge shall have the option to refuse to accept the said building/building site in that position. Any delay in acceptance on this account will be treated as the delay in completion of work and for such delay a levy up to ½ % of tendered value of work per week, may be imposed by the Chief Engineer, whose decision shall be final

and binding both with regard to the justification and quantum and be binding on the contractor. This decision of Chief Engineer will not be open to any arbitration/ litigation. However, the Chief Engineer, through a notice, may require the contractor to remove the illegal occupation anytime on or before construction and delivery.

- 1.52 In addition to the conditions laid down in the 'General Condition of Contract Document of Chandigarh Housing Board' for release of security deposit , the contractor shall have to make compliance of the following:-
- (i) To submit clearance from the RPFC regarding making compliance of the provisions of the EPF Act or otherwise as specified in the 'Tender Document'
 - (ii) To produce no due certificate from Electricity department.
- 1.53 Deduction on account of Income Tax shall be made at the rate prescribed by law from the gross payment due to the contractor in accordance with section 194 C of Income Tax Act 1961, in force.
- 1.54 For the materials other than mentioned in the list of the approved makes in this Document, preference will be given to the ISI marked materials.
- 1.55 The items for which more than one Make/Brand has been specified in the list of 'Approved Makes' in the document and if during execution of the work, for some reason or the other, it is found that only one make remains available in the market, the Chief Engineer, CHB shall be competent to approve other makes of equivalent quality for such The items of work. His decision in this regard shall be final & binding on the part of the contractor.
- 1.56 All T&P required for the labour will have to be arranged by the agency.
- 1.57 Any material left at the site one month after completion of work shall be become the property of the department and no payment shall be made to the contractor for the material.
- 1.58 All the hidden items such as water supply lines, drainage pipes, conduits, sewers etc. are to be properly tested before covering.
- 1.59 No payment will be made to the contractor for damage caused by flood, rain, local disturbance, war, epidemic or either natural calamities during execution of work and no such claim on this account will be entertained.
- 1.60 The test certificate from Factory/Test Lab will be supplied by the agency along with each consignment of material for work. The department has every right to collect the sample from the site of manufacturing and same can be got tested from the reputed/Govt. Test Laboratories at any time.
- 1.61 The work should be planned in a systematic manner so that chase cuttings in the walls, ceilings and floors is minimized. The contractor shall ensure proper co-ordination of various disciplines viz. sanitary & water supply, horticulture & electrical etc.

- 1.62 The Contractor shall demonstrate trouble free functioning of all the Civil, Public Health, Electrical Works and services. The Engineer-in-Charge or his authorized representatives shall carry out final inspection of the various the Civil, Public Health, Electrical Works and services. Any defect(s) noticed during demonstration shall be rectified by the Contractor at his own cost to the entire satisfaction of the Engineer-in-Charge. Nothing extra shall be payable on this account.
- 1.63 Refund of 80% PG or quantum as intimated from time to time, on substantial completion of work will be allowed. However, in case of contracts involving maintenance of building and services/ any other work after construction of same building and services/ other work, then 50% of Performance Guarantee shall be returned to the contractor, without any interest after recording the Provisional Completion certificate.
- 2.0 Unless otherwise specified in the schedule of quantities, the rates for respective items shall be all inclusive and apply to the following: -
- i. The rates quoted by the applicants in the Financial Bid should be inclusive of GST and all other taxes/levies and Cess as per Building & other construction Workers Welfare Cess ACT 1996 as extended to Chandigarh vide notification dated 17.09.2009. Nothing extra on this account shall be paid.

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

3.0. TESTING OF MATERIAL:

3.1 Testing of Materials: When required by the Engineer -in -Charge, the contractor shall supply, for the purpose of testing, samples of all materials proposed to be used in the works. Samples submitted either to govern bulk supplies or required for testing before use shall be provided free of charge by the contractor. All testing charges shall be borne by the contractor unless otherwise mentioned in the document. All mandatory test as per specification shall be carried out at laboratories as directed by Engineer- in- Charge.

All other expenditure required to be incurred for taking samples; Conveyance, packing etc. shall also be borne by the contractor himself.

3.2 However, if any ultrasonic pulse velocity/ load testing or special testing is to be done for concrete whose strength is doubtful, the cost of the same shall be borne by the contractor.

3.3 In case there is any discrepancy in frequency of testing as given in list of mandatory tests and that in individual sub-heads of work as per CPWD Specifications higher of the two frequencies of testing shall be followed and nothing extra shall be payable on this account.

3.4 FIELD LABORATORY

The contractor has to establish field laboratory at site including all necessary equipments and skilled manpower for the Field Tests at his own cost to have proper quality control.

For performing the above tests, the Field Testing Equipments and Instruments are to be arranged and maintained by the contractor.

3.5 The contractor shall ensure quality construction in a planned and time bound manner. Any substandard material, work beyond set-out tolerance limit shall be summarily rejected by the Engineer-in-Charge & contractor shall be bound to replace/ remove such sub-standard /defective work immediately.

Laboratory/ Field equipment referred in the CPWD works Manual/MORTH is to be arranged and maintained by the contractor at the site of work. In case the equipment required for any test is not available at site, the department shall get the test conducted from the third party. However in that event, besides providing free materials of sample, the cost of taking of sample, packing, transportation, testing charges etc. shall be borne by the contractor irrespective of the results.

4.0 SECRECY

4.1 The contractor shall take all steps necessary that all persons employed on any work in connection with the contract have notice that the Indian Official Secrets Act 1923 applies to them & will continue so to apply even after the execution of such works under the contract.

- 4.2 The contract is confidential and must be strictly confirmed to the contractor's own use (except so far as confidential disclosure to sub-contractors or suppliers as necessary) and to the purpose of the contract.
- 4.3 All documents, copies thereof & extracts there from furnished to the contractor shall be returned to the Engineer-in-Charge on the completion of the work/works or the earlier determination of the contract.

5.0 PROGRAM CHART: -

- 5.1 The Contractor shall submit a Time and Progress Chart for each mile stone. The Engineer-in-Charge may within 7 (seven) working days thereafter, if required modify, and communicate the program approved to the contractor failing which the program submitted by the contractor shall be deemed to be approved by the Engineer-in-Charge. The work programme shall include all details of balance drawings and decisions required to complete the contract with specific dates by which these details are required by contractor without causing any delay in execution of the work. The Chart shall be prepared in direct relation to the time stated in the Contract documents for completion of items of the works. It shall indicate the forecast of the dates of commencement and completion of various trades of sections of the work and may be amended as necessary by agreement between the Engineer-in-Charge and the Contractor within the limitations of time imposed in the Contract documents.
- (i) In case of non submission of construction programme by the contractor, the program approved by the Engineer-in-Charge shall be deemed to be final.
 - (ii) The approval by the Engineer-in-Charge of such programme shall not relieve the contractor of any of the obligations under the contract.
 - (iii) The contractor shall submit the Time and Progress Chart and progress report using the mutually agreed software or in other format decided by Engineer-in-Charge for the work done during previous month to the Engineer-in-charge on or before 5th day of each month failing which a recovery as per Schedule F to be decided by the NIT approving authority shall be made on per week or part basis in case of delay in submission of the monthly progress report
- 5.2 The work has to be completed in stages as indicated in the Milestones under **Schedule 'F'** and the program should be prepared in such a manner to achieve these Milestones as indicated therein or earlier.
- 5.3 The program chart should include the following:
- a) Descriptive note explaining sequence of various activities.
 - b) Network (PERT / CPM / BAR CHART) which will indicate resources in financial terms, manpower and specialized equipment for every important stage.
 - c) Program for procurement of materials by the contractor.

- d) Program of procurement of machinery / equipments having adequate capacity, commensurate with the quantum of work to be done within the stipulated period, by the contractor.
- 5.4 If at any time, it appears to the Engineer-in-Charge that the actual progress of work does not conform to the approved program referred above, the contractor shall produce a revised program showing the modifications to the approved program by additional inputs to ensure completion of the work within the stipulated time.
- 5.5 The submission of revised program or approval by the Engineer-in-Charge of such program or the furnishing of such particulars shall not relieve the contractor of any of his duties or responsibilities under the contract. This is without prejudice to the right of Engineer-in-Charge to take action against the contractor as per terms and conditions of the agreement.

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

6.0 SAMPLE OF MATERIALS:-

- 6.1 All materials and fittings brought by the contractor to the site for use shall conform to the samples approved by the Engineer-in-Charge which shall be preserved till the completion of the work. If a particular brand of material is specified in the item of work in Schedule of Quantity, the same shall be used after getting the same approved from Engineer-in-Charge. Wherever brand / quality of material is not specified in the item of work, the contractor shall submit the samples for approval of Engineer-in-charge. For all other items, ISI Marked materials and fittings shall be used with the approval of Engineer-in-Charge. Wherever ISI Marked material/ fittings are not available, the contractor shall submit samples of materials/ a fitting manufactured by firms of repute conforming to relevant Specifications or IS codes for the approval of Engineer-in-Charge.
- 6.2 To avoid delay, contractor should submit samples as stated above well in advance so as to give timely orders for procurement. If any material, even though approved by Engineer-in-Charge is found defective or not conforming to specifications shall be replaced / removed by the contractor at his own risk & cost.
- 6.3. BIS marked materials except otherwise specified shall also be subjected to quality test besides testing of other materials as per the specifications described for the item/material. Wherever BIS marked materials are brought to the site of work, the contractor shall furnish manufacturer's test certificate or test certificate from approved testing laboratory to establish that the material procured by the contractor for incorporation in the work satisfies the provisions of specifications relevant to the material and / or the work done.

BIS marked items (except cement & steel for which separate provisions have been made in the Tender Document) required on the work shall be got tested, for only important tests, which govern the quality of the product, as decided by the Engineer-In-Charge. The frequency of such tests (except the mandatory test) shall be 5% of the frequency as specified in BIS. For mandatory test, frequency shall be as specified in the CPWD Specifications

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

7.0 Written guarantee for various materials

Before the release of payment, the contractor shall arrange a written guarantee (Annexure-A) from the manufacturer (with its certified address) for various material that it conforms to the prescribed specifications. In case, any manufacturing defect is observed before/after the fixing during next two years in the said material, the defective material shall be replaced without any charges free of cost on lodging a complaint to it. The decision of the Engineer- in-Charge in this regard will be final and binding to the Contractor. In case of failure to do so, manufacturer and contractor shall be black listed in CHB.

8.0 DEFECT/ WATCH & WARD LIABILITY:

8.1 The contractor's liability during the defect liability period from the final date of completion as per clause 17 shall be limited to rectification of defects including replacement as follows which in the opinion of Engineer-in-Charge are not man made. The agency shall be responsible for watch and ward of completed houses for the period upto the 'Defect liability Period' or till the physical possession is handed over to the respective allottee whichever is earlier. Nothing extra shall be payable on this account.

S. No.	Description	Defect Liability of the items, if executed under this contract.
(i)	Electrical installation	All manufacturing defects of electrical switches/ sockets, wires/ cables, accessories, MCBs fittings & panels etc.
(ii)	General	(a) All manufacturing defects of structures/ fixtures/ fittings/ equipments other than listed above.

9.0 FOR COMPLIANCE UNDER ENVIRONMENT PROTECTION ACT 1986

9.1 Resident labour shall be provided with proper hygienic and ventilated accommodation.

9.2 The contractor shall provide adequate drinking water and sanitary facilities to the workers employed during the construction period. The contractor is responsible for making arrangements for the safe disposal of wastewater and solid wastes generated during the construction.

9.3 All the top soil excavated during construction activities should be stored as

- directed by the engineer in charge for further use in horticulture /landscape development work within the project site.
- 9.4 The contractor is responsible for making arrangements for the safe disposal of muck including excavated material during construction. It shall not create any adverse effects on the neighboring communities and disposed off taking the necessary precautions for general safety and health aspects, to the approved sites with the approval of competent authority.
 - 9.5 Use of diesel generator sets during construction phase should be of low sulphur diesel type and should conform to Environment (Protection) rules prescribed for air and noise emission standards. The contractor shall submit the requisite permission from the CPCC for setting up the same.
 - 9.6 Vehicles hired for bringing construction material at site should be in good condition and should conform to applicable air and noise emission standards and should be operated only during non peaking hours. The engineer in charge has the right to ban entry of such vehicle/ vehicles which, in the opinion of the Engineer in-charge is/are causing pollution to the environment. The decision of the EIC shall be final and binding to the contractor.
 - 9.7 The agency shall ensure that the ambient noise levels should conform to residential standards both during day and night. The contractor shall submit the monitoring report of actual noise levels at site once in a quarter to the EIC. The monitoring shall be got executed from the Laboratory / consultant approved by MOEF.
 - 9.8 The contractor is responsible for taking steps to avoid contamination of watercourses and ground water by such material like construction spoils including bituminous material and other hazardous materials. He shall be responsible to make secure dumps of such materials so that they should not leach into the ground water.
 - 9.9 The contractor shall make provisions for the supply of kerosene or cooking gas / pressure cooker to meet with the cooking needs of the during construction phase. Burning of wood shall not be allowed under any circumstances.
 - 9.10 The Environmental committee of the CHB or the members of the monitoring officials of the MOEF can inspect the labour camps as well as the construction site at any time. The contractor is responsible to bear the penalties or fines if any imposed for the violation of the provisions of the Environment Protection Act 1986. The decision of the EIC will be the final and binding over the contractor.
 - 9.11 The contractor shall ensure that the constructional activities shall not cause dust pollution. He shall make arrangements for water sprinkling with in the 1 km radii of the project site to subsidize the dust.
 - 9.12 A First Aid Room will be provided by the agency during construction.
 - 9.13 All labour to be engaged for construction shall be screened for health and adequately treated before engaging them to work at the site.

- 9.14 For disinfection of waste water, the contractor will use ultra violet radiation and not chlorination.
- 9.15 Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, creche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.
- 9.16 Construction spoils, including bituminous material and other hazardous materials, must not be allowed to contaminate watercourses and the dump sites for such material must be secured so that they should not leach into ground water.
- 9.17 Any hazardous waste generated during construction phase, should be disposed off as per applicable rules and norms with necessary approvals of the Chandigarh Pollution Control Committee.
- 9.18 The diesel required for operating DG sets shall be stored in underground tanks and if required, clearance from Chief Controller of Explosives shall be taken.
- 9.19 Vehicles hired for bringing construction material to the site should be in good condition and should have a pollution check certificate and should conform to applicable air and noise emission standards and should be operated only during non-peak hours.
- 9.20 Ambient noise levels should conform to residential standards both during day and night. Incremental pollution loads on the ambient air and noise quality should be closely monitored during construction phase. Adequate measures should be made to reduce ambient air and noise level during construction phase, so as to conform to the stipulated standards by CPCB/CPCC.
- 9.21 Water demand during construction should be reduced by use of best industry practices.
- 9.22 Permission to draw ground water shall be obtained from the competent Authority prior to construction/operation of the project.
- 9.23 The contrutural agency shall used fly ash based material products as per provisions of Fly ash notification of 14/09/1999 & amended on 27/08/2003 & its ammendmants if any.

(Above conditions 9.1 to 9.23 to be amended as per note)

Note:- The conditions of environment have been taken as per already executed project adjoining to site. However the case for taking environment clearance is under process. If GOI imposed any additional condition, then the same will be applicable on this project.

10.0 SPECIFICATIONS:

The work shall be carried out in accordance with the CPWD General specifications for Electrical Works, Part-V (Wet Riser and Sprinkler systems) 2006, CPWD. General specifications for Electrical Works (Internal) 2005 and National Building Code 2016 and all relevant IS standards. The brief details of specifications for this work are as under:

i) HYDRANT SYSTEM

Each Hydrant System consists of 1 Number Down-comer of 150mm dia as per drawing enclosed.

On each Floor with each Down-comer there shall be First Aid Hose Reel consisting of a 30 metre length 20 mm (¾") dia double braided rubber hose wound on a drum. This set shall be connected to the Down-comer through a 25 mm (1") dia Ball Valve. Gun Metal Single Headed Hydrant Valve. Fire Extinguisher 3 Nos., Fire Man Axe and 15 mtr. long 63mm dia RRRL Hose Pipe with 63mm dia male & female coupling

Each Down-comer shall also have been connected to Fire Brigade Inlet (Two Way) outside the Building.

The Main Terrace Pump shall be set to start manually from ground floor only as and when required. There shall be flow of water through bypass NRV to be provided across pump.

The Electrical Pump shall continue to run at least for five (5) minutes and register a rise in the pressure up to 4.0 Kg / cm². The Electrical Pump shall be stopped manually by pressing the stop button.

ii) PUMPING SYSTEM

To cater for the fire fighting, the following pumps are being provided:

No.	Pump Type	Discharge	Head (meter)	Drive
1.	Terrace Pump	450 LPM	35 m	Electric

Each Pump shall have a Butterfly Valve on the Suction Side as well as Butterfly Valve and Non Return Valve on the Delivery Side. The Delivery of each Pump shall be connected to the Common Delivery Header.

iii) FIRE PUMP

General

The Pumps shall be single stage designed for continuous operation and shall have a continuously rising head characteristic without any zone of instability.

The head vs. capacity, input power vs. capacity characteristics, etc. shall match to ensure load sharing and trouble free operation throughout the range.

The motor shall have a 15% margin of power rating over the rated pump input power.

The pump shall be capable of a minimum of 150 percent of rated capacity at a total head of not less than 65 percent of the total rated head. The total shut-off head shall not exceed 120 percent of total rated head on the pump.

Pumps coupled with motor on a common platform shall perform smoothly without any excessive noise or vibration.

The terrace pump shall be of End Suction type with Bronze impeller, SS-410 pump shaft, CI shaft sleeve, and CI IS210 & FG 260 casing, grease lubricated bearings capable of handling clear water at ambient temperatures up to 50 deg C. The motor shall have IP-55 protection with Class F insulation and the same shall be rated for 415C \pm 10% and 50Hz \pm 3%.

iv) PUMP CASING

The casing shall be capable of withstanding to the maximum pressure developed by the pump at the pumping temperature.

v) IMPELLER

The impeller shall be of bronze and the bush shall also be of stainless steel.

vi) PUMP

The pumps shall be end suction type for all types of Pumps.

The impeller shall be secured to the shaft and shall be retained against circumferential movement by keying, pinning or lock rings.

All screwed fasteners shall tighten in the direction of normal rotation. All Pumps shall be provided with Mechanical Seal.

vii) SHAFT

Shaft size shall be selected on the basis of maximum combined shear stress.

The shaft shall be of stainless steel SS-304 ground and polished to final dimensions and

shall be adequately sized to withstand all stresses from rotor weight, hydraulic loads, vibrations and torque coming in during operation.

Length of the shaft sleeves must extend beyond the outer faces of gland packing or seal and plate so as to distinguish between the leakage between shaft and shaft sleeve.

Shaft sleeves shall be securely fastened to the shaft to prevent any leakage or loosening. Shaft and shaft sleeve assembly should ensure concentric rotation. The sleeve shall be of stainless steel.

viii) PUMP SHAFT-MOTOR SHAFT COUPLING

All shafts shall be connected with adequately sized flexible couplings of suitable approved design. Necessary guards shall be provided for the couplings.

ix) BASE PLATE

A common base plate mounting both for the pump and drive shall be provided. The base plate shall be of rigid construction, suitably ribbed and reinforced.

Base plate and pump supports shall be so constructed and the pumping unit so mounted as to minimize misalignment caused by mechanical forces such as normal piping strain, hydraulic piping thrust etc.

x) VIBRATION & BALANCING

The rotating elements shall be so designed to ensure least vibration during start and throughout the operation of the equipment. All rotating components shall be statically and dynamically balanced at workshop.

xi) ELECTRIC MOTORS

The motor shall be designed not to draw starting current more than 3 times normal running current. It shall be designed for continuous full load duty. The motor shall be full load duty & shall be capable of handling the required starting torque of the pumps. Speed of motor shall be compatible with the speed of the pump.

Motors shall be enclosed type and shall have a dust tight construction with suitable means of breathing and of drainage to prevent accumulation of water from condensation.

All components shall be of adequate mechanical strength and robustness and shall be constructed of metal unless otherwise approved.

The rating and design shall conform to relevant IS specification.

The motors shall be Squirrel Cage TEFC Induction type.

The motors shall be wound for Class-F insulation, and the winding shall be vacuum impregnated with heat and moisture resisting varnish and glass wool insulated to withstand tropical conditions.

Two independent earthing points shall be provided on opposite sides of the motor for bolted connections.

Motors shall be suitable for 415 Volt power terminals and shall be suitable for receiving 1.1 kv grade armoured power cables.

The cable boxes and terminations shall be designed to enable easy disconnection and replacement of cables.

Motor shall be suitable for +/- 10% variation in voltage and +/- 3% variation in frequency.

Motor shall be of efficiency 1 rating as per ECBC Code.

xii) POWER CABLE:

The Power Cables shall be P.V.C. insulated P.V.C. sheathed Aluminium conductor armoured cable conforming to IS:1554-1988 (Part - I) with upto date amendments or revision. The cable shall be laid directly in ground, pipes, masonry ducts, cable tray surface of wall etc. as shown on drawings. The cable shall satisfy the following tests as per relevant IS codes:

Insulation Resistance Test

Continuity Resistance Test

Earth Continuity Test

xiii) EARTHING

All equipments installed shall be Double-earthed by making proper connection by means of copper cables / wires to the main earthing system.

xiv) CODES AND STANDARDS FOR PUMPS AND MOTORS

a) Pumps

The pumps shall perform to the standards and codes as given below:

IS:1520 Horizontal centrifugal pumps for clear, cold and fresh water.

BS:599 Methods of testing pumps.

PTC:8 ASME Power Test Codes - Centrifugal Pumps.

b) Motor

The following codes shall be applicable for the motor.

- IS:325 Induction motors, three-phase
- IS:900 Induction motors, installation and maintenance, code of practice for
- IS:7816 Guide for testing insulation resistance of rotating machines
- IS:4029 Guide for testing three phase induction motors.

Further to those stated above, the design, manufacture, installation and performance of motors shall conform to the latest Indian Electricity Act and Indian Electricity Rules.

The motor shall also be acceptable to the Tariff Advisory Committee.

xv) FIRE FIGHTING ACCESSORIES

a) Piping

Pipes of the following types (depending upon the description of item) shall be used:

Pipes conforming to IS:1239, ISI marked (heavy grade) for pipes of sizes 65mm NB and below.

b) Piping (for Pipes up to 150 mm dia)

The pipes shall be manufactured by Electric Resistant Welded (ERW) / High Frequency Induction Welding or Hot Finished Welded process. The sulphur and phosphorus requirements in steel shall not be more than 0.05 percent each. The tubes shall be manufactured from hot rolled steel scalps / strips conforming to IS 10748.

M.S. pipe up to 150 mm dia shall have all fittings as per IS:1239, part II (heavy grade)

For M. S. pipes up to 40 mm (2") dia screwed jointing shall be adopted, while for pipes above 50 mm (2") dia welded or flanged connections shall be used. Only electro galvanised nuts / bolts shall be used.

The piping system and components shall be capable of withstanding 150 per cent of the working pressure including water hammer effects and test pressure up to 11.0 kg/cm².

Flanged joints shall be used for connections to vessels, equipment, flanged valves and also on suitable straight lengths of pipeline of strategic points to facilitate erection and subsequent maintenance work.

All pipe to pipe receiving edges shall be bevel finished to a clean edge by an electric grinder. A requisite gap determined by the thickness of the weld electrode shall be

given between the joints before start of welding.

All pipe cutting shall be by oxy acetylene gas welding only. The cut surface shall be cleaned and ground by an electric grinder before further welding.

xvi) VALVES

Swing Check Valve (all valves shall be ISI marked and shall be one of approved makes) of sizes 150 mm dia (PN-16 Rating) and 40 mm dia (PN-10 Rating) complete with rubber gasket, GI bolts, nuts, Gate/Globe valves shall also be provided along with check valve for water supply connection from existing domestic water tanks.

Butterfly valve (Manual) with CI body, SS Disc, Nitrile sheet and O-Ring and PN-16 pressure rating to regulate water supply at terrace pump.

xvii) FIRST AID HOSE REEL

The Hose Reel shall be drum type with hub wheel ties. The supply pipe shall be of copper / aluminium alloy and be a part of the suspension assembly. The drum shall rotate freely on the assembly. The drum shall be fabricated from G.I. sheet of minimum 18 gauge thickness.

The hose reel shall be directly tapped from the riser through a 25 mm (1") dia pipe, the drum and the reel being firmly held against the wall by use of dash fasteners. The Hose Reel shall be swinging type (180 degrees) and the entire Drum, Reel etc shall be as per and IS:884-1985 including marking. The rubber tubing shall be of IS:5132-1962 marked and rayon double braided. The nozzle shall be 6 mm (1/4") dia gun metal rotating head shut off type. A Ball Valve shall be used to shut off the water supply to the Hose Reel.

xviii) AIR VESSEL

The Air Vessel shall be provided to compensate for slight loss of pressure in the system and to provide an air cushion for counter acting source surges whenever the pumping set comes into operation. It shall be normally partly full of water, the remaining being filled with air which will be under compression when the system is in normal operation. Air vessel shall be fabricated from 8 mm (1/2") thick M.S. plate with dished ends and suitable supporting legs. It shall be provided with a 100 mm (4") dia flanged connections from pump, one 50 mm (2") drain with valve, one water level gauge and 25 mm (1") sockets for pressure switches. The air vessel shall be

hydraulically tested to 20.0 kg / cm² pressure for 30 minutes. All Valves shall be Ball Valves in gunmetal. The Vessel shall be at least 1.5 mtr long (excluding dished ends) and shall be of 450 mm (18") dia.

xix) FIRE BRIGADE INLET

Fire Brigade Inlet Connection shall be taken directly to the Riser. It shall comprise of two instantaneous male inlet coupling with plug and steel chain. The Inlet shall have a dual plate wafer type non return valve and a Butterfly Valve on the line up to the Riser. The Fire Brigade Inlet shall be complete with necessary components like special fittings of medium quality M.S. bends, flanged tees etc. The plug shall be of moulded P V C. Fire Brigade Inlet for Tank Filling by Fire Brigade shall be four way with gun metal instantaneous male inlet coupling connection for connection with Fire Brigade vehicles. The inlets shall be provided with ABS Quality by Plastic Blank caps with chain and arrangement for attaching the blank cap & chain to the FB inlet.

xx) PAINTING

All Hydrant pipes shall be painted with post office red colour paint. All pipes shall first be cleaned thoroughly before application of primer coat. After application of primer coat two coats of enamel paint shall be applied. Each coat shall be given minimum 24 hours drying time. No thinners shall be used.

xxi) COUPLINGS

Couplings shall be of gun metal, machined and polished to requirements. Both Male and female couplings shall be fitted into each other smoothly and without any unnecessary force. Couplings shall IS:903 marked with the name of the manufacturer. The coupling shall be tested to 25 kg/cm² test pressure. The Male couplings shall be provided with lugs for inserting female coupling. The lugs of the coupling shall be wing type.

xxii) TERRACE PUMP

The terrace pump shall be of Horizontal Split Case type with Bronze impeller, SS-410 pump shaft, CI shaft sleeve, and CI IS210 & FG 260 casing, grease lubricated bearings capable of handling clear water at ambient temperatures up to 50 deg C. The motor shall have IP-55 protection with Class F insulation and the same shall be rated for 415C

±10% and 50Hz ± 3%.

xxiii) SPRINKLER SYSTEM

Pendent type sprinkler system with 15mm dia Quartzoid bulb type sprinklers of rating 68 degree centigrade with required accessories.

xxiv) CODES & STANDARDS

The following codes and standards and their subsequent modifications shall apply for the design, manufacture, shop testing, erection & fabrication at site, testing and trial operation of piping, valves and special requirements:

- IS:554 Dimensions for pipe threads where pressure tight joints are required on the threads.
- IS:638 Sheet rubber jointing and rubber insertion jointing.
- IS:778 Copper alloy gate, globe and check valves for water work purposes.
- IS:780 Sluice valves for water-works purposes (50 mm (2") to 300 mm(12"))
- IS:901 Couplings, double male and double female, instantaneous pattern for fire fighting.
- IS:1239 Mild steel tubes, tubular and other wrought (Part I & II) steel fittings.
- IS:884 Swinging type wall mounted hose reel with drum,
- IS:388 Hose tubing.
- IS:4038 Foot valves for water-works purposes.
- IS:5290 Landing valves
- IS:10221 Anti corrosion treatment for underground M.S. pipes.
- IS:5312 Swing check type reflux (non-return) valves.

LIST OF RELEVANT INDIAN STANDARDS:

Sr. No.	IS Code No.	Title
1	IS - 8757	Glossary of terms associated with Fire safety.
2	IS - 884	Specification for first aid hose reel for fire fighting.
3	IS - 901	Specification for coupling, double male and double female
4	IS - 902	Specification for suction hose couplings for fire fighting purposes.
5	IS - 903	Specification for fire hose delivery couplings, branch pipe, nozzles and nozzle spanner.
6	IS - 904	Specification for two-way and three-way suction collecting heads for fire fighting purposes.
7	IS - 907	Specification for suction strainers, cylindrical type for fire fighting
8	8IS - 908	Specification for fire hydrant, stand post type.
9	IS - 909	Specification for ground fire hydrant.
10	IS - 636	Non percolating flexible fire fighting delivery hose.
11	IS - 7637	Glossary of terms for fire fighting equipments.

12	IS-937	Specification for washers for water fittings for fire fighting purposes.
13	IS-1641	Code of practice for fire safety of building (general) : General principles for fire grading and classifications
14	IS-1642	Code of practice for fire safety of building (general): Details of construction.
15	IS-1643	Code of practice for fire safety of building (general) :Exposure hazard.
16	IS-1644	Code of practice for fire safety of building (general): Exit requirements and personal hazard.
17	IS-1646	Code of practice for fire safety of building (general) : Electrical Installation.
18	IS-2871	Specification for branch pipe, universal for fire fighting.
19	IS-2930	Functional requirements for hose laying tender for fire brigade use.
20	IS-5290	Specification for landing valves.
21	IS-8090	Specification for coupling, branch pipe, nozzle, used in hose reel tubing for fire fighting.
22	IS-8442	Specification for stand post type water monitor for fire fighting.
23	IS-9972	Specification for automatic sprinkler heads.
24	IS-11101	Specification for extended branch pipe for fire brigade use.
25	IS-12349	Fire Protection sign.
26	IS-12407	Graphic symbols for protection plan.
27	IS-3844	Code of practice for installation and maintenance of internal fire hydrants and hose reel on premises
28	IS-12585	Specification for thermoplastic hoses (Textile Reinforcement) for water Genset purposes
29	IS-10221	Code of practice for coating and wrapping of under ground mild steel pipe lines
30	IS-15105	Design and installation of fixed automatic sprinkler fire extinguisher system -Code of Practice
31	IS-325	Three phase induction motors.
32	IS-1822	Motor starter for voltage not exceeding 1000 volts
33	IS-3624	Burden tube pressure and vacuum gauges
34	IS-1520	Horizontal centrifugal pumps for clear, cold, fresh water
35	IS-1239	Mild steel tubes, tubular and other wrought steel fittings
36	IS-3589	Electrically welded steel pipes for water, gas and sewage
37	IS-6392	Steel pipe flanges
38	IS-778	Gunmetal gate, globe and check valves for general purpose
39	IS-2592	Recommendation for methods for measurement or fluid flow by means of orifice plates and nozzles.
40	IS-732	Code of practice for electrical wiring and fitting of building
41	IS-900	Code of practice for installation and maintenance of induction motor
42	IS-1248	Direct acting electrical indicating instruments
43	IS-4047	A.C. circuit breakers for voltages not exceeding 1000 volts
44	IS-2516	Heavy duty air break switches and composite units of air break switches and fuses for voltage not exceeding 1000 volts.
45	IS-2208	HRC cartridge fuse links upto 650 volts

46	IS -1554	(Part II) PVC insulated (heavy duty) electric cable for working voltage upto and including 11000 volts
47	IS -1536	Centrifugally Cast Iron Pipe
48	IS -1537	Vertically Cast Iron Pipe
49	IS -1538	Cast Iron Pipe Fitting.
50	IS -780	Sluice valve for water works purpose (50 to 300 mm size)

Annexure 'A'

(To be executed On Judicial Stamp paper worth Rs.100/- between Contractor, Manufacturer & Engineer-in-charge of the work)

GUARANTEE BOND

This agreement made this ____ day of _____ between M/s. _____ & M/s. _____ (hereinafter called the Guarantors which expression shall include where the context so admits the representative successors or his/its assignees of the one part) and the Engineer-in-charge on behalf of Chandigarh Housing Board, Chandigarh constituted under Section - III of the Haryana Housing Board Act, 1971 as extended to the Union Territory, Chandigarh having its principal office at 8 Jan Marg, Sector 9-D, Chandigarh (hereinafter called the Board which expression shall unless repugnant to the context or meaning thereof including its successor and assignees of the other part).

Whereas this agreement is supplementary to the contract (hereinafter called the Sub Contract) dated _____ made between the Guarantors of the one part and Board of the other part, whereby the contractor & manufacturer, inter alia, undertook to render the buildings and structures of Fire Fighting System conforming to the prescribed specifications. Wherein, the materials in question have been used in Fire Fighting System in Chandigarh Housing Board Office Building Block 'A' & 'C' in Sector 9-D, Chandigarh (Location) during the period between _____ to _____ at the site of work.

And whereas the Guarantors agreed to give a guarantee to the effect that the said material will remain defect free for the next two years to be reckoned from the date of completion of the work under the contract Agreement No. _____ dated _____.

During this period of guarantee, the Guarantors shall make good all manufacturing defects and for that matter, shall replace at his risk and cost such defective material(s) as observed to the satisfaction of the Engineer-in-charge, and shall commence the works of such rectification within seven days from date of issuing notice from the Engineer-in-charge calling upon him to rectify the defects, failing which the work shall be got done by the Department by some other Contractor/ manufacturer at the Guarantor's cost and risk, and in the later case the decision of the Engineer-in-charge as to the cost recoverable from the Guarantors shall be final and binding.

That if the Guarantors fails to replace the defective material(s) or commits breaches hereunder then the Guarantors will indemnify principal and his successors against all loss, damage, cost, expense or otherwise which may be incurred by him by reason of any default on the part of the Guarantor in performance and observance of this supplemental agreement. As to the amount of loss and/or damage and/or cost incurred by the Board, the decision of the Engineer-in-charge will be final and binding on the parties. In case of failure to replace the defective material, in addition to the recovery, stated here, the Guarantors and the Contractor shall be black listed.

In witness whereof these presents have been executed by the Obligor _____ and by _____ for and on behalf of the Chairman, CHB on the day, month and year first above written.

Signed, sealed and delivered by OBLIGOR in the presence of

1.

2. (Contractor)

2. (Manufacturer)

Signed for and on behalf of The Chairman, CHB by EE _____ in the presence of.

1.

2.

Note:- This Guarantee Bond shall be signed by the manufacturers individually, if the manufacturer of _____ are different agencies.

List of material to be covered under the Guarantee for Fire Fighting System:-

Sr. No.	Description
1.	Fire Pump
2.	Motor

FORMAT OF INDEMNITY BOND.

(To be furnished in Stamp paper as per Stamp Act)
(At presents not less than Rs.80/-Stamp paper)

This deed of indemnity executed by hereinafter referred to as Indemnifier which expression shall, unless repugnant to the context or meaning thereof, include its successors, administrators, representative and assignees in favour of Chandigarh Housing Board, hereinafter to as the indemnified which expression shall unless repugnant to the context of meaning thereof, include its successors and assignees witness us to.

Whereas the indemnified herein has awarded to the Indemnifier therein a contract for the 'Upgradation of existing Fire Fighting System in Chandigarh Housing Board Office Building Block 'A' & 'C' in Sector 9-D, Chandigarh' on terms and conditions set out interalia in contract/Award No. _____ valued at Rs. _____ only)

And whereas the above mentioned contract provides for 'Upgradation of existing Fire Fighting System in Chandigarh Housing Board Office Building Block 'A' & 'C' in Sector 9-D, Chandigarh' as per terms & conditions of the contract.

The indemnifier hereby irrevocably agrees to indemnify the indemnified that he shall be liable for and shall also indemnify the CHB and its employees against all liabilities, losses, claims, demands, proceeding, damages, costs, charges and expenses and further agrees to defend, indemnify and hold the Board and its employees harmless from any penalty whatsoever in respect of any injury or damage to any property of to personals during the execution of work or by the action of any central or state of local authority for violation by the contractor or sub-contractor engaged on the work in respect of his contractual obligations emanated from the contract already referred to the extent of Rs. _____/- Rupees _____ only)

This indemnity shall be in force up to the date of the item from our end.

Name
Designation

WITNESS:

1.

2.

FINANCIAL BID FOR THE WORK UPGRADATION OF EXISTING FIRE FIGHTING SYSTEM IN CHANDIGARH HOUSING BOARD OFFICE BUILDING BLOCK 'A' & 'C' IN SECTOR 9-D, CHANDIGARH

Part	Description	Amount
1	Upgradation of existing Fire Fighting System in Chandigarh Housing Board Office Building Block 'A' & 'C' in Sector 9-D, Chandigarh (DNIT Amount)	Rs. 35,23,806.00
<p>I/we will charge ___ % (in figures) i.e. _____^{(a)*} percent (in words) _____^{(b)*} (write above or below) on the total Composite cost of Rs.35,23,806/- (Rupees Thirty Five Lakh Twenty Three Thousand Eight Hundred Six only). The overall amount of the Tender comes out to be Rs. _____/- (in figures) (Rs. _____^{(c)*} (in words) with my quoted Rates.</p>		
* Note:		
1.	For filling up the portion marked (a)* above the agency is to quote the percentage in figure and words. Percentage is to be quoted up to three digits after decimal.	
2.	For filling up the portion marked (b)* above, the agency is to quote either above or below	
3.	For filling up the portion marked (c)* above the agency is to quote the amount in figures and words.	
4.	In case of any ambiguity or difference between the quoted percentage and amount, the amount worked out at '(c)' above will be considered as correct and the percentage will be considered accordingly.	
	Dated	Signature of the Bidder (s)

Technically examined & recommended for approval

Superintending Engineer-II
Chandigarh Housing Board
Chandigarh

Technically sound & recommended for approval.

Executive Engineer (Elect.)
Chandigarh Housing Board,
Chandigarh

This NIT containing 94 pages as per Index amounting Rs. 35,23,806/- (Rupees Thirty Five Lakh Twenty Three Thousand Eight Hundred Six only) is hereby approved.

Chief Engineer
Chandigarh Housing Board
Chandigarh