

**MANAGEMENT DEVELOPMENT INSTITUTE GURGAON
GURUGRAM, HARYANA**

TENDER DOCUMENT

**NOTICE INVITING TENDER FOR
SUPPLY INSTALLATION TESTING & COMMISSIONING OF CHILLER**

For

Proposed Construction Works at MDI Campus, Gurugram, Haryana



MDI
GURGAON

Management
Development
Institute

Mehrauli Road, Sukhrali, Gurugram – 122007, Haryana



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INDEX

| | |
|---|----|
| INTRODUCTION ABOUT MDI | 3 |
| NOTICE INVITING TENDER | 4 |
| INFORMATION AND INSTRUCTIONS FOR BIDDERS | 5 |
| GENERAL GUIDELINES FOR BIDDERS | 7 |
| SUB-CLAUSE OF GENERAL CONDITIONS/SPECIAL CONDITIONS OF CONTRACT | 12 |
| GENERAL CONDITIONS OF CONTRACT | 13 |
| SPECIAL CONDITIONS OF CONTRACT | 47 |
| TECHNICAL SPECIFICATION & APPROVED MAKES..... | 67 |
| BILL OF QUANTITIES & TENDER DRAWING | 73 |

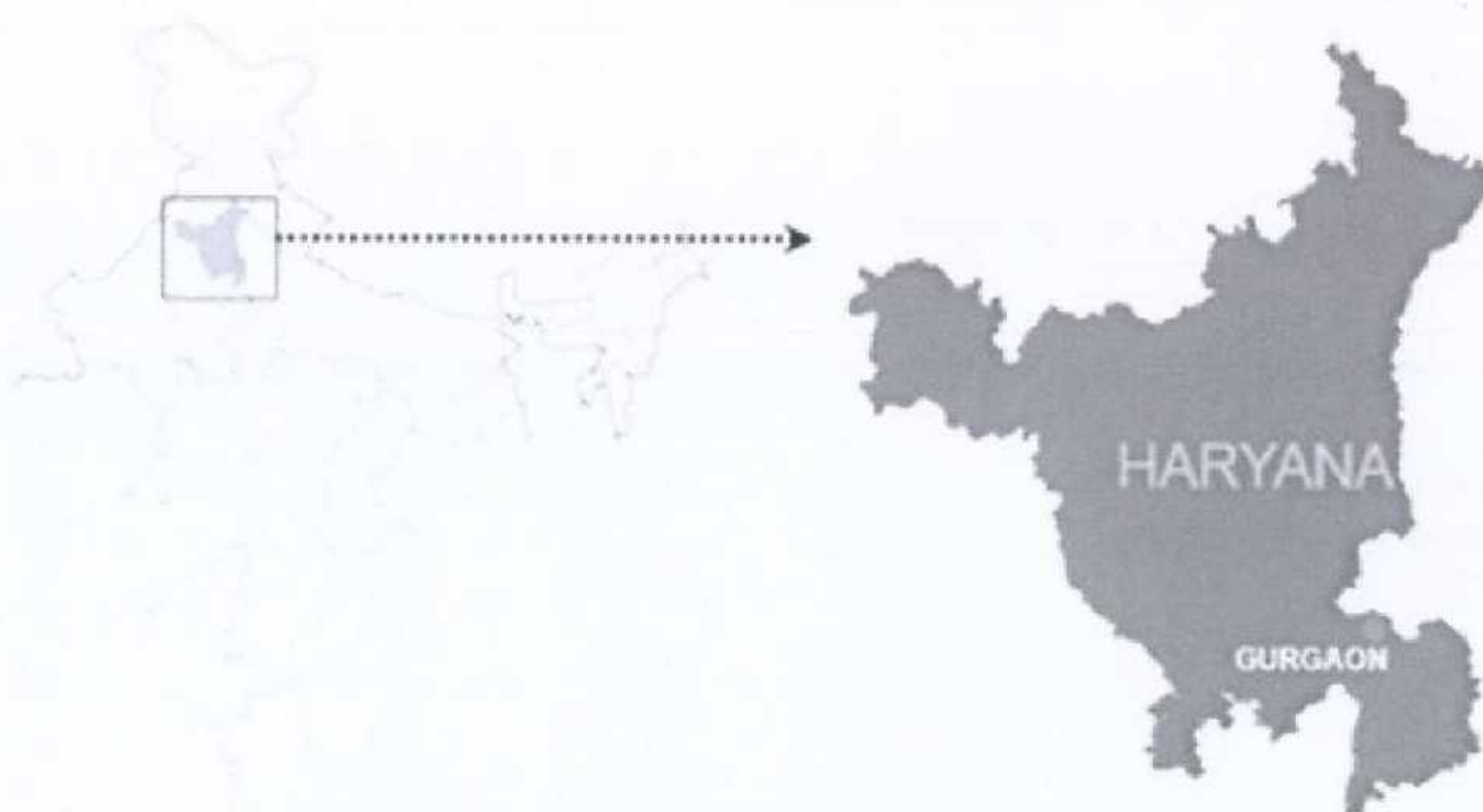


INTRODUCTION ABOUT MDI

Management Development Institute (MDI) is an Educational and Research Institute Imparting Education & Training to middle and senior level executives of public sector undertaking/ private / Government Organization besides Consultancy and research.

MDI has its own campus spread over an area of approx. 35.11 acres in the heart of the city of Gurugram, Haryana. Presently the total built up area of the Institute is about approx. 6,50,000 sq. ft. with Lecture Halls, Mini Auditorium & Library block, Computer Centre and Academic Complex, Residential accommodation for executives, students Hostel, Residential flats for faculty and staff members. Balance space is being maintained with lush green landscaped area with outdoor sports facilities.

Site Location



The Institute attracts the best students and staff from India, and from the World
A historic past, a search for progression in the field Management Studies, combine to affect culture and society

MDI intends to construct Academic and Administrative Block with Central Dining & Kitchen, Student Hostels, Auditorium and other Allied Buildings in MDI Campus at Mehrauli Road, Sukhrali, Gurgaon – 122 007.

Eligible Supplier / Contractor are invited to submit their respective credentials for supply of Supply Installation Testing & Commissioning of Chillers.



NOTICE INVITING TENDER

| | |
|---|---|
| NIT No. | MDI/CCP/2024-01 Date: 22.04.2024 |
| Detail of Work/Supply | Supply, installation Testing & commissioning of Chiller for the Proposed Construction Works MDI Campus, Gurugram, Haryana |
| Estimated Cost | Rs.2,50,00,000/- (Rupees Two Crores Fifty Lakhs) excluding AMC + applicable taxes. Deposited labour cess by MDI to be recovered from the Supplier / Contractor |
| EMD | Rs. 5,00,000/- .(Rs.Five lakhs Only) /- DD in favour of "Management Development Institute Society" |
| Date and time of Pre bid Meeting | 29.04.2024 at 2:30 p.m. |
| Place of Pre bid Meeting | A-9 Scholar Building, MDI Gurgaon |
| Last date and time of submission of Tender | 13.05.2024 at 3.00 PM |
| Completion of work | 120 Days (One hundred & twenty days) |

Tender Documents can be downloaded from Institute Website ww.mdi.ac.in or can obtained from the office of MDI on below address:

Chief Administrative officer (Admin)
Management Development Institute Gurgaon
Mehrauli Road, Sukhrali,
Gurgoan-122007
Phone : 91-124-4560535



INFORMATION AND INSTRUCTIONS FOR BIDDERS

Management Development Institute (MDI) Gurgaon Mehrauli Road, Sukhrali, Gurugram-122007 (Haryana) inviting tender for Supply Installation Testing & Commissioning of Chillers at MDI Gurgaon Campus, Gurugram, Haryana.:

| S. No. | NIT No | Name of work | Earnest Money | Period of Completion of work | Last date and time of submission of eligibility and financial bid EMD, and other documents as specified in the NIT |
|--------|--------------------|--|--|------------------------------|--|
| 1. | MDI/C CP/202 3-/01 | Supply, Installation Testing & commissioning (SITC) of 4 Nos. of Chillers for the Proposed Construction Works MDI Campus, Gurugram, Haryana of | Rs. 5,00,000/- (Rs. Five Lakhs Only) /- DD in favour of "Management Development Institute Society" | 120 Days 120 Days | Up to 3.00 PM on 13.05.2024 |

- The bid shall be considered valid only if the submission is made within the period of bid submission along with Demand Draft of any scheduled bank towards EMD in favour of Management Development Institute Society as mentioned in NIT and other documents as specified. Earnest Money (EM) is acceptable in the form of demand draft only issued by a scheduled bank. The EM shall be valid for a period of 90 days from the last date of submission of bid which may be further revalidated for another 90 days' period.
- Bid to be submitted to the office of Chief Administrative Officer (Administration), Management Development Institute Gurgaon Mehrauli Road, Sukhrali, Gurugram-122007 (Haryana).
- The quoted amount of bid shall be exclusive of GST. This shall be noted while quoting the bid amount.
- No Running Account Bill shall be paid for the work till the labour licenses, registration with EPFO, ESIC and BOCW Welfare Board, whatever applicable is received from the contractor by the Engineer-in-Charge.
- Intending bidders are advised to read the tender carefully and also inspect and examine the site and its surrounding and satisfy themselves before submitting their bids as to the nature of the site (so far as is practicable) mechanism/equipment/safety precautions 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 bid. Electricity & Water (FREE OF COST) will be supplied by client at one point of campus and bidder has to arrange further distribution for completing scope of work. A bidder shall be deemed to have full knowledge whether he inspects it or not and no extra charge consequent on any misunderstanding or otherwise shall be allowed. The bidder shall be responsible for arranging and maintaining at their own cost all material, mechanism, equipment's, tools & plants, access safety and other facilities for workers, safety requirements to adjoining structures and all other service requirements to adjoining structures and all other service required for work unless otherwise specifically provided for in the bid documents. Submission of a bid by a bidder implies that he has read this notice and all allied contract documents and has made himself aware of the scope of the work to be done and prevailing condition and local conditions and other factors.
- Canvassing whether directly or indirectly, in connection with bids is strictly prohibited and the bids submitted by the bidders who resort to canvassing will be liable to rejection.
- Client may also conduct a pre-bid meeting and if so inform the date and venue to all tenderers.
- Agreement shall be drawn with the successful bidder whose bid accepted. The successful bidder/contractor on acceptance of the bids by the Accepting Authority, shall, start the work within Ten (10) days from the date of signing of contract.



9. The bid documents submitted by intending bidders shall be opened only of those bidders, whose **EMD deposit along with** other documents are found in order. Financial bid will be opened for bidders who meet the eligibility criteria. If the bidder fail to meet as above, bid will be rejected and shall not be opened.
10. List of Documents to be submitted within the period of bid submission:
- Receipt for deposition of original Demand Draft against EMD to Chief Administrative Officer (Admin), Management Development Institute Gurgaon.
 - PAN Card
 - GST Registration Certificate
 - Other Document specified in the Check list of Tender Document.



GENERAL GUIDELINES FOR BIDDERS

1. All definitions set forth in the Conditions of Contract or in Other Tender Documents are applicable to this Tender Offer.
2. The Tender Documents comprise:
VOLUME-I : GENERAL CONDITION OF CONTRACT, SPECIAL CONDITIONS OF CONTRACT, PROFORMAS, CONSIDERED AS VOL-I
VOLUME-II : TECHNICAL SPECIFICATIONS, APPROVED MAKES, CONSIDERED AS VOL-II
VOLUME-III : BILL OF QUANTITIES, TENDER DRAWINGS (FINANCIAL BID FOR ABOVE) CONSIDERED AS VOL-III
3. MDI will not be responsible to compensate for any expense or losses which may be incurred by the Bidder in the preparation and submission of Tender.
4. The Bidder shall examine the Tender Documents and all Addenda (if any) before submitting Tender and shall become fully, informed as to the extent, quality, type and character of operations involved in the Works and shall visit and acquaint himself with the Site of the Works. No consideration or compensation will be given for any alleged misunderstanding of the articles to be furnished. It is being understood that the submission of a Tender carried with it the Agreement to all Clauses and Conditions referred to herein or indicated in the Tender Documents.
5. Bidder are required to quote prices individually in numbers for each item in the Bills of Quantities and in letters in the Summary Sheet and Form of Tender.
6. Tender Documents must be returned properly filled in and completed in all respects in accordance with the Conditions and Provisions of the Tender Documents. No alteration shall be made by the Bidders to the Tender Documents.
7. Tender will not be accepted unless it includes total and fixed prices. No consideration will be given to Tenders submitted on the basis of a certain percentage from the lowest offered price.
8. Price of all Tenders must be quoted in Indian Rupees. The total price of the Tender is considered binding for comparison with other Tenders without regard to any other prices that may appear in the General Summary or at any place in the Tender Documents.
9. The Tender shall be submitted according to the form in Volume-I,II & III herein, with suitable entries, including appropriate signatures, made in all blank spaces. The form shall not be altered. Signing the Tender binds the Bidder to strict compliance with all the Conditions stated in the Tender Documents. The Form of Tender must be signed by a person or persons authorised to bid and shall be dated. Evidence of signing authority, such as a Power of Attorney, shall be provided with the Tender.
10. The Documents comprising the Tender shall be placed in a wax-sealed package and shall contain: Completed Tender, Deposit (if applicable), Name of Bidder, address and the selected mailing address and all other Tender Documents that were issued. Broken wax-sealed packages will not be accepted or considered binding for comparison.

The bids shall be received by MDI up to 3:00 p.m. on 13.05.2024 at
Chief Administrative Officer (Admin)
Management Development Institute Gurgaon
Mehrauli Road, Sukhrali, Gurugram -122007
Phone: 91-124-4560535

11. The bidder should sign with their stamp on each and every page of tender including drawings and submit the same up to stipulated date & time. In case of withdrawal of the successful Bidder, MDI reserves the right to forfeit the EMD and it may offer to the L-2 bidder or other bidder and MDI may also undertake fresh tendering process at its own discretion. Once the work is awarded MDI reserves the right to execute the work in one package or in phase wise manner.

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12. Queries: A pre-bid meeting for all Bidders will be held in the office of MDI Gurgaon on 29.04.2024 at 2:30 p.m. Bidders queries in writing shall be addressed during the Pre-bid meeting in presence of MDI Representative / Architect / PMC. No queries will be accepted or answered thereafter.
13. MDI reserves the right to negotiate the rates with any and/or all bidder after the tender submission by the bidders to MDI has been made.
14. Any further information or clarification which the Bidder may require in order to complete the Tender may be obtained from:
Chief Administrative Officer (Admin)
Management Development Institute Gurgaon
Mehrauli Road, Sukhrali,
Gurugram -122007
Phone : 91-124-4560535
All information requested by and supplied to one Bidder will be supplied to all Bidders.
15. At any time prior to the date of opening of the bid, MDI may issue an addendum in writing to all persons or firms to whom the Tender Document has been issued, deleting, varying or extending any item of this Document. The receipt of the addendum by the Bidder shall be acknowledged and so noted in the space provided in the Tender. Unless it is in formal manner described above, any representation or explanation to the Bidder shall not be considered valid or binding on the MDI as to the meaning of anything connected with the Tender Document.
16. The date and time for submission may be deferred by an official notification in writing issued by the MDI to all Bidders. Tenders received after this date will not be considered.
17. Tenders may be disqualified for any reason including, but not limited to the following:
a) If all documents as required are not attached
b) If tender sets forth any conditions which are unacceptable to the MDI.
c) If any tender is submitted under a name other than the name of the individual, firm, partnership or corporation that was issued the Tender Document.
d) If there is evidence of collusion between Bidders.
e) If Bidder sets forth any offer to conditionally discount, reduce or modify its tender.
18. Two bids system (a) –Technical bids, (b)- Financial bids shall be submitted in three parts in sealed envelopes as below (signed of each page in all respect):
a) Envelope-I : Technical bids Volume-I & Volume-II
b) Envelope-II : Original EMD
c) Envelope –III : Duly filled Financial Bids (Bill of Quantities) Volume-III
19. After the ninety days (90) days after the date of submission of tender elapsed without bidders being notified as to the result of tender, the tender and earnest money deposit shall be automatically extended for a further period of ninety (90 days) unless notified to the contrary by MDI.
20. Bidder must submit with the tender an Earnest money deposit to the order of the MDI in the form of Demand draft drawn on any Nationalised Indian Bank favour of MDI through any Indian Nationalised bank This EMD must be valid for 90 days and shall be as per approved proforma. The EMD of unsuccessful bidder will be returned within 7 days from date of signing of contract with successful bidder, while EMD of successful bidder will be returned within 30 days after the submission of contract performance bank guarantee of award of work. Any tender not accompanied by the said EMD will not be considered. EMD of successful contractor shall be forfeited in case contractor refuses to enter into an agreement with owner.
21. Bidders to submit details regarding Registration No., GST, PF No., E.S.I., Labour Licence etc. along with submission of tender.
22. Eligibility Criteria & Selection Process
- 22.1 Bidders who fulfil the following requirements shall be eligible to apply. The Joint ventures / Consortium and Special Purpose Vehicles are not allowed and this bids will not be accepted.



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- 22.2 Should have satisfactorily completed the following works in last 5 (Five) years ending previous day of last date of submission of bid. For this purpose, cost of work shall mean gross value of the completed work.
- Three similar completed works each of value not less than Rs. 100 lakh.
OR
 - Two similar completed works each of value not less than Rs. 150 lakh.
OR
 - One similar completed work of value not less than Rs. 200 lakh.

“Similar Work” shall mean:

- a. Works comprising of, minimum 200TR Chiller in a multi storied buildings (Minimum 15.0 Metre height)
 - b. Should have had average Annual Financial Turn Over of Rs. 1.00 Cr. works during the immediate last 5 years’ consecutive financial years ending March 2023 excluding covid years. This should be duly audited by Chartered Accountants. Year in which no turnover is shown would also be considered for working out the average. The multiplication factor of 7% per annum simple interest is not applicable on the Annual Financial Turnover figures.
 - c. Should not have incurred any loss (profit after tax should be positive) in more than two years during the last five consecutive Financial years ending March 2023 duly audited and certified by the Chartered Accountant.
 - d. Should have a minimum solvency of Rs.1.0 Cr. certified by his Bankers.
23. All bidders are required to submit the documents (Work Completion Certificate duly signed and stamped by respective client) & other documents along with Volume I
24. Financial bids of only those bidders will be opened who qualify the Eligibility Criteria. MDI at it’s own discretion may invite the bidders whose financial bid has been opened for further negotiations. Letter of Intent (LOI) will be given by MDI to the Lowest bidder and the bidder will provide Letter of Acceptance (LOA) against LOI. LOI and LOA shall establish the final agency for execution of the work. Agency shall submit the draft Agreement to MDI within 7 days from the date of LOA which will be legally vetted before executing the Final contract.
25. The Performance Guarantee made out to the value of 5% (Five percent) of signed contract amount shall be submitted as described in Clause 10.1 of the Conditions of Contract. The Bond shall remain valid for a period as per special conditions of contract. Only successful bidder is required to furnish Performance Guarantee.
26. Without prejudice to anything contained in the foregoing Paragraphs, the Contractor shall always maintain the Performance Guarantee at the full amount until the date of issuance of the Completion Certificate in accordance with the terms and Conditions of the Contract. If the Contractor fails to maintain the Performance Guarantee in the full amount, the MDI may, by registered letter sent to the Contractor, terminate this employment under the Contract without necessity for any legal or other formality or reference to judicial proceedings.
27. The acceptance of the Tender shall be conditional and not finally binding upon the MDI until the Performance Guarantee has been duly provided and the actual Contract is signed between the MDI and the lowest bidder (herein called as “Contractor”). Should the Contractor fail to sign the Contract within the stipulated time or to provide the Bond within the period allowed or for any other reason withdraw the participation in the Tender, the MDI may withdraw the acceptance of the Tender without any notice or other formality and may enter into a new Agreement for the execution of the Works or any part it comprised in such acceptance and thereupon the amount of the Initial Guarantee shall be confiscated by the MDI from the Guaranteeing Bank without any necessity for any legal or other formality or reference to judicial proceedings or proof of damage and without prejudice to the right of the MDI inter-alia to award the Tender to the next lowest Bidder, if necessary, or to any other person at any other price or rate and to recover from the Contractor all amounts expended by the MDI in relating such Tender and charging the Contractor the difference in cost between the Contractor’s Tender and the person to whom such Tender

may be awarded pursuant to this Paragraph or to recover any and all actual damages from the Contractor by reason of default of the Contractor as herein provided.

28. The Tender shall be submitted before 3:00 p.m. on 13.05.2024. Any Tender received after this date will not be considered.
29. The Tender shall remain valid for a period of One Hundred Eighty (180) days with effect from the date stated in Paragraph (1) above or any extended period.
30. The value of the Performance Guarantee shall be Five percent (5%) of signed Contract Value. The Performance Guarantee shall be released after completion of work.
31. Bidders are to note that this is an Item Rate Contract and Bill of Quantities have been prepared as a guide to the Bidder and the Bidders are to submit item rate Tender for all the Works shown on the Drawings, described in the Specifications, Bill of Quantities and other Contract Document.
32. Commencement of the Works shall be affected within Ten (10) days from the date of signing LOI & LOA.
33. Retentions shall be to the amount of Five percent (5%) of the value of executed works. The retention during the execution period will be Five Percent (5%) of the value of the executed Works and shall be released 2.5 % after completion of work & rest 2.5 % after completion of DLP. Retentions are in addition to the systematic recovery of the advance payment (if any). Include labour cess recovery point here. The ZERO date for start of project will be considered to be date of signing of LOI & LOA. The Period of Completion for the whole of the Works is 120 Days (One hundred & twenty Days) after issue of letter of intent. The period of completion of 120 days is including mobilisation period of 10 days. The Contractor is to state the Period of Completion if he intends to complete the Works in less than what has been stated above.
34. The amount of Liquidated Damages payable by the Contractor to the MDI in respect of each calendar day over and above the period specified for execution and completion of the Works is 1.23 % per week of the total contract price subjected to maximum of 10% of the contract value. Since time is the essence of project, the works shall be executed as per the program of works as approved by MDI after which MDI reserves the right to terminate the contract without prejudice to the right of the MDI.
35. The Period of defects liability shall be Three Hundred Sixty-Five (365) days from the date of issue of completion certificate by competent authority.
36. The Bidder must submit a list of Sub-contractors with the offer and specialist names proposed to be used in the Works in the form as shown in the sample Appendix to the Form of Tender from the approved list of Sub-contractors. MDI, however, will always have the right to accept or reject any pre-approved subcontractor even after formal award of Contract and/or commencement of work with or without cause.
37. The successful Bidder shall be responsible for co-ordinating the work with various approved sub-contractors and other bid-pack Contractors employed on the Works co-ordinating the work between various trades, obtaining all the necessary information from subcontractors for the purpose of the overall programming of the works; supplying all the normal attendance to all subcontractors and assuming the overall responsibility for the aforesaid.
38. The value of the Earnest Money Deposit shall be Rs. 5,00,000/- (Rupees Five Lakhs Only) in the form of demand draft from Nationalised Bank in the name of Management Development Institute Society payable at Gurugram and shall remain valid for a period of Ninety Days (90 Days) from the last date of submission of bid which may be further revalidated for another 90 days' period.



**MANAGEMENT DEVELOPMENT INSTITUTE GURGAON
GURUGRAM, HARYANA**

**TENDER DOCUMENT
VOLUME I OF III
GENERAL CONDITIONS OF CONTRACT,
SPECIAL CONDITION OF CONTRACT, PROFORMAS**

**NOTICE INVITING TENDER FOR
SUPPLY INSTALLATION TESTING & COMMISSIONING OF CHILLER**

For

Proposed Construction Works at MDI Campus, Gurugram, Haryana



MDI
GURGAON

Management
Development
Institute

Mehrauli Road, Sukhrali, Gurugram – 122007, Haryana

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SUB-CLAUSE OF GENERAL CONDITIONS/SPECIAL CONDITIONS OF CONTRACT

| | | |
|---|--------------------|---|
| Amount of performance Guarantee | S.C.C. (31.1.a) | 5% of the contract price |
| Minimum amount of third party insurance | G.C.C(23.2) | Rs.2,00,000/- per occurrence, with the number of occurrences unlimited. |
| Mobilisation Time for issue of notice to commence | G.C.C(41.1.) | 10 days |
| Time for Completion _____ | G.C.C(43.1) | 120 Days after the signing of LOI and LOA. |
| Amount of liquidated damages_____ | G.C.C(47.1) | 1.23 % of total contract amount per week of delay subject to a maximum 10% of the contract price. |
| Defects Liability period | G.C.C(49.1) | 365 days |
| Retention Money | S.C.C.(41.1.b) | 5% of bill values |
| Initials of Signatory of bidder | | |

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GENERAL CONDITIONS OF CONTRACT

CLAUSE – 1.0

Definitions and Interpretation

Definition

- 1.1 In the Contract (as hereinafter defined) the following words and expression shall have the meaning hereby assigned to them, except where the context otherwise requires:
- a)
- (i) "Owner/Employer" means MDI (Management Development Institute Gurgaon), having their office at – Mehrauli Road, Sukhrali, Gurugram-122007, represented by one of the authorised persons.
 - (ii) "Contractor" means the person whose tender has been accepted by the Owner and the legal successor in title to such person, but not (except with the consent of the Owner) any assignee of such person.
 - (iii) "Subcontractor" means any person named in the Contract as a Subcontractor for a part of the Works or any person to whom a part of the Works has been subcontracted with the consent of the Engineer and the legal successor in title to such person, but not any assignee of any such person.
 - (iv) "Engineer/Engineer-in-Charge" the organisation or person appointed by Employer/MDI to act as Engineer for the purposes of contract.
 - (v) "Engineer's Representative" means a Project Management Consultant (PMC) appointed from time to time by MDI under Sub-Clause 2.2.
 - (vi) "Architect/Consultant" shall mean Architectural & Engineering Consultant appointed by MDI
- b)
- (i) "Contract" means these Conditions, Special Conditions, the Specification, the Drawings, the Bill of Quantities, the Tender, the Letter of Acceptance, the Contract Agreement and such further documents as may be expressly incorporated in the Letter of Acceptance, or Contract Agreement.
 - (ii) "Specification" means the specification of the Works included in the Contract and any modification thereof or addition thereto made under Clause 51 or submitted by the Contractor and approved by the Engineer.
 - (iii) "Drawings" means all drawings, calculations and technical information of a like nature provided by the Client Engineer/PMC Engineer to the Contractor under the Contract and all drawings, calculations, samples, patterns, models, operation and maintenance manuals and other technical information of a like nature submitted by the Contractor and approved by the Client Engineer/PMC Engineer.
 - (iv) "Bill of Quantities" means the Contractor's priced and completed bill of quantities forming part of the Tender.
 - (v) "Tender" means the Contractor's priced offer to the Owner for the execution and completion of the Works and the remedying of any defects therein accordance with the provisions of the Contract, as accepted by the Letter of Acceptance.
 - (vi) "Letter of Acceptance/Letter of Intent (LOI)" means the formal acceptance by the Owner of the Tender.
 - (vii) "Contract Agreement" means the contract agreement (if any) referred to in Sub-Clause 9.1.
 - (viii) "Appendix to Tender" means the appendix comprised in the form of Tender annexed to these Conditions.
- c)
- (i) "Commencement Date" means the date upon which the Contractor receives the notice to commence the work from Engineer pursuant to Clause 41.1.
 - (ii) "Time for Completion" means the time for completing the execution of work and passing the Tests on Completion of the Works or any Section or part thereof as stated in the Contract (or as extended under Clause 44.1) calculated from the Commencement Date.

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- d) (i) "Tests on Completion" means the tests specified in the Contract or otherwise agreed by the Engineer and the Contractor which are to be made by the Contractor before the Works or any Section or part thereof are taken over by the Owner.
- e) (i) "Contract Price" means the sum stated in the Letter of Acceptance as payable to the Contractor for the execution and completion of the Works and the remedying of any defects therein in accordance with the provisions of the Contract.
- (ii) "Retention Money" means the aggregate of all monies retained by the Owner pursuant to Sub-Clause 60.2(a).
- f) (i) "Works" means the Permanent Works and the Temporary Works or either of them as appropriate.
- (ii) "Permanent Works" means the permanent works to be executed (including Plant) in accordance with the contract.
- (iii) "Temporary Works" means all temporary works of every kind (other than Contractor's Equipment) required for execution and completion of the Works and the remedying of any defects therein.
- (iv) "Plant" means machinery, apparatus and the like intended to form or forming part of the Permanent Works.
- (v) "Contractor's Equipment" means all appliances and things of whatsoever nature (other than Temporary Works) required for the execution and completion of the Works and the remedying of any defects therein, but does not include Plant, materials or other things intended to form or forming part of the Permanent Works.
- (vi) "Section" means a part of the Works specifically identified in the Contract as a Section.
- (vii) "Site" means the places provided by the Owner where the Works are to be executed and any other places as may be specifically designated in the Contract as forming part of the Site.
- g) (i) "Cost" means all expenditure properly incurred or to be incurred, whether on or off the Site, including overhead, profit and other charges properly allocable thereto.
- (ii) "Day" means the day of 24 hours from mid night to mid night, with respect to calendar, but irrespective of the number of hours worked in that day.
- (iii) "Writing" means any hand-written, type-written, or printed communication, including telex, cable and facsimile transmission.

Headings and Marginal Notes

1.2 The headings and marginal notes in these Conditions shall not deemed part thereof or be taken into consideration in the interpretation or construction thereof or of the Contract.

Interpretation

1.3 Words importing persons or parties shall include firms and corporation and any organisation having legal capacity.

Singular and Plural

1.4 Words importing the singular only also include the plural and vice versa where the context requires.

Notices, Consents, Approvals, Certificates and Determinations

1.5 Wherever in the Contract provision is made the giving or issue of any notice, consent, approval, certificate or determination by any person, unless otherwise specified such notice, consent, approval, certificate or determination shall be in writing and the words "notify", "certify" or "determine" shall be construed accordingly. Any such consent approval, certificate or determination shall not unreasonably be withheld or delayed.



Engineer and Engineer's Representative

Engineer's Duties and Authority

- 2.1 a) The Engineer shall carry out the duties specified in the Contract.
- b) The Engineer may exercise the authority specified in or necessarily to be implied from the Contract, provided, however, that if the Engineer is required, under the terms of his appointment by the Owner, to obtain the specific approval of the Owner before exercise any such authority, particulars of such requirement shall be as set out in Part-II of these Conditions, Provided further that any requisite approval shall be deemed to have been given by the Owner for any such authority exercised by the Engineer.
- c) Except as expressly stated in the Contract, the Engineer shall have no authority to relieve the Contractor of any of his obligations under the Contract.

Engineer's Representative

- 2.2 The Engineer's Representative shall be appointed by engineer and be responsible to the Engineer and shall carry out such duties and exercise such authority as may be delegated to him by the Engineer under Sub-Clause 2.3.

Engineer's Authority to Delegate

- 2.3 The Engineer may from time to time delegate to the Engineer's Representative any of the duties and authorities vested in the Engineer and he may at any time revoke such delegation. Any such delegation or revocation shall be in writing and shall not take effect until a copy thereof has been delivered to the Owner and the Contractor.

Any communication given by the Engineer's Representative to the Contractor in accordance with such delegation shall have the same effect as though it had been given by the Engineer. Provided that:

- a) any failure of the Engineer's Representative to disapprove any work, materials or Plant shall not prejudice the authority of the Engineer to disapprove such work, materials or plant and to give instructions for the rectification thereof:
- b) if the Contractor questions any communication of the Engineer's Representative he may refer the matter to the Engineer who shall confirm, reverse or vary the contents of such communication.

Appointment of Assistants

- 2.4 The Engineer or the Engineer's Representative may appoint any number of persons to assist the Engineer's Representative in carrying out of his duties under Sub-Clause 2.2. He shall notify to the Contractor the names, duties and scope of authority of such persons. Such assistants shall have no authority to issue any instructions to the Contractor till such time and to secure their acceptance of materials, Plant or workmanship as being in accordance with the Contract, and any instruction given by any of them for those purposes shall be deemed to have been given by the Engineer's Representative.

Instructions in Writing

- 2.5 Instruction given by the Engineer shall be in writing, provided that if for any reason the Engineer considers it necessary to give any such instruction orally, the Contractor shall comply with such instruction. Confirmation in writing of such oral instruction given by the Engineer, whether before or after the carrying out of the instruction, shall be deemed to be an instruction within the meaning of this Sub-Clause. Provided further that if the Contractor, within 7 days, confirms in writing to the Engineer any oral instruction of the Engineer and such confirmation is not contradiction in writing within 7 days by the Engineers, it shall be deemed to be an instruction of the Engineer. The provisions of this Sub-Clause shall equally apply to instructions given by the Engineer's Representative and any assistants of the Engineer or the Engineer's Representative appointed pursuant to Sub-Clause 2.4.

Engineer to Act Impartially

- 2.6 Wherever, under the Contract, the Engineer is required to exercise his discretion by:
- a) giving his decision, opinion or consent, or
- b) expressing his satisfaction on approval, or



- c) determining value, or
- d) otherwise taking action which may affect the rights and obligations of Owner or the Contractor he shall exercise such discretion impartially within the terms of the Contract and having regard to all the circumstances. Any such decision, opinion, consent, expression of satisfaction, or approval, determination of value or action may be opened up, reviewed or revised as provided in Clause-67.

CLAUSE – 3.0

Assignment and Subcontracting

Assignment of Contract

- 3.1 The Contractor shall not, without the prior consent of the Owner (which consent, notwithstanding the provisions of Sub-Clause 1.5, shall be at the sole discretion of the Owner), assign the Contract or any part thereof, or any benefit or interest therein or thereunder, otherwise than by:
- a) A charge in favour of the Contractor's bankers of any monies due or to become due under the Contract, or
 - b) Assignment to the Contractor's insurers (in cases where the insurers have discharged the Contractor's loss or liability) of the Contractor's right to obtain relief against any other party liable.

CLAUSE – 4.0

Subcontracting

- 4.1 The Contractor shall not subcontract the whole of the Works. Except where otherwise provided by the Contract, the Contractor shall not subcontract any part of the Works without the prior consent of the Engineer. Any such consent shall not relieve the Contractor from any liability or obligation under the Contract and he shall be responsible for the acts, defaults and neglects of any Subcontractor, his agents, servants or workmen as fully as if they were the acts, defaults or neglects of the Contractor, his agents, servants or workmen. Provided that the Contractor shall not be required to obtain such consent for:
- a) The provision of labour, or
 - b) The purchase of materials which are in accordance with the standards specified in the Contract, or
 - c) The subcontracting of any part of the Works for which the Subcontractor is named in the Contract, provided Contractor notifies Owner of such Sub-Contractors.

Assignment of Subcontractor's Obligations

- 4.2 In the event of a Subcontractor having undertaken towards the Contractor in respect of the work executed, or the goods, materials, plant or services supplied by such Subcontractor, any continuing obligation extending for a period exceeding that of the Defects Liability Period under the Contract, the Contractor shall at any time, after the expiration of such Period, assign to the Owner, at the Owner's request and cost, the benefit of such obligation for the unexpired duration thereof.

CLAUSE – 5.0

Contract Document

Language/s and Law

- 5.1 The language for the purpose of Contract and any arbitration thereunder (if any) shall be English only.

Order of Precedence

- 5.2 The several documents forming the Contract are to be taken as mutually explanatory of one another, but in case of ambiguities or discrepancies the same shall be referred to the Engineer who shall thereupon issue to the Contractor instructions thereon and in such event, the following order of Precedence will prevail.
- a) Addendum & corrigendum
 - b) The Agreement
 - c) Letter of Acceptance
 - d) Special Conditions
 - e) Bill of Quantities



- f) Specifications
- g) Drawings
- h) General Conditions of Contract

CLAUSE – 6.0

6.1 The Drawings shall remain in the sole custody of the Engineer; two copies thereof shall be provided to the Contractor free of charge. The Contractor shall make at his own cost any further copies required by him. Unless it is strictly necessary for the purposes of the Contract, the Drawings, Specification and other documents provided by the Owner or the Engineer shall not, without the consent of the Engineer, be used or communicated to a third party by the Contractor. Upon issue of the Defects Liability Certificate, the Contractor shall return to the Engineer all Drawings, Specifications and other documents provided under the Contract. The Contractor shall supply to the Engineer four copies of all Detailed Drawings, Specifications and other documents as required for the execution of work, submitted by the Contractor and approved by the Engineer in accordance with Clause 7, together with a reproducible copy of any material which cannot be reproduced to an equal standard by photocopying. In addition, the Contractor shall also supply copies of such Drawings, Specifications and other documents as the Engineer may require in writing for the use of the Owner.

6.2 One set of Drawings to be kept at Site

One copy of the Drawings, provided to or supplied by the Contractor as aforesaid, shall be kept by the Contractor on the Site and the same shall at all reasonable times be made available for the reference of Engineer and for the reference of any other person authorised by the Engineer in writing.

6.3 Disruption of Progress

The Contractor shall give notice to the Engineer, with a copy to the Owner, whenever planning or execution of the Works is likely to be delayed or disrupted unless any further drawing or instruction is issued by the Engineer within a reasonable time. The notice shall include details of the drawing or instruction required and of why and by when it is required and of any delay or disruption likely to be suffered if it is late.

6.4 Delay of Drawings

If, by reason of any failure or inability of the Engineer to issue, within a reasonable time in all the circumstances, any drawing or instruction for which notice has been given by the Contractor in accordance with Sub-Clause 6.3, the Contractor suffers delay then the Engineers shall, after due consultation with the Owner and the Contractor, determine any extension of time to which the Contractor is entitled under Clause – 44 and shall notify the Contractor accordingly with a copy to the Owner.

6.5 Failure by Contractor to submit Drawings

If the failure or inability of the Engineer to issue any drawings or instruction is caused in whole or in part to the failure of the Contractor to submit Drawings, Specification or other documents which he is required to submit under the Contract, the Engineer shall take such failure by the Contractor into account while making his determination pursuant to Sub-Clause 6.4.

CLAUSE – 7.0

7.1 Supplementary Drawings and Instruction

The Engineer shall have authority to issue to the Contractor, from time to time, such supplementary Drawings and instructions as shall be necessary for the purpose of the proper execution and completion of the Works and the remedying of any defects therein. The Contractor shall carry out and be bound by the same.

7.2 Permanent Works Designed by Contractor

Where the Contract expressly provides that part of the Permanent Works shall be designed by the Contractor, he shall submit to the Engineer, for approval:

- a) such drawings, specifications, calculations and other information as shall be necessary to satisfy the Engineer as to the suitability and adequacy of that design, and
- b) operation and maintenance manuals together with drawings of the Permanent Works as completed, in sufficient detail to enable the Owner to operate, maintain, dismantle, reassemble and adjust the



Permanent Works incorporating that design. The Works shall not be considered to be completed for the purposes of taking over in accordance with Clause 48.1 until such operation and maintenance manuals, together with drawings on completion, have been submitted to and approved by the Engineer. All such drawings, specifications, calculations, manuals or other information shall become the Owner's property.

7.3 Responsibility Unaffected by Approval

Approval by the Engineer, in accordance with Sub-Clause 7.2, shall not relieve the Contractor of any of his responsibilities under the Contract.

CLAUSE – 8.0

General Obligations

8.1 Contractor's General Responsibilities

The Contractor shall, with due care and diligence, design (to the extent covered under the Contract), execute and complete the Works and rectify any defects therein in accordance with the provisions of the Contract. The Contractor shall provide all superintendence, labour, materials, plant, Contractor's Equipment and all other things, whether of a temporary or permanent nature, required in and for such design, execution, completion and remedying of any defects, so far as the necessity for providing the same is specified in or is reasonably to be inferred from the Contract. The failure of Contractor for any reason or his negligence in acquiring information or providing services, materials or other matters that may affect construction or completion of the works or remedying any defects therein shall not relieve him of his responsibilities undertaken under the contract.

8.2 Site Operations and Methods of Construction

The Contractor shall take full responsibility for the adequacy, stability and safety of all Site operations and methods of construction. Provided that the Contractor shall not be responsible (except as stated hereunder or as may be otherwise agreed) for the design or specification of Permanent Works, or for the design or specification of any Temporary Works not prepared by the Contractor. Where the Contract expressly provides that part of the Permanent Works shall be designed by the Contractor, he shall be fully responsible for that part of such Works, notwithstanding any approval by the Engineer.

CLAUSE – 9.0

9.1 Contract Agreement

The Contractor shall, if called upon to do so, enter into and execute the Contract Agreement, to be prepared and completed, in the form annexed to these Conditions with such modifications as may be necessary.

CLAUSE – 10.0

10.1 Performance Guarantee

The Contractor, for due and faithful performance of the Contract, shall obtain and submit to the Owner such security within 15 days after the receipt of the Letter of Acceptance, in the proforma as annexed to Tender. While providing such security to the Owner, the Contractor shall notify the Engineer of so doing. Such security shall be in such form as may be agreed between the Owner and the Contractor. The institution providing such security shall be subject to the approval of the Owner. The cost of complying with the requirement of this Clause shall be borne by the Contractor, unless the Contract otherwise provides.

10.2 Period of Validity of Performance Guarantee

The Performance Guarantee shall be valid till the Contractor has executed, completed the Works and 365 days' defect liability period of the work is over in accordance with the Contract. No claim shall be entertained against such security after the issue of the Defects Liability Certificate in accordance with Sub-Clause 62.1 and such security shall be returned to the Contractor within 14 days of the issue of the said Defects Liability Certificate.



CLAUSE – 11.0

11.1 Inspection of Site

The Owner/Engineer shall have made available to the Contractor, before the submission of the Tender, such data on hydrological and sub-surface conditions as have been obtained by or on behalf of the Owner from investigations undertaken relevant to the Works but the Contractor shall be responsible for his own interpretation thereof.

The Contractor shall be deemed to have inspected and examined the Site and its surroundings and information available in connection therewith.

And satisfied himself regarding the sufficiency of his tender with respect to the works and rates therefore sufficient to cover all obligations mentioned in the contract and whatever contingencies may arise for completion of the works and remedying defects therein, before submitting his tender, as to without limitation.

- a) Shape and nature of this site including the soil, surface and sub-surface conditions.
- b) Drill such holes and employs such soil probes as necessary for such verification.
- c) Existence and extent of water underground, if any.
- d) Existence and extent of rocks and their nature, if any.
- e) Hydrological and climatic conditions.
- f) Extent and nature of the work and materials necessary for execution and completion of works and remedying any defects therein.
- g) The means of access to the site and the accommodations and utilities he may require.
- h) All applicable legal and regulatory requirements.

And in general shall be deemed to be fully aware of the above conditions and to have obtained all necessary information personally on such and all other circumstances and conditions which may affect his tender whether mentioned or not in the contract. The contractor shall be deemed to have based his tender on his knowledge and information of the foregoing conditions and also data made available by owner and obtained through site visit or collected from other reliable sources.

Owner shall not be liable to consider any additional extra or any circumstances or obstacles arising or existing by reason of contractor's failure or negligence in so satisfying himself as stated above and any approvals by or submission of date by owner or engineer with respect to any of the foregoing conditions, circumstances, designs, plans or other matters shall not relieve contractor of his obligations under the contract.

CLAUSE – 12.0

12.1 Sufficiency of Tender

The Contractor shall be deemed to have satisfied himself as to the correctness and sufficiency of the Tender and of the rates and prices quoted/stated in the Bill of Quantities, all of which shall, except insofar as it is otherwise provided in the Contract, cover all his obligations under the Contract (including those in respect of the supply of goods, materials, Plant or services or of contingencies for which there is a Provisional Sum) and all matters and things necessary for the proper execution and completion of the Works and the remedying of any defects therein.

CLAUSE – 13.0

13.1 Work to be in Accordance with Contract

Unless it is legally or physically impossible, the Contractor shall execute and complete the Works and remedy any defects therein strictly in accordance with the Contract, to the satisfaction of the Engineer. The Contractor shall comply with and adhere strictly to the Engineer's instructions on any matter, whether mentioned in the Contract or not, touching or concerning the Works. The Contractor shall take instructions only from the Engineer or, subject to the provisions of Clause 2, from the Engineer's Representative.



CLAUSE – 14.0

14.1 Programme to be submitted

The Contractor shall, within 7 days' time after the date of the Letter of Acceptance, submit to the Engineer for his consent a computerised programme, in such form and detail as the Engineer shall reasonably prescribe, for the execution of the Works. The Contractor shall, whenever required by the Engineer, also provide in writing for his information a general description of the arrangements and methods which the Contractor proposes to adopt for the execution of the Works.

14.2 Revised Programme

If during the course of execution, it is noticed by the Engineer that the actual progress of the Works does not conform to the programme to which consent has been given under Sub-Clause 14.1, the Contractor shall produce, at the notice of the Engineer, a revised programme showing the modifications to such programme necessary to ensure completion of the Works within the Time for Completion.

14.3 Cash Flow Estimate to be Submitted

The Contractor shall, within 15 days after the date of the Letter of Acceptance, provide to the Engineer for his information and budgetary allocation a detailed cash flow estimate, at quarterly intervals, of all payments based on programme, the Contractor propose to work under the Contract and the Contractor shall subsequently revise the cash flow estimate at quarterly intervals, if required to do so by the Engineer.

14.4 Contractor not Relieved of Duties or Responsibilities

The submission to and consent by the Engineer of such programmes or the provision of such general descriptions or cash flow estimates shall not relieve the Contractor of any of his duties or responsibilities under the Contract.

CLAUSE – 15.0

15.1 Contractor's Superintendence

The Contractor shall provide all necessary superintendence during the execution of the Works and as long thereafter as the Engineer may consider necessary for the proper fulfilling of the Contractor's obligations under the Contract. The Contractor, or a competent and authorised representative approved of by the Engineer, shall give his whole time to the superintendence of the Works, such authorised representative shall receive, on behalf of the Contractor, instructions from the Engineer or, subject to the provisions of Clause 2, the Engineer's Representative. If approval of the representative is withdrawn by the Engineer, the Contractor shall, as soon as is practicable, having regard to the requirement of replacing him as hereinafter mentioned, after receiving notice of such withdrawal, remove the representative from the Works and shall not thereafter employ him again on the Works in any capacity and shall replace him by another representative approved by the Engineer.

CLAUSE – 16.0

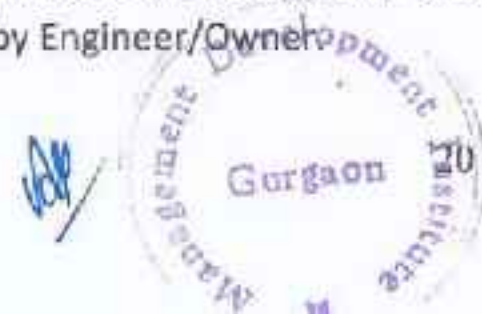
16.1 Contractor's Employees

The Contractor shall provide on the Site in connection with the execution and completion of the Works and the remedying of any defects therein

- a) only such Engineers which are skilled and experienced in their respective trades and such foremen and leading hands which are competent to give proper superintendence of the Works, and
- b) such skilled, semi-skilled and unskilled labour which is necessary for the proper and timely fulfilling of the Contractor's obligations under the Contract.

16.2 Engineer at Liberty to Object

The Engineer shall be at liberty to object to and require to remove forthwith from the Works any person provided by the Contractor who, in the opinion of the Engineer, misconducts himself, or is incompetent or negligent discharging his duties, or whose presence on Site is otherwise considered by the Engineer to be undesirable, and such person shall not be again allowed upon the Works without the consent of the Engineer. Any person so removed from the Works shall be replaced as directed by Engineer/Owner.



CLAUSE – 17.0

17.1 Setting-out

The Contractor shall be responsible for:

- a) the accurate setting-out of the Works in relation to reference points, lines and levels as given by the Engineer in writing,
- b) the correctness, subject as above mentioned, with regard to position, levels, dimensions and alignment of all parts of the Works, and
- c) the provision of all necessary instrument, appliances and labour in connection with the foregoing responsibilities.

CLAUSE – 18.0

18.1 Setting-out -The Contractor shall be responsible for:

If, at any time during the execution of the Works, any error appears in the position, levels, dimensions or alignment of any part of the Works, the Contractor, on being required so to do by the Engineer, shall, at his own cost, rectify such error to the satisfaction of the Engineer. The checking of any setting-out or of any line or level by the Engineer shall not in any way relieve the Contractor from his responsibility for the accuracy thereof and the Contractor shall carefully protect and preserve all bench-marks, reference points, pegs and other things required to be used in setting-out the Works.

CLAUSE – 19.0

19.1 Safety, Security and Protection of the Environment

The Contractor shall, throughout the execution and completion of the Works and remedying of any defects therein:

- a) have full regard for the safety of all persons engaged with the execution of the work at work site or to the general public and keep the Site (so far as the same is under his control) and the Works (so far as the same are not completed or occupied by the Owner) in an orderly state appropriate to the avoidance of danger to such persons, and all labour to wear safety helmets, belts and safety shoes.
- b) provide and maintain at his own cost all lights, guards, fencing, warning signs and watching, when and where necessary or required by the Engineer or by any local authority, for the protection of the Works or for the safety and convenience of the public or others, and
- c) Take all reasonable steps to protect the environment on and off the Site to avoid damage or nuisance to persons or to property of the public or others resulting from pollution, noise or other causes arising as a consequence of his methods of operation.

19.2 Owner's Responsibilities

If under Clause 31 the Owner shall carry out work on the Site with his own workmen, he shall, in respect of such work:

- a) have full regard to the safety of all persons engaged with the execution of work at work site or to the general public.
- b) Keep the Site in an orderly state appropriate to the avoidance of danger to such persons.

If under Clause 31 the Owner shall employ other contractors on the site, he shall require them to have the same regard for safety and avoidance of danger.

CLAUSE – 20.0

20.1 Care of Works

The Contractor shall take full responsibility for the care of the Works and materials and Plant for incorporation therein from the Commencement Date to the date of issue of the Taking-Over Certificate for the whole or part of the Works. The responsibility for the said care shall be passed to the Owner. Provided that:



- a) If the Engineer/Owner issues Taking-Over Certificate after agreement from Owner for any Section or part of the Permanent Works, the Contractor shall cease to be liable for the care of that Section or part from the date of issue of the Taking-Over Certificate. The responsibility for the care of that Section or part shall be pass to the Owner, and
- b) The Contractor shall take full responsibility for the care of any outstanding Works and materials and Plant for incorporation therein which he undertakes to finish during the Defects Liability Period until such outstanding Works have been completed pursuant to Clause 49.

20.2 Responsibility to Compensate/Rectify Loss or Damages

If any loss or damage caused to the Works, or any part thereof, or materials or Plant for incorporation therein, during the period for which the Contractor is responsible for the care thereof, due to any cause whatsoever, other than the risks defined in Sub-Clause 20.4, the Contractor shall, at his own cost, compensate/rectify such loss or damage so that the Permanent Works conform in every respect with the provisions of the Contract to the satisfaction of the Engineer/Owner. The Contractor shall also be liable for any loss or damage to the Works occasioned by him in the course of any operations carried out by him for the purpose of complying with his obligations under Clauses 49 and 50.

20.3 Loss or Damage Due to Owner's Risks

In the event of any such loss or damage caused due to any of the risks defined in Sub-Clause 20.4, the Engineer shall determine an addition to the Contract Price in accordance with Clause 52 and shall notify the Engineer/Owner accordingly, with a copy to the Owner. In the case of a combination of risks causing loss or damage any such determination shall take into account the proportional responsibility on mutually agreed basis of the Contractor and the Owner.

20.4 Owner's Risks

The Owner's risks are:

- a) war, hostilities (whether war be declared or not), invasion, act of foreign enemies,
- b) rebellion, revolution, insurrection, or military or usurped power, or civil war,
- c) ionising radiations, or contamination by radiation-activity from any nuclear fuel, or from any nuclear waste from the combustion of nuclear fuel, radio-active toxic explosive, or other hazardous properties of any explosive nuclear assembly or nuclear component thereof,
- d) pressure waves caused by aircraft or other aerial devices travelling at sonic or supersonic speeds,
- e) riot, commotion or disorder, unless solely restricted to employees of the Contractor or of his Subcontractors and arising from the conduct of the Works,
- f) loss or damage due to the use or occupation by the Owner of any Section or part of the Permanent Works, except as may be provided for in the Contract,
- g) any operation of the forces of natural calamities against which an experienced contractor could not reasonably have been expected to take precautions.

CLAUSE – 21.0

21.1 Insurance of Works and Contractor's Equipment

The Contractor shall at his own cost without limiting his or the Owner's obligations and responsibilities under Clause 20, take Contractors all risk (CAR) insurance policy to insure:

- a) The Works, together with materials and Plant for incorporation therein, to the full replacement cost of the works involved in new construction.
- b) An additional sum of 15 percent of such replacement cost, or as may be specified elsewhere of these Conditions, to cover any additional costs of and incidental to the rectification of loss or damage including professional fees and the cost of demolishing and removing any part of the Works and of removing debris of whatsoever nature.
- c) The Contractor's Equipment and other things brought on to the Site by the Contractor, for a sum sufficient to provide for their replacement at the Site.

21.2 Scope of Cover



The insurance policy as defined in paragraphs(a) and (b) of Sub-Clause 21.1 shall be in the joint names of the Owner and the Contractor and shall cover:

- a) The Owner and the Contractor against all loss or damage from whatsoever nature arising, other than as mentioned in Sub-Clause 21.4, from the start of work at the Site to the date of issue of the relevant Taking-Over Certificate in respect of the Works or any Section or part thereof as the case may be, and
- b) The Contractor to discharge his liability:
 - i) During the Defects Liability Period for loss or damage arising due to a cause occurring prior to or during the Defects Liability Period, and
 - ii) For loss or damage occasioned by the Contractor in the course of any operations carried out by him for the purpose of complying with his obligations under Clause 49 and 50.

21.3 Responsibility for Amounts Not Covered under Insurance

The responsibility of any amounts not covered under insurance policy shall be borne by the Owner or the Contractor in accordance with their responsibilities as defined under Clause 20.

21.4 Exclusions

There shall be no obligation for the insurances in Sub-Clause 21.1 to include loss or damage caused by:

- a) War, hostilities (where war may be declared or not), invasion, act of foreign enemies,
- b) Rebellion, revolution, insurrection, or military or usurped power, or civil war,
- c) Pressure waves caused by aircraft or other aerial devices travelling at sonic or supersonic speeds.

CLAUSE – 22.0

22.1 Damage to Persons and Property

The Contractor shall, except if and so far as the Contract provides otherwise, indemnify the Owner against all losses and claims in respect of:

- a) Death of or injury to any person, or
- b) Loss or damage to any property (other than the Works), which may arise out of or in consequence of the execution and completion of the Works and the remedying of any defects therein, and against all claims, proceedings, damages, costs, charges and expenses whatsoever in respect thereof or in relation thereto, subject to the exception defined in Sub-Clause 22.2.

22.2 Exceptions

The “exceptions” referred to in Sub-Clause 22.1 are:

The permanent use or occupation of land by the Works, or any part thereof, the right of the Owner to execute the Works, or any part thereof, on, over, under, in or through any land,

- a) Death of or injury to persons or loss of or damage to property resulting from any act or neglect of the Owner, his agents, servants or other contractors, not being employed by the Contractor, or in respect of any claims, proceedings, damages, costs, charges and expenses in respect thereof or in relation thereto or, where the injury or damage was contributed to by the Contractor, his servants or agents, such part of the said injury or damage as may be just and equitable having regard to the extent of the responsibility of the Owner, his servants or agents or other contractors for the injury or damage.

CLAUSE – 23.0

23.1 Third Party Insurance (including Owner’s Property)

The Contractor shall, without limiting his or the Owner’s obligations and responsibilities under Clause 22, insure, in the joint names of the Contractor and the Owner, against liabilities for death of or injury to any person (other than as provided in Clause 24) or loss of or damage to any property (other than the Works) arising out of the performance of the Contract, other than the exceptions defined in paragraphs (a),

23.2 Minimum Amount of Insurance

Such insurance shall be for at least the amount stated in the Appendix to Tender.



23.3 Cross Liabilities

The insurance policy shall include a cross liability clause such that the insurance shall apply to the Contractor and to the Owner as separate insureds.

CLAUSE – 24.0

24.1 Accident or Injury to Workmen

The Owner shall not be liable for or in respect of any damages or compensation payable to any workman or other person in the employment of Contractor or any Subcontractor, other than death or injury resulting from any act or default of the Owner, his agents or servants. The Contractor shall indemnify and keep indemnified the Owner against all such damages and compensation, other than those for which the Owner is liable as aforesaid, and against all claims, proceedings, damages, costs, charges and expenses whatsoever in respect thereof or in relation thereto.

24.2 Insurance against Accident to Workmen

The Contractor shall insure against such liability and shall continue such insurance throughout the contract period for to the persons employed by him on the Works. Provided that, in respect of any persons employed by any of his Subcontractor, the Contractor's obligations to insure as aforesaid under this Sub-Clause shall be satisfied if the Subcontractor shall have insured against the liability in respect of such persons in such manners so that the Owner is indemnified under the policy. It shall be contractor's responsibilities to produce his sub-contractors to the Owner, when required, at the time of receipt for the payment of the current premium.

CLAUSE – 25.0

25.1 Evidence and Terms of Insurance

The Contractor shall provide evidence to the Owner prior to the start of work at the Site that the insurance required under the Contract have been effected and shall, provide the insurance policies to the Owner when desired. While providing such evidence and such policies to the Owner, the Contractor shall notify the Engineer of so doing. Such insurance policies shall be consistent with the general terms agreed prior to the issue of the Letter of Acceptance. The Contractor shall effect all insurance for which he is responsible with insurers and in terms approved by the Owner.

25.2 Adequacy of Insurance

The Contractor shall notify the insurers of changes in the nature, extent or programme for the execution of the Works and ensure the adequacy of the insurance at all times in accordance with the terms of the Contract and shall, when required, produce to the Owner the insurance policies in force and the receipts for payment of the current premiums.

25.3 Remedying on Contractor's Failure to Insure

If the Contractor fails to effect and keep in force any of the insurance required under the Contract, or fails to provide the policies to the Owner within the period specified in Sub-Clause 25.1, then and in any such case the Owner may effect and keep in force any such insurance and pay any premium as may be necessary for that purpose and from time to time deduct the amount so paid from any amounts due or to become due to the Contractor, or recover the same as a debt due from the Contractor.

25.4 Compliance with Policy Conditions

In the event that the Contractor or the Owner fails to comply with conditions imposed by the insurance policies effected pursuant to the Contract, each shall indemnify the other against all losses and claims arising from such failure.

CLAUSE – 26.0

26.1 Compliance with Statutes, Regulations

The Contractor shall conform in all respects, including by the giving of all notices and the paying of all fees, with the provisions of:



- a) Any National or State Statute, Ordinance, or other Law, or any regulation, or bye-law of any local or other duly constituted authority in relation to the execution and completion of the Works and the remedying of any defects therein, and
- b) The rules and regulations of all public bodies and companies whose property or rights are affected or may be affected in any way by the Works, and the Contractor shall keep the Owner indemnified against all penalties and liability of every kind for breach of any such provisions. Provided always that the Owner shall be responsible for obtaining any planning, zoning or other similar permission required for the Works to proceed.

CLAUSE – 27.0

27.1 Fossils

All fossils, coins, articles of value or antiquity and structures and other remains or things of geological or archaeological interest discovered on the Site shall, as between the Owner and the Contractor, be deemed to be the absolute property of the Owner. The Contractor shall take reasonable precautions to prevent his workmen or any other persons from removing or damaging any such article or thing and shall, immediately upon discovery thereof and before removal, acquaint the Engineer of such discovery and follow the Engineer's instructions for dealing with the same. If, by reason of such instruction, the Contractor suffers delay and/or incurs costs then the Engineer shall, after due consultation with the Owner and the Contractor, determine:

- a) Any extension of time to which the Contractor is entitled under Clause 44, and no extra claims shall be entertained on this account.

CLAUSE – 28.0

28.1 Patent Rights

The Contractor shall save harmless and indemnify the Owner from and against all such claims and proceedings for or on account of infringement of any patent rights, design trademark or name or other protected rights in respect of any Contractor's Equipment, materials or Plant used for or in connection with or for incorporation in the Works and from and against all damages, costs, charges and expenses whatsoever in respect thereof or in relation thereto, except such infringement results from compliance with the design or Specification provided by the Engineer.

28.2 Royalties

Except where otherwise stated, the Contractor shall pay all tonnage and other royalties, rent and other payments or compensation, if any, for getting stone, sand, gravel, clay, or other materials required for the Works.

CLAUSE – 29.0

29.1 Interference with Traffic and Adjoining Properties

All operations necessary for the execution and completion of the Works and the remedying of any defects therein shall, so far as compliance with the requirements of the Contract permits, be carried on so as not to interfere unnecessarily or improperly with:

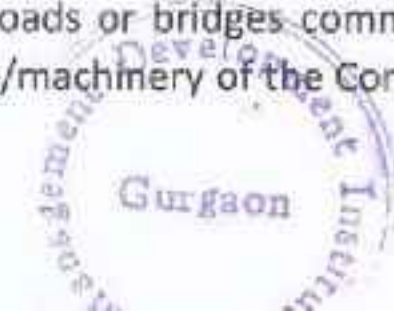
- a) The convenience of the public, or
- b) The access to, use and occupation of public or private roads and footpaths to or of properties whether in the possession of the Owner or of any other person

The Contractor shall save harmless and indemnify the Owner in respect of all claims, proceedings, damages, costs, charges and expenses whatsoever arising out of, or in relation to, any such matters insofar as the Contractor is responsible therefor.

CLAUSE – 30.0

30.1 Avoidance of Damages of Roads

The Contractor shall use every reasonable means to prevent any of the roads or bridges communicating with on the routes to the Site from being damaged or injured by any vehicle/machinery of the Contractor or



any of his Subcontractors and, in particular, shall select routes, choose and use vehicles and restrict and distribute loads so that any such extraordinary traffic as will inevitably arise from the moving of materials, Plant, Contractor's Equipment or Temporary Works from and to the Site shall be limited, as far as reasonably possible, and so that no unnecessary damage or injury may be occasioned to such roads and bridges.

30.2 Transport of Contractor's Equipment or Temporary Works

Save insofar as the Contract otherwise provides, the Contractor shall be responsible for and shall pay the cost of strengthening any bridges or altering or improving any road communicating with or on the routes to the Site to facilitate the movement of Contractor's Equipment or Temporary Works and the Contractor shall indemnify and keep indemnified the Owner against all claims for damage to any such road or bridge caused by such movement, including such claims as may be made directly against the Owner, and shall negotiate and pay all claims arising solely out of such damage.

30.3 Transport of Materials or Plant

If, notwithstanding Sub-Clause 30.1, any damage occurs to any bridge or road communicating with or on the routes to the Site arising from the transport of materials or Plant, the Contractor shall notify the Engineer with a copy to the Owner, as soon as he becomes aware of such damage or as soon as he receives any claim from the authority entitled to make such claim. Where under any law or regulation the haulier of such materials or Plant is required to indemnify the road authority against damage, the Owner shall not be liable for any costs, charges or expenses in respect thereof or in relation thereto.

30.4 Waterborne Traffic

Where the nature of the Works is such as to require the use by the Contractor of waterborne transport the foregoing provisions of this Clause shall be construed as though "roads" included a lock, dock, sea wall or other structure related to a waterway and "vehicle" included craft, and shall have effect accordingly.

CLAUSE – 31.0

31.1 Opportunities for Other Contractors

The Contractor shall, in accordance with the requirements of the Engineer, afford all reasonable opportunities for carrying out their work to:

- a) Any other contractors employed by the Owner and their workmen,
- b) The workmen of the Owner, and
- c) The workmen of any duly constituted authorities who may be employed in the execution on or near the Site of any work not included in the Contract or of any contract which the Owner may enter into in connection with or ancillary to the Works.

31.2 Facilities for Other Contractors

If, however, pursuant to Sub-Clause 31.1 the Contractor shall, on the written request of the Engineer:

- a) Make available to any such other contractor, or to the Owner or any such authority, any roads or ways for the maintenance of which the Contractor is responsible.
- b) Permit the use, by any such, of Temporary Works or Contractor's Equipment on the Site, or
- c) Provide any other service of whatsoever nature for any such, the Engineer shall determine an addition to the Contract Price in accordance with Clause-52 and shall notify the Contractor accordingly, with a copy to the Owner.

CLAUSE – 32.0

32.1 Contractor to Keep Site Clear

During the execution of the Works the Contractor shall keep the Site reasonably free from all unnecessary obstruction and shall store or dispose of any Contractor's Equipment and surplus materials and clear away and remove from the Site any wreckage, rubbish or Temporary Works on daily basis. Contractor shall abide by all statutory requirements in this regard.



CLAUSE – 33.0

33.1 Clearance of Site on Completion

Upon the issue of any Taking-Over Certificate the Contractor shall clear away and remove from that part of the Site to which such Taking-Over Certificate relates, all Contractor's Equipment, surplus material, rubbish and Temporary Works of every kind, and leave such part of the Site and Works clean and in a workmanlike condition to the satisfaction of the Engineer. Provided that the Contractor shall be entitled to retain on Site, until the end of the Defects Liability Period, such materials, Contractor's Equipment and Temporary Works as are required by him for the purpose of fulfilling his obligations during the Defects Liability Period.

CLAUSE – 34.0

Labour**34.1 Engagement of Staff and Labour**

The Contractor shall, unless otherwise provided in the Contract, make his own arrangements for the engagement of all staff and labour, local or other, and for their payment, housing, feeding and transport.

CLAUSE – 35.0

35.1 Returns of Labour and Contractor's Equipment

The Contractor shall, submit to the Engineer daily labour deployment report showing the staff and the numbers of the several classes of labour employed by the Contractor on the Site and such information with respect of Contractor's Equipment as the Engineer may require.

CLAUSE – 36.0

Materials Works and Workmanship**36.1 Quality of Materials, Works and Workmanship**

All materials Works and workmanship shall be

- a) of the respective kinds described in the Contract and in accordance with the Engineer's instructions, and
- b) Subjected from time to time to such tests as the Engineer may require at the place of manufacture, fabrication or preparation, or on the Site or at such other place or places as may be specified in the Contract, or at all or any of such places.

The Contractor shall provide such assistance, labour, electricity, fuels, stores, apparatus and instruments as are normally required for examining, measuring and testing any materials or for completion of the works and shall supply samples of materials, before incorporation in the Works, for testing as may be selected and required by the Engineer.

36.2 Cost of Samples

All samples shall be supplied by the Contractor at his own cost if the supply thereof is clearly intended by or provided for in the Contract or if Contractor considers it necessary of the Works.

36.3 Cost of Tests

The cost of making any test shall be borne by the Contractor if such test is

- a) Clearly intended by or provided for in the Contract.
- b) Particularized in the Contract (in cases only of a test under load or of a test to ascertain whether the design of any finished or partially finished work is appropriate for the purposes which it was intended to fulfil) in sufficient detail to enable the Contractor to price or allow for the same in his Tender.

36.4 Cost of Tests Not Provided for

If any test required by the Engineer which is

- a) Not so intended by or provided for, or
- b) (in the cases above mentioned) not so particularized, or



- c) (though so intended or provided for) required by the Engineer to be carried out at any place other than the Site or the place of manufacture, fabrication or preparation of the materials or Works tested, shows the materials, Works or workmanship not to be accordance with the provisions of the Contract to the satisfaction of the Engineer, then the cost of such test shall be borne by the Contractor, but in any other case Sub-Clause-36.5 shall apply.

36.5 Engineer's Determination Where Tests Not Provided for Where, pursuant to Sub-Clause 36.4, this Sub-Clause applies the Engineer shall, after due consultation with the Owner and the Contractor, determine:

CLAUSE – 37.0

37.1 Inspection of Operations

The Engineer, and any person authorised by him, shall at all reasonable times have access to the Site and to all workshops and places where materials or Plant and Works are being manufactured, fabricated or prepared for the Works and the Contractor shall afford every facility for and every assistance in obtaining the right to such access.

37.2 Dates for Inspection and Testing

The Contractor shall agree with the Engineer on the time and place for the inspection or testing of any materials or Plant as provided in the Contract. The Engineer shall give the Contractor not less than 24 hours' notice of his intention to carry out the inspection or to attend the tests. If the Engineer, or his duly authorised representative, does not attend on the date agreed, Contractor and Engineer shall agree on a new date and if the Engineer still does not attend, the Contractor may, unless otherwise instructed by the Engineer, proceed with the tests, which shall be deemed to have been made in the presence of the Engineer. The Contractor shall forthwith forward to the Engineer duly certified copies of the test reading. If the Engineer has not attended the tests, he shall accept the said readings as accurate.

37.3 Rejection

If, at the time and place agreed in accordance with Sub-Clause 37.3, the Materials or Plant and Works are not ready for inspection or testing or if, as a result of the inspection or testing referred to in this Clause, the Engineer determines that the materials or Plant and Works are defective or otherwise not in accordance with the Contract, he may reject the materials or Plant and Works and shall notify the Contractor thereof immediately. The notice shall state the Engineer's objections with reasons. The Contractor shall then promptly make good the defect or ensure that rejected materials or Plant and Works comply with the Contract. If the Engineer so requests, the tests of rejected materials or Plant shall be made or repeated under the same terms and conditions. All costs incurred by the Owner by the repetition of the tests shall, after due consultation with the Owner and the Contractor, be determined by the Engineer and shall be recoverable from the Contractor by the Owner and may be deducted from any monies due or to become due to the Contractor and the Engineer shall notify the Contractor accordingly, with a copy to the Owner.

37.4 Independent Inspection

The Engineer may delegate inspection and testing of materials or Plant and Works to an independent inspector. Any such delegation shall be effected in accordance with Sub-Clause 2.4 and for this purpose such independent inspector shall be considered as an assistant of the Engineer. Notice of such appointment (not being less than 14 days) shall be given by the Engineer to the Contractor.

CLAUSE – 38.0

38.1 Examination of Work Before Covering up

No part of the Works shall be covered up or put out of view without approval of the Engineer and the Contractor shall afford full opportunity for the Engineer to examine and measure any such part of the Works which is about to be covered up or put out of view and to examine foundations before any part of the Works is placed thereon. The Contractor shall give notice to the Engineer whenever any such part of the Works or foundations is or are ready or about to be ready for examination and the Engineer shall, without unreasonable delay, if Clause 28.1 was not compiled with attend for the purpose of examining and measuring such part of the Works or of examining such foundations.



Uncovering and Making Openings

- 38.2 The Contractor shall at his expense uncover any part of the Works or make openings in or through the same as the Engineer may from time to time instruct and shall reinstate and make good such part. If any such part has been covered up or put out of view after compliance with the requirement of Sub-Clause 38.1 and is found to be executed in accordance with the Contract, and if Engineer should instruct Contractor to uncover or make openings, the Engineer shall, after due consultation with the Owner and the Contractor, determine the amount of the Contractor's costs in respect of such of uncovering, making openings in or through, reinstating and making good the same, which shall be added to the Contract Price, and shall notify the Contractor accordingly, with a copy to the Owner. In any other case all costs shall be borne by the Contractor.

CLAUSE – 39.0

39.1 Removal of Improper Work, Materials or Plant

The Engineer shall have authority to issue instructions from time to time, for:

- a) the removal from the Site, within such time or times as may be specified in the instruction, of any materials or Plant or Works which, in the opinion of the Engineer, are not in accordance with the Contract,
- b) the substitution of proper and suitable materials or Plant or works, and
- c) the removal and proper re-execution, notwithstanding any previous test thereof or interim payment therefor, of any work which, in respect of materials, Plant, Works or workmanship, or design by the Contractor or for which he is responsible, is not, in the opinion of the Engineer, in accordance with the Contract.

39.2 Default of Contractor in Compliance

In case of default on the part of the Contractor in carrying out such instruction within the time specified therein or, if none, within a reasonable time, the Owner shall be entitled to employ and pay other persons to carry out the same and all costs consequent thereon or incidental thereto shall, after due consultation with the Owner and the Contractor, be determined by the Engineer and shall be recoverable from the Contractor by the Owner, and may be deducted by the Owner from any monies due or to become due to the Contractor and the Engineer shall notify the Contractor accordingly, with a copy to the Owner.

CLAUSE – 40.0

Suspension

40.1 Suspension of Work

The Contractor shall, on the instruction of the Engineer, suspend the progress of the Works or any part thereof for such time and in such manner as the Engineer may consider necessary and shall, during such suspension, properly protect and secure the Works or such part thereof so far as is necessary in the opinion of the Engineer. Unless such suspension is

- a) Otherwise provided for in the Contract, or
- b) Necessary by reason of some default of or breach of contract by the Contractor for which he is responsible, or
- c) Necessary by reason of exceptionally adverse climate conditions on the Site, or the conditions stated in Clause 20.4, or
- d) Necessary for the proper execution of the Works or for the safety of the Works or any part thereof (save to the extent that such necessity arises from any act or default by the Engineer or the Owner or from any of the risks defined in Sub-Clause 20.4). Sub-Clause 40.2 shall apply.

40.2 Engineer's Determination following Suspension

Where, pursuant to Sub-Clause 40.1, this Sub-Clause applies the Engineer shall, after due consultation with the Owner and the Contractor, determine

- a) Any extension of time to which the Contractor is entitled under Clause 44, and no extra claim shall be admissible on this account

40.3 Suspension lasting more than 28 Days



If the progress of the Works or any part thereof is suspended on the written instructions of the Engineer and if permission to resume work is not given by the Engineer within a period of 28 consecutive days from the date of suspension then, unless such suspension is within paragraph (a), (b), (c) or (d) of Sub-Clause 40.1, the Contractor may give notice to the Engineer requiring permission, within 15 days from the receipt thereof, to proceed with the Works or that part thereof in regard to which progress is suspended. If, within the said time, such permission is not granted, the Contractor may, but is not bound to, elect to treat the suspension, where it affects part only of the Works, as an omission of such part under Clause 51 by giving a further notice to the Engineer to that effect, or, where it affects the whole of the Works, treat the suspension as an event of default by the Owner and terminate his employment under the Contract in accordance with the provisions of Sub-Clause 69.1, whereupon the provisions of Sub-Clause 69.2 and 69.3 shall apply. The Contractor shall, if any when instructed by the Engineer to resume the Works, resume the Works without undue delay.

CLAUSE – 41.0

Commencement and Delays

41.1 Commencement of Works

The Contractor shall commence the Works promptly as soon as is reasonably possible after the receipt by him of a notice to this effect from the Engineer, which notice shall be issued within the time stated in the Appendix to Tender after the date of the Letter of Acceptance. Thereafter, the Contractor shall proceed with the Works with due expedition and without delay.

CLAUSE – 42.0

42.1 Possession of Site and Access Thereto Save insofar as the Contract may prescribe:

- a) The extent of portions of the Site of which the Contractor is to be given possession from time to time, and
- b) The order in which such portions shall be made available to the Contractor and subject to any requirement in the Contract as to the order in which the Works shall be executed, the Owner will, with the Engineer's notice to commence the Works, give to the Contractor possession of
- c) So much of the Site, and
- d) Such access as, in accordance with the Contract, is to be provided by the Owner as may be required to enable the Contractor to commence and proceed with the execution of the Works in accordance with the programme referred to in Clause 14, if any, and otherwise in accordance with such reasonable proposals as the Contractor shall, by notice to the Engineer with a copy to the Owner, make. The Owner will, from time to time as the Works proceed, give to the Contractor possession of such further portions of the Site as may be required to enable the Contractor to proceed with the such programme or proposals, as the case may be.

42.2 Failure to Give Possession

If the Contractor suffers delay from failure on the part of the Owner to give possession in accordance with the terms of Sub-Clause 42.1, the Engineer shall, after due consultation with the Owner and the Contractor, determine:

- a) Any extension of time to which the Contractor is entitled under Clause 44, and shall notify the Contractor accordingly, with a copy to the Owner without any compensation on this account.

CLAUSE – 43.0

43.1 Time for completion

The whole of the Works and, if applicable, any Section required to be completed within a particular time as stated in the Appendix to Tender, shall be completed, in accordance with the provisions of Clause 48, within the time stated in the Appendix to Tender for the whole of the Works or the Section (as the case may be), calculated from the Commencement Date, or such extended time as may be allowed under Clause 44.



CLAUSE – 44.0

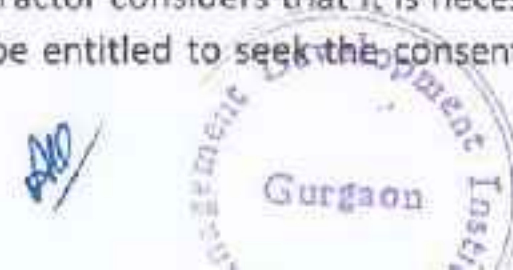
- 44.1 Extension to Time for Completion in the event of
- a) The period or nature of extra or additional work covered by variation under Clause 51, or
 - b) Any cause of delay referred to in these Conditions as entitling Contractor to Extension to time for completion, or
 - c) Exceptionally adverse climate conditions, or
 - d) any delay, impediment or prevention caused without good reason (excluding suspension under Clause 40 except as provided therein) by the Owner, or
 - e) Other special circumstances which may occur, other than through a default of or breach of contract by the Contractor or for which he is responsible, being such as fairly to entitle the Contractor to an extension of the Time for Completion of the Works, or any Section or part thereof, the Engineer shall, after due consultation with the Owner and the Contractor, determine the period of such extension and shall notify the Contractor accordingly, with a copy to the Owner.
- 44.2 Contractor to Provide Notification and Detailed Particulars Provided that the Engineer is not bound to make any determination unless the Contractor has
- a) within 15 days after the stated in Clause 44.1 has first arisen notified the Engineer with a copy to the Owner, and
 - b) within 15 days, or such other reasonable time as may be agreed by the Engineer, after such notification submitted to the Engineer detailed particulars of any extension of time to which he may consider himself entitled in order that such submission may be investigated at the time.
- 44.3 Interim Determination of Extension
- Provided also that where an event has a continuing effect such that it is not practicable for the Contractor to submit detailed particulars within the period of 15 days referred to in Sub-Clause 44.2(b), he shall nevertheless be entitled to an extension of time provided that he has submitted to the Engineer interim particulars at intervals of not more than 15 days and final particulars within 15 days of the end of the effects resulting from the event. On receipt of the final particulars, the Engineer shall review all the circumstances and shall determine an overall extension of time in regard to the event. In both such cases the Engineer shall notify the Contractor accordingly, with a copy to the Owner. No final review shall result in a decrease of any extension of time already determined by the Engineer, unless the extension of time already determined by the Engineer was premised on facts or events not fully disclosed to or misrepresented to Engineer.

CLAUSE – 45.0

- 45.1 Restriction on Working Hours
- Subject to any provision to the contrary contained in the Contract, none of the Works shall, save as hereinafter provided, be carried on during the night or on locally recognised days of rest without the consent of the Engineer, except when work is unavoidable or absolutely necessary for the saving of life or property or for the safety of the Works, in which case the Contractor shall immediately advise the Engineer. Provided that the provisions of this Clause shall not be applicable in the case of any work which it is customary to carry out by multiple shifts.
- Works can be executed shift-wise. However prior permission from Owner is to be obtained before employing shifts.

CLAUSE – 46.0

- 46.1 Rate of Progress
- If for any reason, which does not entitle the Contractor to an extension of time, the rate of progress of the Works or any Section is at any time, in the opinion of the Engineer, too slow to comply with the Time for Completion, the Engineer shall so notify the Contractor who shall thereupon take such steps as are necessary, subject to the consent of the Engineer, to expedite progress so as to comply with the Time for Completion. The Contractor shall not be entitled to any additional payment for taking such steps. If, as a result of any notice given by the Engineer under this Clause, the Contractor considers that it is necessary to do any work at night or on locally recognised days of rest, he shall be entitled to seek the consent of the



Engineer so to do. Provided that if any steps, taken by the Contractor in meeting his obligations under this Clause, involve the Owner in additional supervision costs, such costs shall, after due consultation with the Owner and the Contractor, be determined by the Engineer and shall be recoverable from the Contractor by the Owner, and may be deducted by the Owner from any monies due or to become due to the Contractor and the Engineer shall notify the Contractor accordingly, with a copy to the Owner.

CLAUSE – 47.0

47.1 Liquidated Damages for Delay

If the Contractor fails to comply with the Time for Completion in accordance with Clause 48, for the whole of the Works or, if applicable, any Section within the relevant time prescribed by Clause 43, then the Contractor shall pay to the Owner the relevant sum stated in the Appendix to Tender a liquidated damages for such default and not as a penalty (which sum shall be the only monies due from the Contractor for such default) for every day or part of a day which shall elapse between the relevant Time for Completion and the date stated in a Taking-Over Certificate of the whole of the Works or the relevant Section, subject to the applicable limit stated in the Appendix to Tender. The Owner may, without prejudice to any other method of recovery, deduct the amount of such damages from any monies due to Contractor and such payment shall not relieve the Contractor from his obligation to complete the Works, or from any other of his obligations and liabilities under the Contract.

47.2 Reduction of Liquidated Damages

If, before the Time for Completion of the whole of the Works or, if applicable, any Section, a Taking-Over Certificate has been issued for any part of the Works or of a Section, the liquidated damages for delay in completion of the remainder of the Works or of that Section shall, for any period of delay after the date stated in such Taking-Over Certificate, and in the absence of alternative provisions in the Contract, be reduced in the proportion which the value of the part so certified bears to the value of the whole of the Works or Section, as applicable. The provisions of this Sub-Clause shall only apply to the rate of liquidated damages and shall not affect the limit thereof.

CLAUSE – 48.0

48.1 Taking-Over Certificate

When the whole of the Works have been substantially completed and have satisfactorily passed any Tests on Completion prescribed by the Contract, the Contractor may give a notice to that effect to the Engineer, with a copy to the Owner, accompanied by a written undertaking to finish with due expedition any outstanding work during the Defects Liability Period. Such notice and undertaking shall be deemed to be a request by the Contractor for the Engineer to issue a Taking-Over Certificate in respect of the Works. The Engineer shall, within 21 days of the date of delivery of such notice, either issue in agreement with Owner to the Contractor, with a copy to the Owner, a Taking-Over Certificate, stating the date on which, in his opinion, the Works were substantially completed in accordance with the Contract, or give instructions in writing to the Contractor specifying all the work which, in the Engineer's opinion, is required to be done by the Contractor before the issue of such Certificate.

The Engineer shall also notify the Contractor of any defects in the Works affecting substantial completion that may appear after such instructions and before completion of the Works specified therein. The Contractor shall be entitled to receive such Taking-

Over Certificate within 21 days of completion, to the satisfaction of the Engineer/Owner, of the Works so specified and remedying any defects so notified.

48.2 Taking-Over of Sections or Parts

Similarly, in accordance with the procedure set out in Sub-Clause 48.1, the Contractor may request and the Engineer in agreement with Owner shall issue a Taking-Over Certificate in respect of:

- a) any Section in respect of which a separate Time for Completion is provided in the Appendix to Tender, or
- b) any substantial part of the Permanent Works which has been both completed to the satisfaction of the Engineer and, otherwise than as provided for in the Contract, occupied or used by the Owner, or

- c) any part of the Permanent Works which the Owner has elected to occupy or use prior to completion (where such prior occupation or use is not provided for in the Contract or has not been agreed by the Contractor as a temporary measure).

48.3 Substantial Completion of Parts

If any part of the Permanent Works has been substantially completed and has satisfactorily passed any Tests on Completion prescribed by the Contract, the Engineer may issue a Taking-Over Certificate in respect of that part of the Permanent Works before completion of the whole of the Works and, upon the issue of such Certificate, the Contractor shall be deemed to have undertaken to complete with due expedition any outstanding work in that part of the Permanent Works during the Defects Liability Period.

48.4 Surfaces Requiring Reinstatement

Provided that a Taking-Over Certificate given in respect of any Section or part of the Permanent Works before completion of the whole of the Works shall not be deemed to certify completion of any ground or surfaces requiring reinstatement, unless such Taking-Over Certificate shall expressly so state.

CLAUSE – 49.0

Defects Liability

49.1 Defects Liability Period

In these Conditions the expression "Defects Liability Period" shall mean the defects liability period named in the Appendix to Tender, calculated from:

- a) The date of virtual/substantial completion of the Works certified by the Engineer in accordance with Clause 48, or
- b) In the event of more than one certificate having been issued by the Engineer under Clause 48, the respective dates so certified and in relation to the Defects Liability Period the expression "the Works" shall be construed accordingly.

49.2 Completion of Outstanding Work and Remedying Defects

To the intent that the Works shall, at or as soon as practicable after the expiration of the Defects Liability Period, be delivered to the Owner in the condition required by the Contract, fair wear and tear excepted, to the satisfaction of the Engineer, the Contractor shall:

- a) Complete the work, if any, outstanding on the date stated in the Taking-Over Certificate as soon as practicable after such date and
- b) Execute all such work of amendment, reconstruction, and remedying defects, shrinkages or other faults as the Engineer may, during the Defects Liability Period or within 14 days after its expiration, as a result of an inspection made by or on behalf of the Engineer prior to its expiration, instruct the Contractor to execute.

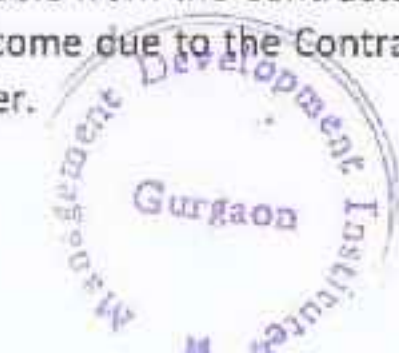
49.3 Cost of Remedying Defects

All work referred to in Sub-Clause 49.2 (b) shall be executed by the Contractor at his own cost if the necessity thereof is, in the opinion of the Engineer, due to:

- a) The use of materials, Plant, Works or workmanship not in accordance with the Contract, or
- b) Where the Contractor is responsible for the design of part of the Permanent Works, any fault in such design, or
- c) The neglect or failure on the part of the Contractor to comply with any obligation, expressed or implied, on the Contractor's Part under the Contract.

49.4 Contractor's Failure to Carry Out Instructions

In case of default or delay on the part of the Contractor in carrying out such instruction within a reasonable time, the Owner shall be entitled to employ and pay other persons to carry out the same and if such work is work which, in the opinion of the Engineer, the Contractor was liable to do at his own cost under the Contract, then all costs consequent thereon or incidental thereto shall, after due consultation with the Owner and the Contractor, be determined by the Engineer and shall be recoverable from the Contractor by the Owner, and may be deducted by the Owner from any monies due or to become due to the Contractor and the Engineer shall notify the Contractor accordingly, with a copy to the Owner.



CLAUSE – 50.0

50.1 Contractor to Search

If any defect, shrinkage or other fault in the Works appears at any time prior to the end of the Defects Liability Period, the Engineer may instruct the Contractor, with copy to the Owner, to search under the directions of the Engineer for the cause thereof. Unless such defect, shrinkage or other fault is one for which the Contractor is liable under the Contract, the Engineer shall, after due consultation with the Owner and the Contractor, determine the amount in respect of the costs of such search incurred by the Contractor, which shall be added to the Contract Price and shall notify the Contractor accordingly, with a copy to the Owner. If such defect, shrinkage or other fault is one for which the Contractor is liable, the cost of the work carried out in searching as aforesaid shall be borne by the Contractor and he shall in such case remedy such defect, shrinkage or other fault at his own cost in accordance with the provisions of Clause 49.

CLAUSE – 51.0

51.1 Alterations, Additions and Omissions

The Engineer shall make any variation of the form, quality or quantity of the Works or any part thereof that may, in his opinion, be necessary and for that purpose, or if for any other reason it shall, in his opinion, be appropriate, he shall have the authority to instruct the Contractor to do and the Contractor shall do any of the following:

- a) Increase or decrease the quantity of any work included in the Contract,
- b) Omit any such work (but not if the omitted work is to be carried out by the Owner or by another contractor).
- c) Change the character or quality or kind of any such work,
- d) Change the levels, lines, position and dimensions of any part of the Works,
- e) Execute additional work of any kind necessary for the completion of the Works,
- f) Change any specified sequence or timing of construction of any part of the Works,

No such variation shall in any way vitiate or invalidate the Contract, but the effect, if any, of all such variations shall be valued in accordance with Clause 52. Provided that where the issue of an instruction to vary the Works is necessitated by some default of or breach of contract by the Contractor or for which he is responsible, any additional cost attributable to such default shall be borne by the Contractor.

51.2 Instructions for Variations

The Contractor shall not make any such variation without an instruction of the Engineer/Owner. Provided that no instruction shall be required for increase or decrease in the Quantity of any work where such increase or decrease is not the result of an instruction given in accordance with this Clause, but is the result of the quantities exceeding or being less than those stated in Bill of Quantities.

CLAUSE – 52.0

52.1 Valuation of Variations

All variations referred to in Clause 51 and any additions to the Contract Price which are required to be determined in accordance with Clause 52 (for the purposes of this clause referred to as varied work) shall be valued at the rates and prices set out in the Contract if, in the opinion of the Engineer, it shall be applicable. If the Contract does not contain any rates or prices applicable to the varied work, the rates and prices in the Contract shall be used as the basis for valuation so far as may be reasonable, failing which, after due consultation by the Engineer with the Owner and the Contractor, suitable rates or prices shall be determined and agreed upon between the Engineer and the Contractor. In the event of disagreement, the Engineer shall fix such rates or prices as are, in his opinion, appropriate and shall notify the Contractor accordingly, with a copy to the Owner. Until such time as rates or prices are not agreed or fixed, the

Engineer shall determine provisional rates or prices to enable on-account payments to be included in certificates issued in accordance with Clause 60.

52.2 Power of Engineer to Determine Rates/Prices

Provided that if the nature or amount of any varied work relates to the nature or amount of the whole of the Works or to part thereof, is such that, in the opinion of the Engineer, the rate or price contained in the Contract for any item of the Works is, by reason of such varied work, rendered inappropriate or inapplicable, then, after due consultation with the Owner and the Contractor, the Engineer shall determine suitable rate or price and agreed among Owner, Engineer and the Contractor. In the event of disagreement, the Engineer shall fix such other rate or price as is, in his opinion, appropriate and shall notify the Contractor accordingly, with a copy to the Owner. Until such time as rates or prices are agreed or fixed, the Engineer shall determine provisional rates or prices to enable on-account payments to be included in certificates issued in accordance with Clause 60.

Provided also that no varied work instructed to be done by the Engineer pursuant to Clause 51 shall be valued under Sub-Clause 52.1 or under this Sub-Clause unless, within 14 days of the date of such instruction and, other than in the case of omitted work, before the commencement of the varied work, notice shall have been given either:

- a) By the Contractor to the Engineer of his intention to claim extra payment or a varied rate or price, or
- b) By the Engineer to the Contractor of his intention to vary a rate or price.

52.3 Variations Exceeding Consider as per the CPWD norms

If, on the issue of the Taking-Over Certificate for the whole of the Works, it is found that as a result of

- a) all varied work valued in accordance with Sub-Clauses 52.1 and 52.2, and
- b) all adjustments upon measurement of the estimated quantities set out in the Bill of Quantities, but not from any other cause, there have been additions to or deductions from the Contract Price which taken together are in excess of 15 percent of the "Estimated Contract Price" (which for the purposes of this Sub-Clause shall mean the Estimated Contract Price, excluding Provisional Sums and allowance for day works, if any) then and in such event (subject to any action already taken under any other Sub-Clause of this Clause) after due consideration the Engineer in consultation with the Owner and the Contractor, there shall be added to or deducted from the Contract Price such further sum as may be agreed between the Contractor, and the Engineer on, failing agreement, determined by the Engineer having regard to the Contractor's Site and general overhead costs of the Contract. The Engineer shall notify the Contractor of any determination made under this Sub-Clause, with a copy to the Owner. Such sum shall be based only on the amount by which such additions or deductions shall be consider as per the CPWD norms of Estimated Contract Cost.
- c) Owners prior approval is required while increasing the cost of any item/works.

52.4 Daily Wages Work
The Engineer may, if in his opinion it is necessary or desirable, issue an instruction that any varied work shall be executed on a day work basis. The Contractor shall then be paid for such varied work under the terms set out in the day work schedule included in the Contract and at the rates and prices affixed thereto by him in the Tender.

The Contractor shall furnish to the Engineer such receipts or other vouchers as may be necessary to prove the amounts paid and, before placement of order for supply of material shall submit to the Engineer quotations for the same for his approval.

In respect of such of the Works executed on a day work basis, the Contractor shall, during the Continuance of such work, deliver each day to the Engineer an exact list in duplicate of the names, occupation and time of all workmen employed on such work and a statement, also in duplicate, showing the description and quantity of all materials and Contractor's Equipment used thereon or therefore other than Contractor's Equipment which is included in the percentage addition in accordance with such day work schedule. One copy of each list and statement duly signed, if found correct and acceptable to the engineer, be returned to contractor for reference and record.

At the end of 15 days the Contractor shall deliver to the Engineer a priced statement of labour, materials and Contractor's Equipment, except as aforesaid, used and the Contractor shall not be entitled to any payment unless such lists and statements have been fully and punctually rendered. Provided always that if the Engineer considers that for any reason the submission of such list or statements by the Contractor, in



accordance with the foregoing provision, was impracticable he shall nevertheless be entitled to authorise payment for such work, either as day work, on being satisfied as to the time required and the labour, materials and Contractor's Equipment used on such work, or at such value therefore as shall in his opinion, be fair and reasonable.

CLAUSE – 53.0

Procedure for Claims

53.1 Notice of Claims

Notwithstanding any other provision of the Contract, if the Contractor intends to claim any additional payment pursuant to any Clause of these Conditions or otherwise, he shall give notice of his intention to the Engineer, with a copy to the Owner, within 28 days after the event giving rise to the claim has first arisen.

53.2 Contemporary Records

Upon the happening of the event referred to in Sub-Clause 53.1, the Contractor shall keep such contemporary records as may reasonably be necessary to support any claim he, subsequently will claim. Without necessarily admitting the Owner's liability, the Engineer shall, on receipt of a notice under Sub-Clause 53.1, inspect such contemporary records and may instruct the Contractor to keep any further contemporary records as are reasonable and may be material to the claim of which notice has been given. The Contractor shall provide necessary assistance to the Engineer to inspect all records kept pursuant to this Sub-Clause and shall submit to Engineer the requisite copies thereof as and when the Engineer so require.

53.3 Substantiation of Claims

Within 28 days, after happening of the event or such other reasonable time as may be agreed by the Engineer, of giving notice under Sub-Clause 53.1, the Contractor shall submit to the Engineer an account giving detailed particulars of the amount claimed and the grounds upon which the claim is based. Where the event giving rise to the claim has a continuing effect, such account shall be considered to be an interim account and the Contractor shall, at such intervals as the Engineer may reasonably require, send further interim accounts giving the accumulated amount of the claim and any further grounds upon which it is based in cases where interim accounts are submitted to the Engineer, the Contractor shall submit, a final account within 28 days of the end of the effects resulting from the event. The Contractor shall, if required by the Engineer so to do, copy to the Owner, all accounts submitted to the Engineer pursuant to this Sub-Clause.

53.4 Failure to Comply

If the Contractor fails to comply with any of the provisions of this clause in respect of any claim which he seeks to make, his entitlement to payment in respect thereof shall not exceed such amount as the Engineer or any arbitrator or arbitrators appointed pursuant to Sub-Clause 67.3 assessing the claim considers to be verified by Contemporary records (whether or not such records were brought to the Engineer's notice as required under Sub-Clause 53.2 and 53.3).

53.5 Payment of Claims

The Contractor shall be entitled to have included in any interim payment certified by the Engineer pursuant to clause 60 such amount due to the Contractor in respect of any claim as the Engineer, after due consultation with the Owner and the Contractor, may consider provided that the Contractor has supplied sufficient particulars to enable the Engineer to determine the amount due. If such particulars are insufficient to substantiate the whole of the claim, the Contractor shall be entitled to get payment in respect of such part of the claim as such particulars may substantiate to the satisfaction of the Engineer. The Engineer shall notify the Contractor of any determination made under this Sub-Clause, with a copy to the Owner.

CLAUSE – 54.0

Contractor's Equipment, Temporary Works and Materials

54.1 Contractor's Equipment, Temporary Works and Materials; Exclusive Use of the Works



All Contractor's Equipment, Temporary Works and materials provided by the Contractor shall, when brought on to the Site, be deemed to be exclusively intended for the execution of the Works and the Contractor shall not remove the same or any part thereof, except for the purpose of moving it from one part of the Site to another, without the consent of the Engineer. Provided that consent shall not be required for vehicles engaged in transporting any staff, labour, Contractor's Equipment, Temporary Works, Plant, Works or materials to or from the Site.

54.2 Owner not Liable for Damage

The Owner shall not at any time be liable, as mentioned in Clauses 20 and 65, for the loss of or damage to any of the said Contractor's Equipment, Temporary works or materials.

54.3 Customs Clearance

It shall be contractor's responsibility to obtain clearance through customs authorities in respect of contractor's equipment, materials and other things as required for in terms of recommendatory letters etc. can be provided by the Owner.

54.4 Costs for the Purpose of Clause 63

In the event of the Owner entering into any agreement for the hire of Contractor's Equipment pursuant to Sub-Clause 54.5, all sums paid by the Owner under the provisions of any such agreement and all costs incurred by him (including stamp duties) in entering into such agreement shall be deemed, for the purpose of Clause 63, to be part of the cost of executing and completing the Works and the remedying of any defects therein.

54.5 Incorporation of Clause in Subcontracts

The Contractor shall, where entering into any sub-contract for the execution of any part of the Works, incorporate in such subcontract (by reference of otherwise) the provisions of this Clause in relation to Contractor's Equipment, Temporary Works or materials brought on to the Site by the Subcontractor.

54.6 Approval of Materials not implied

The operation of this Clause shall not be deemed to imply any approval by the Engineer to the materials or other matters referred to therein nor shall it prevent the rejection of any such materials at any time by the Engineer.

Clause 55.0

Measurement

55.1 Measurement shall be recorded as per the methods of measurement spelt out in CPWD specifications and I.S. code 1200. If not mentioned in the specifications Engineer shall be full authorised and entitle for checking the requirements and quantitatively as recorded in the measurement book/bills.

Clause 56.0

56.1 Works to be Measured

The Engineer shall, except as otherwise stated, ascertain and determine through measurement the value of the Work done in accordance with the contract and the Contractor shall be paid in accordance with Clause 60. The Engineer shall, when he requires any part of the Works to be measured, give reasonable notice to the Contractor's authorised agent, who shall:

- a) Forthwith attend or send a qualified representative to assist the Engineer in taking such measurement, and
- b) Assist in the Engineer as possible in the way as required by the Engineer. Should the Contractor not attend, or neglect or omit to send such representative, then the measurement made by the Engineer or his authorised representative shall be final and binding out the contractor and the contractor shall have no right to dispute. For the purpose of measuring such Permanent Works as are to be measured by records and drawings, the Engineer shall prepare records and drawings based on actual execution as the work proceeds and the Contractor, as and when called upon in writing, shall, within 14 days,



attend to examine and agree such records and drawings with the Engineer and shall sign the same when so agreed. If the Contractor does not attend to examine and agree such records and drawings, they shall be taken to be correct. If, after examination of such records and drawings, the Contractor does not agree the same or does not sign the same as agreed, they shall nevertheless be taken to be correct, unless the Contractor, within 14 days of such examination lodges with the Engineer notice to this effect in which such records and drawings are claimed by him to be incorrect. On receipt of such notice, the Engineer shall review the records and drawings and either confirm or vary them.

CLAUSE – 57.0

57.1 Method of Measurement

The Works shall be measured as per specification attached with Tender Documents or mentioned otherwise.

CLAUSE – 58.0

Production of Vouchers

58.1 The Contractor shall produce to the Engineer all quotations, invoices, vouchers and accounts or receipts in connection with expenditure in respect of extra/substituted items/additional claims

59.1 **CLAUSE** – clause 58.1 shall not be applicable where work is valued in accordance with rates or prices set out in the Tender.

CLAUSE – 60.0

Certificates and Payments

60.1 Statements

The Contractor shall submit to the Engineer after the end of each month 3 copies, each signed by the Contractor's representative approved by the Engineer in accordance with Sub-Clause 15.1, of a statement, in such form as the Engineer may from time to time prescribe, showing the amounts to which the Contractor considers himself to be entitled up to the end of the month in respect of

- a) The value of the Permanent Works executed
- b) Any other sum to which the Contractor may be entitled under the Contract.

60.2 Monthly Payments

Payment for Running Account (R.A.) bills shall be made within 30 days after issuance of certificate from PMC Consultant. The bills shall be submitted to Engineer/ PMC Consultant based on the joint measurement. The Engineer shall certify to the Owner the amount of payment to the Contractor which he considers due and payable in respect thereof, subject:

- a) Firstly, to the retention of the amount calculated by applying the Percentage of Retention stated in the Appendix to Tender, to the amount to which the Contractor is entitled under paragraphs (a) and (b) of Sub-Clause 60.1 until the amount so retained reaches the Limit of Retention Money state in the Appendix to Tender, and
- b) Secondly, to the deduction, other than pursuant to Clause 47, of any sums which may have become due and payable by the Contractor to the Owner. Provided that the Engineer shall not be bound to certify any payment under this Sub-Clause if the net amount thereof, after all retentions and deductions, would be less than the Minimum Amount of Interim Certificates stated in the Appendix to Tender. Notwithstanding the terms of this Clause or any other Clause of the Contract no amount will be certified by the Engineer for payment until the performance Guarantee, if required under the Contract, has been provided by the Contractor and approved by the Owner.

60.3 Payment of Retention Money

- a) Upon the issue of the Taking Over Certificate with respect to the whole of the Works, one half of the Retention Money, or upon the issue of a Taking-Over Certificate with respect to a Section or part of the Permanent Works only such proportion thereof as the Engineer determines having regard to the relative value of such Section or part of the Permanent Works, shall be certified by the Engineer for payment to the Contractor against Bank Guarantee and equivalent amount up to defect liability period.



- b) Upon the expiration of the Defects Liability Period for the Works the other half of the Retention Money shall be certified by the Engineer for payment to the Contractor. Provided that, in the event of different Defects Liability Periods having become applicable to different Sections or parts of the Permanent Works pursuant to Clause 48, the expression "expiration of the Defects Liability Period" shall, for the purposes of this Sub-Clause, be deemed to mean the expiration of the latest of such periods.

Provided also that if at such time, there shall remain to be executed by the Contractor any work ordered, pursuant to Clause 49 and 50, in respect of the Works, the Engineer shall be entitled to withhold certification until completion of such work of so much of the balance of the Retention Money as shall, in the opinion of the Engineer, represent the cost of the work remaining to be executed.

60.4 Correction of Certificates

The Engineer may by any interim certificate make any correction or modification in any previous certificate which shall have been issued by him and shall have authority, if any work is not carried out to his satisfaction, to omit or reduce the value of such work in any interim certificate.

60.5 Bill at Completion

Not later than 60 days after the issue of the Taking-Over Certificate in respect of the whole of the Works, the Contractor shall submit to the Engineer a Bill at Completion with supporting documents showing in detail, in the form approved by the Engineer,

- a) the final value of all work done in accordance with the Contract up to the date stated in such Taking-Over Certificate
- b) any further sums which the Contractor considers to be due and
- c) an estimate of amounts which the Contractor considers will become due to him under the Contract. Estimated amounts shall be shown separately in such Statement at Completion. The Engineer shall certify payment in accordance with Sub-Clause 60.2.

60.6 Final Bill

Not later than 45 days after the issue of the Defects Liability pursuant to Sub-Clause 62.1, the Contractor shall submit to the Engineer for consideration a draft of final bill with supporting documents showing in detail, in the form approved by the Engineer,

- a) The value of all work done in accordance with the Contract and
- b) Any further sums which the Contractor considers to be due to him under the Contract.

If the Engineer disagrees with or cannot verify any part of the draft final bill, the Contractor shall submit such further information as the Engineer may reasonably require and shall make such changes in the draft as may be agreed between them. The Contractor shall then prepare and submit to the Engineer the final bill as agreed (for the purposes of these Conditions referred to as the "Final Bill").

60.7 Discharge

Upon submission of the Final Bill, the Contractor shall give to the Owner, with a copy to the Engineer, a written discharge confirming that the total of the Final Bill represents full and final bill of all monies due to the Contractor arising out of or in respect of the Contract. Provided that such discharge shall become effective only after payment due under the Final Certificate issued pursuant to Sub-Clause 60.7 has been made and the performance Guarantee referred to in Sub-Clause 10.1, if any, has been returned to the Contractor.

60.8 Final Certificate

Within 60 days after receipt of the Final Bill, and the written discharge, the Engineer shall issue to the Owner (with a copy to the Contractor) a Final Certificate stating:

- a) The amount which, in the opinion of the Engineer, is finally due under the Contract, and
- b) After giving credit to the Owner for all amount previously paid by the Owner and for all sums to which the Owner is entitled under Contract, other than Clause 47, the balance, if any due from the Owner to the Contractor or from the Contractor to the Owner as the case may be.

60.9 Cessation of Owner's Liability



Owner shall not be liable to the Contractor for any matter or thing arising out of or in connection with the Contract or execution of the Works, unless the Contractor shall have included a claim in respect thereof in his Final Bill and (except in respect of matters or things arising after the issue of the Taking-Over Certificate in respect of the whole of the Works) in the Bill at Completion referred to in Sub-Clause 60.5.

60.10 Time for Payment

The amount due to the Contractor under any interim certificate issued by the Engineer pursuant to this Clause, or to any other term of the Contract, shall subject to Clause-47, be paid by the Owner to the Contractor within **30 days** after such interim certificate has been delivered to the Owner or, in the case the Final Certificate referred to in Sub-clause 60.8, within 60 days, after such final certificate has been delivered to the Owner.

CLAUSE – 61.0

61.1 Approval only by Defects Liability Certificate

Only the Defects Liability Certificate, referred to in Clause 62, shall be deemed to constitute approval of the Works.

CLAUSE – 62.0

62.1 Defects Liability Certificate

The Contract shall not be considered as completed until a Defects Liability Certificate shall have been signed by the Engineer and delivered to the Owner, with a copy to the Contractor, stating the date on which the Contractor shall have completed his obligations to execute and complete the Works and remedy any defects therein to the Engineer's satisfaction. The Defects Liability Certificate shall be given by the Engineer within 28 days after the expiration of the Defects Liability Period, or, if different defects liability periods shall become applicable to different Sections or parts of the Permanent Works, the expiration of the latest such period, or as soon thereafter as any works instructed, pursuant to Clauses 49 and 50, have been completed to the satisfaction of the Engineer. Provided that the issue of the Defects Liability Certificate shall not be a condition precedent to payment to the Contractor of the second portion of the Retention Money in accordance with the conditions set out in Sub-Clause 60.3.

62.2 Unfulfilled Obligations

Notwithstanding the issue of the Defects Liability Certificate the Contractor and the Owner shall remain liable for the fulfilment of any obligation incurred under the provisions of the Contract prior to the issue of the Defects Liability Certificate which remains unperformed at the time such Defects Liability Certificate is issued and, for the purposes of determining the nature and extent of any obligation, the Contract shall be deemed to remain in force between the parties to the Contract.

CLAUSE – 63.0

Remedies

63.1 Default of Contractor

If the Contractor is deemed by law unable to pay his debts as they fall due, or enters into involuntary bankruptcy, liquidation or dissolution (other than a voluntary liquidation for the purposes of amalgamation or reconstruction), or becomes insolvent, or makes an arrangement with, or assignment in favour of, his creditors, or agrees to carry out the Contract under a committee of inspection of his creditors, or if a receiver, administrator, trustee or liquidator is appointed over any substantial part of his assets or if, under any law or regulation relating to reorganization, arrangement or readjustment of debts, proceedings are commenced against the Contractor or resolutions passed in connection with dissolution or liquidation or if any steps are taken to enforce any security interest over a substantial part of the assets of the Contractor, or if any act is done or event occurs with respect to the contractor his assets which, under any applicable law has a substantially similar effect to any of the foregoing acts or events, or if the Contractor has contravened Sub-Clause 3.1, or has an execution levied on his goods, or if the Engineer certifies to the Owner, with a copy to the Contractor, that, in his opinion, the Contractor :

- a) Has repudiated the Contract, or



- b) Without reasonable excuse has failed
 - i) to commence the Works in accordance with Sub-Clause 41.1, or
 - ii) to proceed with the Works, or any Section thereof, within 28 days after receiving notice pursuant to Sub-Clause 46.1, or
- c) Has failed to comply with a notice issued pursuant to Sub-Clause 37.4 or an instruction issued pursuant to Sub-Clause 39.1 within 28 days after having received it, or
- d) Despite previous warning from the Engineer, in writing, is otherwise persistently or flagrantly neglecting to comply with any of his obligations under the Contract, or
- e) Has contravened Sub-Clause 4.1 then the Owner may after giving 14 days' notice to the Contractor, enter upon the Site and the Works and terminate the employment of the Contractor without thereby releasing the Contractor from any of his obligations or liabilities under the Contract, or affecting the rights and authorities conferred on the Owner or the Engineer by the Contract, and may himself complete the Works or may employ any other contractor to complete the Works. The Owner or such other contractor may use for such completion so much of the Contractor's Equipment, Temporary Works and materials as he or they may think proper at contractor's risk and cost.

63.2 Valuation at Date of Termination

The Engineer shall, as soon as may be practicable after any such entry and termination by the Owner, fix and determine ex parte, or by or after reference to the parties or after such investigation or enquiries as he may think fit to make or institute, and shall certify:

- a) What amount (if any) had, at the time of such entry and termination, been reasonably earned by or would reasonably accrue to the Contractor in respect of work then actually done by him under the Contract, and
- b) The value of any of the said unused or partially used materials, any Contractor's Equipment and Temporary Works.

63.3 Payment after Termination

If the Owner terminates the Contractor's employment under this Clause, he shall not be liable to pay to the Contractor any further amount (including damages) in respect of the Contract until the expiration of the Defects Liability Period and thereafter until the cost of execution, completion and remedying of any defects, damages for delay in completion (if any) and all other expenses incurred by the Owner have been ascertained and the amount thereof certified by the Engineer. The Contractor shall then be entitled to receive only such sum (if any) as the Engineer may certify would have been payable to him upon due completion by him after deducting the said amount. If such amount exceeds the sum which would have been payable to the Contractor on due completion by him, then the Contractor shall, upon demand, pay to the Owner the amount of such excess and it shall be deemed a debt due by the Contractor to the Owner and shall be recoverable accordingly.

63.4 Assignment of Benefit of Agreement

Unless prohibited by law, the Contractor shall, if so instructed by the Engineer within 14 days of such entry and termination referred to in Sub-Clause-63.1, assign to the Owner the benefit of any agreement for the supply of any goods or materials or services and/or for the execution of any work for the purposes of the Contract, which the Contractor may have entered into.

CLAUSE – 64.0

64.1 Urgent Remedial Work

If, by reason of any accident, or failure, or other event occurring to, in or in connection with the Works, or part thereof, either during the execution of the Works, or during the Defects Liability Period, any remedial or other work is in the Opinion of the Engineer, urgently necessary for the safety of the Works and the Contractor is unable or unwilling at once to do such work, the Owner shall be entitled to employ and pay other persons to carry out such work as the Engineer may consider necessary. If the work or repair so done by the Owner is work, which in the opinion of the Engineer, the Contractor was liable to do at his own cost under the Contract, then all costs consequent thereon or incidental thereto shall, after due consultation



with the Owner and the Contractor, be determined by the Engineer and shall be recoverable from the Contractor by the Owner, and may be deducted by the Owner from any monies due or to become due to the Contractor engineer shall notify the Contractor accordingly with a copy to the employer. Provided that the Engineer shall, as soon after the occurrence of any such emergency as may be reasonably practicable, notify the Contractor thereof.

CLAUSE – 65.0

Special Risks

65.1 No Liability for Special Risks

The Contractor shall be under no liability whatsoever in consequence of any of the special risks referred to in Sub-Clause 65.2 whether by way of indemnity or otherwise, for or in respect of :

- a) Destruction of or damage to the Works, save to work condemned under the provisions of Clause 39 prior to the occurrence of any the said special risks, or parties, or
- b) Destruction of or damage to property, whether of the Owner or third parties, or
- c) Injury or loss of life.

65.2 Special Risks

The special risks are:

- a) The risks defined under paragraphs (a), (c) and (e) of Sub-Clause 20.4, and
- b) The risks defined under paragraphs (b) of Sub-Clause 20.4 in so far as these relate to the country in which the Works are to be executed.

65.3 Damage to Works by Special Risks

If the Works or any materials of Plant on or near or in transit to the Site, or any of the Contractor's Equipment, sustain destruction or damage by reason of any of the said special risks, the Contractor shall be entitled to payment in accordance with the Contractor for any Permanent Works duly executed and for any materials or plant so destroyed or damaged and, so far as may be required by the Engineer or as may be necessary for the Completion of the Works, to payment for:

- a) Rectifying any such destruction or damage to the Works,
- b) Replacing or rectifying such materials or Contractor's equipment and the Engineer shall determine an addition to the Contract Price in accordance with Clause 52 (which shall in the case of the cost of replacement of Contractor's Equipment include the fair market value thereof as determined by the Engineer) and shall notify the Contractor accordingly, with a copy to the Owner.

65.4 Projectile, Missile

Destruction, damage, injury or loss of life caused by the explosion or impact, whenever and wherever occurring, of any mine, bomb, shell, grenade, or other projectile, missile, a munition, or explosive of war, shall be deemed to be a consequence of the said special risks.

65.5 Increased Costs arising from Special Risks

Save to the extent that the Contractor is entitled to payment under any other provision of the Contract, the Owner shall repay to the Contractor any costs of the execution of the Works (other than such as may be attributable to the cost of reconstructing work condemned under the provisions Clause 39 prior to the occurrence of any special risk) which are howsoever attributable to or consequent on or the result of or in any way whatsoever connected with the said special risks, subject however to the provisions in this Clause hereinafter contained in regard to outbreak of war, but the Contractor shall, as soon as any such cost comes to his knowledge, forthwith notify the Engineer thereof.

The engineer shall after due consultation with the Owner and the Contractor, determine the amount of the Contractor's costs in respect thereof which shall be added to the Contract Price and shall notify the Contractor accordingly, with a copy to the Owner.

65.6 Outbreak of War

If, during the currency of the Contract, there is an outbreak of war, whether war is declared or not, in any part of the world which, whether financially or otherwise, materially affects the execution of the Works, the



Contractor shall, unless and until the Contract is terminated under the provisions of the Clause, continue to use his best endeavours to complete the execution of the Works. Provided that the Owner shall be entitled, at any time after such outbreak of war, to terminate the Contract by giving notice to the Contractor and, upon such notice being given, the Contract shall, except as the rights of the parties under this Clause and to the operation of Clause 67, terminate, but without prejudice to the rights of either party in respect of any antecedent breach thereof.

65.7 Removal of Contractor's Equipment on Termination

If the Contract is terminated under the Provisions of Sub-Clause 65.6, the Contractor shall with all reasonable dispatch, remove from the Site all Contractor's Equipment and shall give similar facilities to his Subcontractors to do so.

65.8 Payment if Contract Terminated

If the Contract is terminated as aforesaid, the Contractor shall be paid by the Owner, insofar as such amounts or items have not already been covered by payments on account made to the Contractor, for all work executed prior to the date of termination at the rates and prices provided in the Contract and in addition:

- a) The amounts payable in respect of any preliminary items referred to in the Bill of Quantities, so far as the work or service comprised therein has been carried out or performed, and a proper proportion of any such items which have been partially carried out or performed.
- b) The cost of materials, Plant or goods reasonably ordered for the Works which have been delivered to the Contractor or of which the Contractor is legally liable to accept delivery, such materials, Plant or goods becoming the property of the Owner upon such payments being made by him.
- c) A sum being the amount of any expenditure reasonably incurred by the Contractor in the expectation of completing the whole of the Works insofar as such expenditure has not been covered by any other payments referred to in this Sub-Clause.
- d) Any additional sum payable under the provisions of Sub-Clauses 65.3 and 65.5.
- e) Such proportion of the cost as may be reasonable, taking into account payments made or to be made for work executed, of removal of Contractor's Equipment under Sub-Clause 65.7 and, if required by the Contractor, return thereof to the Contractor's main plant yard in his country of registration or to other destination, at no greater cost.
- f) The reasonable cost of repatriation of all the Contractor's staff and workmen employed on or in connection with the Works at the time of such termination.

Provided that against any payment due from the Owner under this Sub-Clause, the Owner shall be entitled to be credited with any outstanding balances due from the Contractor for advances in respect of Contractor's Equipment, materials and Plant and any other sums which, at the date of termination, were recoverable by the Owner from the Contractor under the terms of the Contract. Any sums payable under this Sub-Clause shall, after due consultation with the Owner and the Contractor, be determined by the Engineer who shall notify the Contractor accordingly, with a copy to Owner.

CLAUSE – 66.0

Release from Performance

66.1 Payment in Event of Release from Performance

If any circumstance outside the control of both parties arises after the issue of the Letter of Acceptance which renders it impossible or unlawful for either party to fulfil his contractual obligations, or under law governing the Contract the parties are released from further performance, then the sum payable by the Owner to the Contractor in respect of the work executed shall be the same as that which would have been payable under Clause 65 if the Contract had been terminated under the Provisions of Clause 65.

CLAUSE – 67.0

Settlement of Disputes

67.1 Engineer's Decision



If a dispute of any kind whatsoever arises between the Owner and the Contractor in connection with, or arising out of, the Contract or the execution of the Works, whether during the execution of the Works or after their completion and whether before or after repudiation or other termination of the Contract, including any dispute as to any opinion, instruction, determination certificate or valuation of the Engineer, the matter in dispute shall, in the first place, be referred in writing to the Engineer, with a copy to the other party. Such reference shall state that it is made pursuant to the Clause. No later than the 3 months after the day on which he received such reference the Engineer shall give notice of his decision to the Owner and the Contractor. Such decision shall state that it is made pursuant to this Clause. Unless the Contract has already been repudiated or terminated, the Contractor shall in every case, continue to proceed with the Works with all due diligence and the Contractor and the Owner shall give effect forthwith to every such decision of the Engineer unless and until the same shall be revised, as hereinafter provided, in an amicable settlement or an arbitral award. If either the Owner or the Contractor be dissatisfied with any of decision of the Engineer, or if the Engineer fails to give notice of his decision on or before the eighty-fourth days after the day on which he received the reference, the either the Owner or the Contractor may on or before the seventieth day after the day on which he received the notice of such decision, or on or before the seventieth day after the day on which the said period of 60 days expired, as the case may be give notice to the other party, with copy for information to the Engineer, of his intention to commence arbitration, as entitlement of the party giving the same to commence arbitration, hereinafter provided as to the matter in dispute. Such notice shall establish the entitlement of the party giving the same to commence arbitration, as hereinafter provided, as to such dispute and, subject to Sub-Clause 67.4 no arbitration in respect thereof may be commenced unless such notice is given. If the Engineer has given notice of his decision as to a matter in dispute to the Owner and the Contractor and no notification of intention to commence arbitration as to such dispute has been given by either the Owner or the Contractor on or before the seventieth day after the day on which the parties received notice as to such decision from the Engineer or after expiration of the 60 days' period, the said decision shall become final and binding upon the Owner and the Contractor.

67.2 Amicable Settlement

Where notice of intention to commence arbitration as to a dispute has been given in accordance with Sub-Clause 67.1, arbitration of such dispute shall not be commenced unless an attempt has first been made by the parties to settle such dispute amicably. Provided that, unless the parties otherwise agree, arbitration may be commenced on or after the fifty-sixth day after the day on which notice of intention to commence arbitration of such dispute was given, whether or not any attempt at amicable settlement thereof has been made.

67.3 Arbitration

Settlement of disputes by arbitration

If any dispute, question or controversy, the settlement of which is not herein specifically approved for, shall at any time arise between Employer and the Contractor relating to this contract or any clause or thing contained or the construction thereof or any matter connected with this contract or the portion of the same of the rights or duties or liabilities of either party then in every such case, the matter in dispute can be referred to arbitration. The provisions of **Indian Arbitration and Conciliation (Amendment) Act, 2021**, with three arbitrators, shall apply to such arbitration proceedings. **Arbitration proceedings shall be held at Gurugram, Haryana.** Services under this contract shall, notwithstanding the existence of any such dispute/question or controversy, continue during the arbitration proceedings and no payment due or payable by Employer to the contractor or vice-versa shall be withheld on account of such proceedings unless such payments are the direct subject of such arbitration proceedings. It is also a term of the contract that the part invoking arbitration shall speed the dispute or disputes to be referred to arbitration under this clause together with the amount or amounts claimed in respect of each such dispute.

If no agreement is made for arbitration, then either party may submit the dispute to such judicial tribunal as the circumstances may require.

CLAUSE – 68.0

Notices

68.1 Notice to Contractor



All certificates, notices or instructions to be given to the Contractor by the Owner or the Engineer under the terms of the Contract shall be sent by post, cable, telex or facsimile transmission to or left at the Contractor's principal place of business or such other address as the Contractor shall nominate for that purpose.

68.2 Notice to Owner and Engineer

Any notice to be given to the Owner or to the Engineer under the terms of the Contract shall be sent by post, cable, telex or facsimile transmission to or left at the respective addresses nominated for that purpose.

68.3 Change of Address

Either party may change a nominated address to another address in the country where the Works are being executed by prior notice to the other party, with a copy to the Engineer, and the Engineer may do so by prior notice to both parties.

CLAUSE – 69.0

Default of Employer

69.1 Default of Owner

In the event of the Owner

- a) failing to pay to the Contractor the amount due under any certificate of the Engineer within 28 days after the expiry of the time stated in Sub-Clause-60.10 within which payment is to be made, subject to any deduction that the Owner is entitled to make under the Contract, or
- b) interfering with or obstructing or refusing any required approval to the issue of any such certificate, or without valid reasons beyond the scope of this contract.
- c) becoming bankrupt or, being a company, going into liquidation, other than for the purpose of a scheme of reconstruction or amalgamation, or
- d) giving notice to the Contractor that for unforeseen reasons, due to economic dislocation, it is impossible for him to continue to meet his contractual obligations the Contractor shall be entitled to terminate his employment under the Contract by giving notice to the Owner, with a copy to the Engineer. Such termination shall take effect 14 days after the giving of the notice.

69.2 Removal of Contractor's Equipment

Upon the expiry of the 14 days' notice referred to in Sub-Clause 69.1, the Contractor shall, notwithstanding the provisions of Sub-Clause 54.1, with all reasonable dispatch, remove from the Site all Contractor's Equipment brought by him thereon.

69.3 Payment on Termination

In the event of such termination the Owner shall be under the same obligations to the Contractor in regard to payment as if the Contract had been terminated under the provisions of Clause 65, but, in addition to the payments specified in Sub-Clause 65. 8..

69.4 Contractor's Entitlement to Suspend Work

Without prejudice to the Contractor's entitlement to payment under Sub-Clause 60.10 and to terminate under Sub-Clause 69.1, the Contractor may, if the Owner fails to pay the Contractor the amount due under any certificate of the Engineer within 28 days after expiry of the time stated in Sub-Clause 60.10 within which payment is to be made, subject to any deduction that the Owner is entitled to make under the Contract, after giving 28 days' prior notice to the Owner, with a copy to the Engineer, suspend work or reduce the rate of work. If the Contractor suspends work or reduces the rate of work in accordance with the provisions of this Sub-Clause and thereby suffers delay or incurs cost the Engineer shall, after due consultation with the Owner and the Contractor, determine:

- a) any extension of time to which the Contractor is entitled under Clause 44, and
- b) the amount of such costs, which shall be added to the Contract Price, and shall notify the Contractor accordingly, with a copy to the Owner.

69.5 Resumption of Work

AD



Where the Contractor suspends work or reduces the rate of work, having given notice in accordance with Sub-Clause 69.4, and the Owner subsequently pays the amount due, including interest pursuant to Sub-Clause 60.10, the Contractor's entitlement under Sub-Clause 69.1 shall, if notice of termination has not been given, lapse and the Contractor shall resume normal working as soon as is reasonably possible.

CLAUSE – 70.0

Force Majeure

70.1 Force Majeure

Neither party will be liable to the other for any delay or failure of performance if and to the extent that it is caused by occurrence beyond the control and without the fault or negligence of the party affected including war, rebellion, sabotage or riots, floods, unusually severe weather that could not reasonably have been anticipated; fires, explosions or the catastrophes strikes or any other concerted acts of workmen or other occurrences which are not within the control of the party affected and which that party is unable to avoid or prevent by the exercise of reasonable diligence (herein called "Force Majeure"). Force Majeure will not include late delivery of equipment, materials or services caused by congestion at a manufacturer's plant or elsewhere, an oversold condition of the market, shortages of supervisors or labour, inefficiencies or similar occurrences, unless the delay arises out of a Force Majeure occurrence and is beyond Contractor's or the Supplier's control and an alternate acceptable source of services, equipment or materials is unavailable. Any delay or failure in performance by either party caused by Force Majeure will not constitute a default or give rise to any claim for damages or loss of anticipated profits.

70.2 Notice of Force Majeure

Should contractor be delayed in performing Work by an occurrence it believes is Force Majeure, Contractor will promptly give notice to Owner. If Owner agrees, Owner will give notice to Contractor confirming the existence of Force Majeure and authorise a change if necessary.



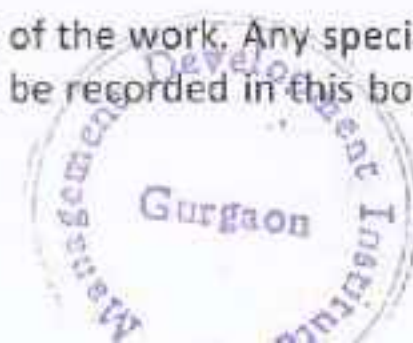
SPECIAL CONDITIONS OF CONTRACT

| | | | |
|----|-----------------------|----|---|
| 1. | General | 1. | The special conditions shall be read in conjunction with General conditions of contract where the provision of these special conditions are at variance with the provision of the General Conditions of Contract, the provisions of these special conditions shall take precedence. |
| 2. | References | 1. | Applicable Indian and Local building codes including all amendments up to tender closing date. In case of conflict, the more stringent requirement will apply unless ruled otherwise by the Architect/Consultant. |
| 3. | Description of Work | 1. | Supply installation Testing & commissioning of Chiller for the Proposed Construction works of - (1) Academic block cum Admin. block, (2) PGPM Hostels, (3) Electrical Sub-station and Main Entrance Gate of MDI campus, Gurugram, Haryana The Scope of Work shall be as listed in Bill of Quantities and drawings and specifications. |
| 4. | Codes | 1. | In the absence of definite provision on particular issue in the specification/codes, reference may be made to relevant latest IS specification. Wherever IS codes are silent, General engineering practices shall be followed under direction of Consultant/Architect. |
| 5. | Documents Required | 1. | Maintain at Job site, one copy of following: 1. Contract drawings 2. Specifications 3. Corrigendum/addendum 4. Reviewed shop drawings 5. Site order book 6. Other modifications to contract |
| 6. | Extra Items | 1. | Unit rate for extra/variation items shall be determined as under: 1. Cost of material as per marked rate on documentary evidence and approval. 2. Labour as per CPWD latest Labour Rate. 3. 15% O.H. & profits including Tools/ Plants / Electricity / Water Charges etc. i.e. (material cost + labour) x 1.15 shall be payable. GST Extra. |
| 7. | Technical Examination | 1. | The contractor herewith agrees that as a respect of inspection of works by the Technical Examiner appointed by the MDI and duly notification to the Contractor of the works and the bills of the contractor including all supporting vouchers, abstract, etc. to be made after payment of the bills and as a result of such audit and technical examination any sum is found to have been over paid in respect of any work done by the contractor under the contract or any work claimed by him to have been done by him under the contract and found not to have been executed or in accordance with the contract, the contractor shall be liable to refund the amount of over payment made already and it shall be lawful for the MDI as he deems fit to recover such overpayments either from any payments due and/or becoming due to the contractor or from the security deposit or retention money or through any further bills and/or final bill or in any other manner whatsoever not excluding through recourse to legal action |
| 8. | Variation | 1. | The variation limit shall be $\pm 10\%$ of the Contract award value for works within the site and of similar nature and specification at the same accepted rate. There is no limit of |



variations for individual items, variation clause is applicable on final contract award value.

| | | | |
|-----|---|----|--|
| 9. | Safety Measures | 1. | It shall be the sole responsibility of the Contractor to ensure all safety measures giving proper prior notices etc. and obtaining prior permission from concerned local authorities as per bye-laws or directions issued by them all at his own cost. No claim of the contractor in this regard shall be entertained. Enclosed in Annexure, Proforma of Safety Measures which shall be attached along with each bill duly filled and certified by Engineer. |
| 10. | Sub-Standard Materials | 1. | Any material / item / fitting / fixtures rejected by the Engineer / PMC / Architect shall be removed from the site within 48 hours of issue of instructions to this effect by the Engineer / Architect. Failing this, the Engineer / PMC / Architect shall have the rights to get these so removed and the Contractor shall have no claim whatsoever in this regard. |
| 11. | Alterations Additions and Omissions | 1. | The Engineer/Architect can make any variation of the form, quality or quantity of the works or any part thereof that may, in his opinion be necessary and for that purpose, or if for any other reason it shall, in his opinion be desirable, he shall have power to order in writing the contractor to do and the contractor shall do any of the following: <ol style="list-style-type: none"> 1 Increase or decrease in the quantity of any work included in the contract in which case the value of contract may be increased or decreased. 2 Omit any such work. 3 Change the levels, lines, position and dimension of any part of the works and 4 Execute additional work of any kind necessary for the completion of the works and no such variation shall in any way vitiate or invalidate the contract, but the value, if any of all such variations shall be taken into account in ascertaining the amount of the Contract Price. 5 The contractor shall not affect any of the aforementioned changes without the written order of the Engineer. |
| 12. | Responsibility For Procurement | 1 | Sole responsibility rests with contractor for procurement of all materials required for completion of work within the stipulated time. All consignment shall be insured. Nothing extra shall be paid on this account. |
| 13. | Taxes / Duties | 1 | Bidder should quote all-inclusive prices including the liability of all types of taxes, duties, Octroi, excluding GST (Goods and Services Tax) and labour cess. |
| 14. | Income Tax | 1 | Income tax deductions as per Income tax rules shall be made from contractor's Running Account Bills unless specific exemption has been obtained by the Contractor from the Income Tax Department and documentary evident to this effect has been submitted to the MDL. |
| 15. | Removal of Plant and, Equipment from Site | 1 | All materials, tools, tackles plant and equipment brought to the site by the contractor, shall not be removed from the work site without written permission of the Engineer. |
| 16. | Inspection and Testing | 1 | As and when required by Engineer, the contractor shall provide all facilities for inspection of contract works and materials at his own cost. |
| | | 2 | All materials shall be of highest standard, quality and kind. All requisite cost as per IS/Tender stipulations are to be carried out by the contractor at his own cost and results submitted to the engineer. This, however, does not absolve the contractor from his responsibility for the overall quality, kind, strength and stability of the structures. |
| | | 3 | In case of discrepancy in frequency of tests given in list of mandatory tests and CPWD the higher of two shall be followed and nothing extra shall be payable to contractor on this account. |
| 17. | Site Order Book | 1 | The contractor shall maintain a site order book at site of the work. Any special orders and instructions to be issued to the contractor at site will be recorded in this book which will |



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| | | | be numbered and initialled by the Engineer. The contractor will however sign all the orders as a token of information received by him and take action accordingly. |
| 18. | Payment condition | 1 | Each bill shall be jointly verified with PMC and the payment of each bill shall be made as three stages. Stage 1 - 85 % on delivery of consignment at site with original invoice, test certificate and copy of insurance. Mobilization Advance if issued will be recovered completely from Stage 1 Bill. Stage-2- 10% after installation Stage-3 5% after testing, commissioning and final acceptance by Engineer-In-charge/Client |
| 19. | Specifications | 1 | Those items for which detailed specifications have not been included in tender, shall be executed as per relevant IS/NBC Specifications after prior approval of Client/ Consultant. |
| 20. | Guarantees | 1 | All guarantees and test certificate for the entire work shall be transferred to the MDI by the contractor on substantial/interim completion of the work. |
| | | 2 | All guarantees shall be for the values and duration as mentioned in specification/item description. |
| 21. | Language | 1 | All correspondence, drawings and notations relating to this Contract must be in English. |
| 22. | Storage of Material | 1 | The Contractor will provide storage space on the site, in designated areas, for all materials likely to be deteriorated through exposure to weather. Space requirements as directed by Engineer. |
| | | 2 | Storage of materials in such a manner as to facilitate rapid and easy execution, checking and control. |
| | | 3 | Each agency under main contractor shall be responsible for the security of his own material and will replace losses at his own expenses. |
| 23. | Gatekeepers & Watchmen | 1 | The Contractor shall provide, maintain at his own expense gatekeepers and watchmen to ensure at all times effective protection of their own materials and works, materials and workmen, until completion of the project, at his own risk and cost. |
| 24. | Electricity | 1 | The Electricity shall be provided for testing & commissioning of the machine only. |
| 25. | Project Meetings | 1 | Hold project meetings at times and locations approved by PMC/Engineer. |
| | | 2 | Notify participants of meetings. |
| | | 3 | Contractor shall record minutes of meetings and distribute to participants within 3 days of meeting. |
| 26. | Setting Out of Work | 1 | Assume full responsibility for and execute complete layout of work to locations, lines and elevations indicated. |
| | | 2 | Provide devices needed to layout and construct work. |
| | | 3 | Supply stakes and other survey markers required for laying out work. |
| 27. | Location of Equipment and Fixtures | 1 | Location of equipment, fixtures and outlets indicated or specified are to be considered as approximate. |
| | | 2 | Locate equipment, fixtures and distribution systems to provide minimum interference and maximum useable space and in accordance with manufacturer's recommendations for safety, access and maintenance. |
| | | 3 | Inform Engineer of impending installation and obtain his approval for actual location. |
| | | 4 | Submit field drawings to indicate relative position of various services and equipment when |



| | | | |
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| | | | required by Engineer. |
| | | 5 | Enclose list of complete equipment's along with the Tender |
| | | | Contractor to submit site Logistics regarding replacement of equipment of client's approval. |
| | | e) | Proof of payment for ESI/PF etc. for Laborer's worked during the period of claim with wage details. |
| 28. | Brand Name | 1 | The specific reference in the Specifications and documents to any material by trade name, make or catalogue number shall be construed as establishing standard or quality and performance and not as limited competition. However, Bidder may offer other similar equipment's/material, provided it meets the specified standard design & performance requirements. |
| 29. | Escalation | 1 | No Escalation is payable to Contractor and prices quoted shall be firm throughout currency of the project. |
| 30. | Site Meetings | 1 | Site meetings shall be held at regular intervals and in addition to other meeting required by the MDI/PMC. There shall be at least one site meeting per weekly in the presence of the Engineer to discuss and co-ordinate the work. The Contractor shall provide responsible member of his organisation who is authorized to commit and bind the contractor to any agreement reached during said meeting |
| 31. | Contract Security Conditions | 1 | Securing Deposit : The successful Bidder shall deposit @ 10% of the contract value as security deposit in the following manner a) 5% of contract value as initial security deposit to be submitted as performance/initial security in the form of Bank Guarantee from a Nationalized bank after signing and acceptance of Tender. b) Balance 5% of security deposit shall be deducted as retention from each Running Account Bill of the Contractor. However, the Security Deposit so deducted can be converted into Bank Guarantee from a Nationalized Bank in every three months subject to satisfactory execution and at the sole discretion of MDI. The Security Deposit as mentioned in Item No. (a) above shall be released to the Contractor after the completion certificate of the work is issued to Contractor by the MDI. Further the balance security deposit as mentioned in item (b) 2.5% of 5% of retention money which is lying with MDI shall be released with final bill Certification after compliance with following. a) No due certificate from the contractor certifying that there are no disputes. b) All statutory approval such as Completion Certificate, Fire approvals etc. from local competent authority as per agreement. c) N.O.C. form technical examination and audit if required by the Client. Balance 2.5 % of retention amount shall be released after expiry of defects liability period on satisfactory rectification of defects pointed out during defects liability period on recommendation of Engineer and MDI. |
| 32. | Shop Drawing | | Contractor shall at his own cost prepare, submit and take approval of shop drawing for the works desired by Consultant. |
| 33. | Labour/Safety | | Contractor shall comply with all laws and statutory regulations (Latest with up to date |



| | | | |
|-----|-----------------------------|---|--|
| | conditions | | revisions) dealing with the employment of labour such as: |
| | | | <ul style="list-style-type: none"> i The Payment of Wages Act, 1936 ii The Minimum Wages Act, 1938 iii The Employee's Compensation Act, 1923 iv The Contract Labour (Regulations and Abolition's) Act, 1970 v The Employer's Liability Act, 1938 vi Industrial Disputes Act, 1947 vii Maternity Benefits Act, 1961 viii Mines Act, 1952 ix Employees State Insurance Act, 1948, x Employees Provident Funds and Miscellaneous Provisions Act, 1952 xi Equal Remuneration Act, 1976 xii Payment of Gratuity Act, 1972, xiii Apprentices Act, 1965 xiv Building and other construction work act (BOCW) |
| 34. | Safety & other codes | | Contractor shall comply with Safety Codes, Labour Welfare Acts or rules or any modification thereof, any other Laws and Regulations framed by the Competent Legislative Authorities from time to time. |
| 35. | Insurance of Works | 1 | All personal on site must wear safety helmets and shoes and follow safety regulations described herein the tender. The contractor shall ensure that his insurance shall include for all liabilities which should cover material and building damage, workmen's compensation, third party liabilities etc. The contractor shall produce evidence of insurance coverage for all above before submitting invoices for payment. |
| 36. | Final payment of R.A. Bills | 1 | Contractor to submit Indemnity on Rs.200/- stamp paper as under. We undertake that payments against subject work order have been made in full to all sub-contractors, vendors. In case any claim is lodged by our sub-contractor, vendors, we shall bear the same and cost thereof and shall not hold "MDI" or any actions, suits, proceedings, loss, costs, damages, charges, losses, claims and demands of every nature and description brought or recovered against the MDI in this regard.." |
| 37. | AMC | | 3 years after completion of warranty period/defect liability of one year |
| 38. | Licence | | Contractor shall obtain all license & approval, safety certificate, load capacity test, etc. |
| 39. | Bank Guarantee | | Maximum allowable extension with late fee @ 0.1% per day of performance guarantee amount beyond the period provided in tender document. |
| 40. | Documents | | Following documents to be submitted by contractor with final bill 1-Three sets of operation & maintenance manual with support drawings. 2-Three sets of as build drawing 3-3 sets of routine and type test certificates of the equipment carried out at the manufacturers premises and pre-commissioning tests carried out at site. |
| 41 | Detail of Projects in hand | | Bidder shall provide projects detail under execution or awarded as per below format. |

Handwritten signature



Format-I (Eligibility Criteria)

| Sr.No | Name of work/ project and location | Owner or sponsoring organization | Cost of work (in Rs.) | Completion Certificate Attached (Y/N) | Name and address/ telephone of the officers to whom reference may be made | Remarks |
|-------|------------------------------------|----------------------------------|-----------------------|---------------------------------------|---|---------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

Signed & Stamped

Authorized Officer of Contractor/Supplier

Format-II (Work in Hand)

| Sr.No | Name of work/ project and location | Owner or sponsoring organization | Cost of work (in Rs.) | Date of commencement as per contract | Stipulated date of completion | Up to date percentage progress of work | Slow progress if any and reason thereof | Name and address/ telephone of the officers to whom reference may be made | Remarks |
|-------|------------------------------------|----------------------------------|-----------------------|--------------------------------------|-------------------------------|--|---|---|---------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |

Signed & Stamped

Authorized Officer of Contractor/Supplier



Format-III (Technical & Administrative Staff to be deployed for works)

| S. No. | Name of Technical & Administrative Staff | Discipline | Subcontractor/ OR Employee | Designation | Minimum Experience (Years) | Nos. | Qualification |
|--------|--|------------|----------------------------|-------------|----------------------------|------|---------------|
| | | | | | | | |
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Signed & Stamped

Authorized Officer of Contractor/Supplier

Format-IV

MILE STONE AS PER BELOW FORMAT: -

| Sr.no | Description of Milestone (Physical) | Time Allowed in days (from date of start) D-date of start of work |
|-------|---|---|
| 1 | Submission of shop drawings for approval | D+10 |
| 2 | Supply of complete material at site in good condition after approval of shop drawings | D+90 |
| 3 | Installation of the equipment and accessories at site in good condition | D+110 |
| 4 | Completion of testing, commissioning | D+115 |
| 5 | Submission of statutory approvals and handing over to the MDI for beneficiary use | D+120 |

Signed & Stamped

Authorized Officer of Contractor/Supplier



DRAFT OF BANK GUARANTEE FOR MATERIAL ADVANCE TO THE CONTRACTOR

Note: This Guarantee should be executed on non-judicial stamp paper of appropriate value.

WHEREAS _____ (hereinafter referred to as the MDI) which expression shall unless repugnant to the context include its legal representatives, successors and assigns, have placed a Contract (hereinafter referred to as the Contractor) with M/s _____ (hereinafter referred to as the Contractor) which expression shall unless repugnant to the context, include its legal representatives, successors and assigns, for the construction for its _____ (work).

AND WHEREAS one of the conditions of the Contract placed on the Contractor is that the MDI should make an advance payment of Rs. _____ (Rupees _____ only) being _____ per cent of the Contract Price against the indemnity in the form of a Bank Guarantee from a Bank in a form acceptable to the MDI.

AND WHEREAS at the request of the Contractor, the MDI has agreed to accept a Bank Guarantee from _____ (Bank) with registered office at _____ (hereinafter called the Bank).

AND NOW THIS GUARANTEE WITNESSETH that in consideration of the MDI having at the request of the Contractor agreed to accept a Bank Guarantee of the Bank in respect of Rs. _____ (Rupees _____ only) required by the Contractor from the MDI for the above work stipulated in the Contract, which figure of advance shall become reduced and extinguished as hereinafter set forth the Bank hereby indemnified payment, without protest or demur and without recourse to the contractor, to the said MDI up to and not exceeding altogether a sum of Rs. _____ (Rupees _____ only) being the amount of the (one hundred) 100 per cent of the advance payment or such other unadjusted amount of the said advance. The decision of the MDI as to whether the terms and conditions of this Guarantee have been observed shall be final and binding on the Bank.

The MDI may, without affecting bank's liabilities and obligations hereunder, grant time or other indulgence to or compound with the contractor or enter into any agreement or agree to forbear to enforce any of the terms and conditions of the said Contract against the Contractor or agree to vary any of the terms and conditions of the said Contract.

This guarantee shall not be effected by any change in the constitution of the MDI by absorption with any other body or corporation or otherwise and this guarantee will be available to or enforceable by such body or corporation.

In order to give effect to this guarantee the MDI will be entitled to act as if the Bank were the Principal debtor and the Bank hereby waives all and any of its rights or suretyship.

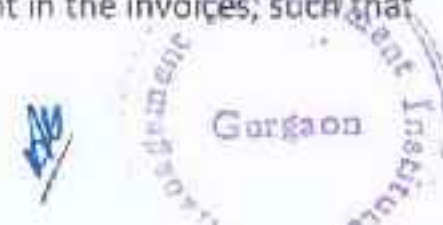
This Guarantee shall continue to be in force notwithstanding the discharge of the Contractor by operation of law and shall cease only on payment of the full amount by the Bank to the MDI of the amount hereby secured and on the claim of the MDI against the Contractor in respect of the said Contract being satisfied.

This Guarantee shall be in addition to and not in substitution for any other Guarantee or Security for the Contractor given or to be given to the MDI in respect of the said Contract by the Bank (whether alone or jointly with others).

Any notice by way of request, demand or otherwise hereunder may be sent by post to the Bank addressed as aforesaid and, if sent by post, it shall be deemed to have been given at the time when it would be delivered in due course of post and in proving such notice, when given by post, it shall be sufficient to prove that the envelope containing the notice was posted shall be conclusive.

These present shall be governed by and construed in accordance with Indian Law.

THE GUARANTEE HEREIN CONTAINED is not revocable by notice during its currency and will remain in full force until (a) payment has been made to the MDI by the Bank of the aggregate amount payable hereunder or (b) the said advance/progress payment has been fully adjusted and extinguished as hereunder set forth whichever is earlier. Out of the gross amount of each invoice representing the full cost of goods being effected Per cent of the amount due will be deducted by way of adjustment of the said advance/progress payment in the invoices, such that



UNLESS PREVIOUSLY CANCELLED BY THE MDI, this indemnity will remain in force up to 30 months from date of issue of the Guarantee which may be extended in case the work has not been fully executed. Unless demand or claim under this Guarantee is made on Bank in writing size months from the date of expiry of this Guarantee, all the rights of the MDI against as hereunder shall be forfeited and Bank shall be relieved and discharged from all liabilities hereunder.

The Bank hereby declares that it has the power to issue this Guarantee and the undersigned has fully power to do so.

Date..... this..... day of.....



AS

DRAFT OF BANK GUARANTEE PERFORMANCE GUARANTEE

Dear Sirs,

We, _____ hereby issue this irrevocable letter of guarantee in your favour for the account of _____ (hereinafter called "CONTRACTOR") for amounts up to Rs. _____ (Rupees _____ only) being equal to _____ of the Contract Price payable under the _____ Contract made on _____ 2024 between you and _____ for Construction of _____

We hereby unconditionally and irrevocably guarantee to pay the amount or amounts up to, but not exceeding in the aggregate, the above mentioned amount or the amount currently outstanding after the reduction in accordance with the preceding paragraph upon your written demand based on your absolute judgment, stating that CONTRACTOR has not fulfilled his obligation under the Contract.

This guarantee shall become effective within fifteen (15) days after the letter of acceptance and remain valid for 12 months after the completion date of the Work or until its amount has been paid, whichever comes earlier.

This guarantee shall become null and void upon the said expiry date or when a sum or sums paid by us to you shall have equalled in aggregate the total amount of this guarantee, whichever comes earlier.

This guarantee shall not be assigned or transferred without our prior written consent.

This guarantee shall be governed by, and construed in accordance with, the laws of India.

This letter of guarantee is to be returned to us immediately upon its expiry.

NAME OF BANK

AUTHORIZED SIGNATURE



ACCEPTANCE LETTER OF TENDER

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 TENDER SHALL BE REGARDED AS AN UNCONDITIONAL AND ABSOLUTE ACCEPTANCE of the conditions of the NIT.

Signed & Stamped

Authorized Officer of Contractor/Supplier



AFFIDAVIT FOR COMPLIANCE OF ESI, PF & MINIMUM WAGES

(On a Rs 100/- non judicial stamp paper duly notarized)

We do hereby indemnify CLIENT against all penal action that may be levied/effectuated by any concerned authority for default in any labour regulation/PF/ESI / Minimum wages and other statutory requirements of the relevant Acts/Laws of Haryana Govt. related to the work of the contractor and will bear the legal charges, if any, and will pay the legal charges/dues directly to the concerned authorities.

Signed & Stamped

Authorized Officer of Contractor/Supplier



UNDERTAKING OF AGENCY / FIRM REGARDING GST

(On a Rs. 100/- non judicial stamp paper duly notarized)

We do hereby undertake that we have complied and updated all extant GST provisions as per state & central GOVT.

Signed & Stamped

Authorized Officer of Contractor/Supplier



SELF DECLARATION

(On a Rs. 100/- non judicial stamp paper duly notarized)

1. I/we _____ who is/are _____ (status in the firm/ company) and competent for submission of the affidavit on behalf of M/S _____ (contractor) do solemnly affirm an oath and state that:
2. All the statements made in the required attachments are true and correct.
3. That M/s _____ have not been blacklisted/debarred by any government agency or public sector undertaking or judicial authority/arbitration body and the action taken against my firm does exist as on date of submission of the tender.
4. The undersigned hereby authorize (s) and request (s) any bank, person, form or corporation to furnish pertinent information deemed necessary and requested by the Department to verify this statement or regarding my (our) competence and general reputation.
5. The undersigned understands and agrees that further qualifying information may be requested, and agrees to furnish any such information at the request of the MDI.
6. 'I/We have not altered/ modified the financial bid. If it is found during the tender stage or later that the BOQ is modified by us, MDI shall have the right to reject our bid'.
7. We do hereby indemnify MDI, against all penal action that may be levied/ effected by any concerned authority for default in any labour regulation/PF/ESI and other statutory requirements of the relevant Acts/Laws related to the work of the Contractor and will bear the legal charges, if any, and will pay the legal charges/dues directly to the concerned authority.

Signed & Stamped

Authorized Officer of Contractor/Supplier



GST, EPFO, ESIC, BOCW REGISTRATION AND PAN DETAILS

| Sr. No | Description | Details |
|--------|---|---------|
| 1. | Entity Name | |
| 2. | Address (As per registration with GST) | |
| 3. | City | |
| 4. | Postal code | |
| 5. | Region/State (complete state name) | |
| 6. | Permanent account number (PAN) | |
| 7. | GSTN/ARN/UID/Provisional with ID No. (Copy of acknowledgement required) | |
| 8. | Type of business (As per registration with GST) | |
| 9. | Service accounting code/HSN Code | |
| 10. | Compliance Rating (If updated by GSTN) | |
| 11. | EPFO Registration Details | |
| 12. | ESIC Registration Details | |
| 13. | BOCW Registration Details | |
| 14. | Contact Person | |
| 15. | Phone Number and Mobile Number | |
| 16. | Email -ID | |

Signed & Stamped



Authorized Officer of Contractor/Supplier

INTEGRITY AGREEMENT

(On a Rs 100/- non judicial stamp paper duly notarized)

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

BETWEEN

MDI represented through Engineer-In-Charge,

MDI....., (Hereinafter referred as the (Address) 'Principal/Owner', which expression shall unless repugnant to the meaning or context hereof include its successors and permitted assigns)

AND

(Name and Address of the Individual/firm/Company)

through..... (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**".

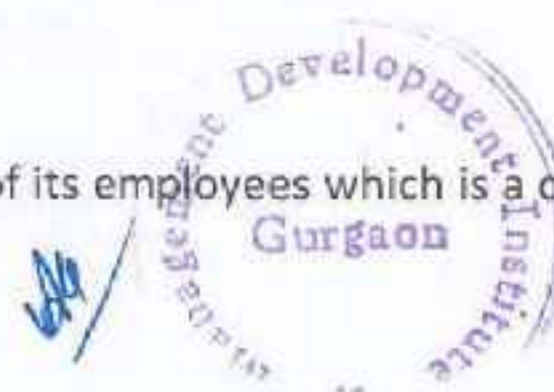
AND WHEREAS the Principal/Owner values full compliance with all relevant laws of the land, rules, regulations, economic use of resources and of fairness/transparency in its relation with its Bidder(s) and Contractor(s).

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:
 - 1.1 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.
 - 1.2 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.
 - 1.3 The Principal/Owner shall endeavor 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:
 - 2.1 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**.
 - 2.2 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.
 - 2.3 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.
 - 2.4 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 participates 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.
 - 2.5 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 MP 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**.

Article 7- Other Provisions

1. This Pact is subject to Indian Law, place of performance and jurisdiction is the Headquarters of the

AP



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 intentions.
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:



**MANAGEMENT DEVELOPMENT INSTITUTE GURGAON
GURUGRAM, HARYANA**

**TENDER DOCUMENT
VOLUME II OF III
TECHNICAL SPECIFICATIONS & APPROVED MAKES**

SUPPLY INSTALLATION TESTING & COMMISSIONING OF CHILLER

For

Proposed Construction Works at MDI Campus, Gurugram, Haryana



MDI
GURGAON

Management
Development
Institute

Mehrauli Road, Sukhrali, Gurugram – 122007, Haryana



TECHNICAL SPECIFICATION

HELICAL ROTARY (SCREW) WATER COOLED CHILLING MACHINE WITH VFD

1.0 General:

The Rotary Screw Water Chilling Units shall be packaged factory assembled and tested, installation, testing and commissioning complete in all respects and shall generally comply with the specifications as given in subsequent paragraphs.

2.0 Water Chilling Unit:

Each Chilling Unit shall be standard cooling model and shall comprise of:

- 2.1 Single / Multiple Compressors with Mono / Twin Rotors /Screws horizontal casing Semi Hermetic type with single / multiple (independent) refrigerant circuits.
- 2.2 Evaporator and Condenser with accessories and supports.
- 2.3 Steel structure as required for assembling/mounting the above.
- 2.4 Microprocessor based control panel with automatic controls and display module.
- 2.5 Accessories as specified/required.
- 2.6 Interconnecting refrigerant piping.
- 2.7 To provide liquid level sight glass and relief device of (bursting type) to prevent excessive built of pressure.
- 2.8 Full charge of R-134a and oil.
- 2.9 VFD Starter for the motor.
- 2.10 Micro Computer Control Centre

Each unit shall be furnished with microcomputer control centre in a locked enclosure, factory mounted, wired and tested. The control center shall include a screen displaying all system parameters in English language with numeric data in English (FPS) units.

Digital programming of essential set points shall include: entering and leaving chilled water temperature and condensing water temperature; percent loading; pull down demand limiting; seven-day time clock for starting and stopping chiller (complete with local holiday schedule); and remote reset temperature range.

All safety and cycling shutdowns shall be annunciated through the alphanumeric display and consist of day, time, cause of shutdown, and type of restart required. Safety shutdowns shall include: high oil pressure; high compressor discharge temperature; low evaporator pressure. Cycling shutdowns shall include: low water temperature; low oil temperature; chiller/condenser water flow interruption; power fault; internal time clock; and entire cycle.

System operating information shall include: return/leaving chilled water temperatures; return/leaving condenser water temperatures; evaporator / condenser refrigerant pressure; differential oil pressure; percent motor current; evaporator/condenser saturation temperatures; operating hours (Hours Run) and number of compressor starts.

The chiller shall be provided with an RS-232/485 port to output all system operating data, shutdown/cycling messages and a record of the last four cycling or safety shutdowns to a remote printer or Building Automation System (BAS). The control center shall be programmable to provide data logs to the BAS/printer at a set time interval.

Control center shall be able to interface with the Building Automation System (BAS) to provide remote chiller start/stop reset of chilled water temperature reset of current limit; and status messages indicating chiller is ready to start, chiller is operating, chiller is shut down on a safety requiring reset, and chiller is shut down on a recycling safety.

2.11 Interface With Building Automation System

All necessary hardware / software's to integrate the chiller panel to BAS system shall be provided free of cost by chiller manufacturer / supplier. **BAC Net communication card** shall be provided.



3.0 Compressor

Each unit shall have single / multiple compressors – **Mono / Twin Rotors/ Screws horizontal casing semi-hermetic type.**

- 3.1 The rotary screw shall be manufactured from forged steel, with profiles which are as symmetrical. The profile of screws, shall permit safe operation up to a speed of 3000 RPM for 50 Hz operation.
- 3.2 The compressor housing shall be of high grade cast iron, machined with precision, to provide a very close tolerance between the rotors and the housing.
- 3.3 The rotors shall be mounted on anti-friction bearings designed to reduce friction and power input. There shall be multiple cylindrical bearings to handle the radial and axial loads.
- 3.4 There shall be built in oil reservoir to ensure full supply of lubricants to all bearings and a check valve to prevent back spin during shut down.
- 3.5 There shall be forced lubrication of all parts due to differential pressure during startup, running and coasting for shut down. An oil header shall be provided in the casing
- 3.6 The units shall be complete with step-less capacity control mechanism, to permit modulation between 25% to 100% of capacity range.
- 3.7 An oil separator shall be included to remove oil from the refrigerant and there shall be suitable heat exchanger for oil separation, if required.
- 3.8 The Compressor shall be of same make as that of Chiller. No machine with outsourced compressor shall be acceptable.

4.0 Compressor Motor

- 4.1 The driving motor shall be double squirrel cage type or suitable hermetic type as required.
- 4.2 The compressor motor shall be suction gas cooled.
- 4.3 The compressors and Motors shall be fully protected against abnormal operating conditions by high and low pressure switches, and safety controls and Phase failure fuses.
- 4.4 The compressors shall be fitted with gauge connections for reading oil, suction and discharge pressure, and shall be fitted with sight glass, crankcase heater, muffler discharge manifold and internal motor protection.
- 4.5 Tender to specify time frame from date of release of the order till the delivery to the site and installation time separately from the date of arrival of equipment at site. Any delay in the time frame agreed shall be subjected to penalty as per the terms and conditions agreed during the discussions.

5.0 Condenser

- 5.1 Each unit shall have (1) one horizontal shell and tube, water cooled, multi-pass condenser, fitted with safety.
- 5.2 Valve, purge valve, and other safety devices.
- 5.3 The shell shall be of welded steel construction fitted with machined steel tube sheets on either ends. The tubes shall be at least 19mm dia. of seamless copper with integral fins. The tubes shall be supported in the shell to avoid noise and vibrations and the ends shell be properly expanded in the tube sheets to prevent leakage of refrigerant gas.
- 5.4 The water heads shall be of fabricated steel, easy to remove, with suitable baffles for multi-pass water flow, in and out connections and gasket to prevent water leakage.
- 5.5 The condenser shall be tested against leaks, with a pressure of 225 psig on both the shell side and the water side.
- 5.6 The condenser shall be complete in all respects and shall also include:
 - Support for mounting
 - Refrigerant in and out connections.
 - Water in, out and drain connections.
 - Relief valve and purge valve.

6.0 Chiller:

- 6.1 Each unit shall have (1) one horizontal shell and tube, flooded type cooler complete with accessories.
- 6.2 The shell shall be of welded steel construction fitted with machined steel tube sheets on either ends.
- 6.3 The chiller shall either have integrally finned copper tubes or tubes with other means for increasing heat transfer surface. The tube shall be supported in the shell by adequate, stiff supports to eliminate vibration



and noise. The tube ends shall be mechanically bonded to the tube sheets to prevent leakage of refrigerant gas.

6.4 The water heads shall be made of fabricated steel and the faces ground to a close tolerance to prevent leakage and permit 2,3 or 4 pass operation.

6.5 The chiller shall be tested against leaks with a pressure of 225 psig both on the shell and the water side.

6.6 The chiller shall be insulated with 19 mm thick rubber base close cell insulation.

6.7 The chiller shall be complete in all respects and also include: -

- Supports for mounting
- In and out connections both for the refrigerant and the water circuit and drain connections.

7.0 Control Console:

7.1 The unit shall be complete with a microprocessor based control console mounted directly on the unit and pre wired with all operating and safety controls.

7.2 The control console shall have the following extended capabilities:

a) Remote indication of:

- Chiller operating status
- Shutdown codes
- Key operating parameters
- Self-diagnostics

b) Programming capabilities of:

Leaving chilled water temperature

Reset of chilled water temperature from:

- Return chilled water temperature (to maintain constant return chilled water temperature)
- Remote temperature (i.e., Outside air, supply air)
- Load on chiller.

c) Power demand limit

d) Reset of power demand limit from :

- Stepped-position contact closure (80/60/40% selectable)

e) Lead-lag operation and control.

7.4 The control console should include but not be limited to the items listed below:

- Start/stop switch and micro processor module for capacity control system with overload limit control point adjustment, oil pump and purge unit controls etc.
- Indicating lights.
- Suction, oil and discharge pressure indications.
- Safety cutouts for low chilled water temperature, high oil temperature, low oil pressure, high and low refrigerant pressures with reset buttons.
- Necessary motor protection devices.
- Other time delays, relays etc. As required.

8.0 Refrigerant Piping:

8.1 Necessary steel refrigerant pipe lines of heavy class shall be provided for the flow of suction and hot gases and liquid refrigerant.

8.2 The pipe lines shall be insulated, as required.

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9.0 Lubrication system

- 9.1 The lubrication system shall be complete with accessories such as oil chiller with thermostatic control, oil heaters, oil strainer, relief valve etc.
- 9.2 Necessary pipe lines for lubricants and cooling system with valves, shall be included.

10.0 Accessories:

- 10.1 Each unit shall include the following as part of unit price.
 - Ribbed rubber isolation pads to eliminate transmission of vibrations up to 90%.
 - Full charge of refrigerant gas and required quantity of lubrication oil.
 - Other valves as required for cleaning of condenser and draining of water.

11.0 Starter for Compressor Motor:

Factory fitted machine mounted VFD starter with all safeties, interlocks & protections such as over load, short circuit and single phasing prevention.

12.0 Type of Refrigerant:

- 12.1 In view of Montreal convention on CFC, units using R-134a shall be offered or other environment friendly refrigerants.

13.0 CHILLING UNIT DESIGN PARAMETERS

| | | |
|--|--|-------------|
| | Water velocity thru' Chiller & Condenser | 2.5 MPS |
| | Chilled water In | 12.2 Deg.C. |
| | Chilled water Out | 6.7 Deg.C. |
| | Condenser water In | 32.2 Deg.C. |
| | Condenser water Out | 36.3 Deg.C. |
| | Chiller Fouling Factor (sq.m/hr. deg.C./K.Calorie) | 0.0001 |
| | Condenser Fouling Factor (sq.m/hr. deg.C./K.Calorie) | 0.0002 |
| | Chiller Fouling Factor sq.ft./hr. deg.F./BTU | 0.0005 |
| | Condenser Fouling Factor sq.ft./hr. deg.F./BTU | 0.001 |

The minimum Efficiency must comply with the 4 Star Rating as per ECBC.

The OEM has to furnish the Selection Output showing ISEER as per IS16590 standards.

The testing of the machine has to be done on test Bed duly certified by AHRI and NABL as well.



APPROVED MAKES

Approved makes: Tenderers should base their offer on the following makes of Equipment only which are acceptable to Consultant/MDI.

| SL. NO. | <u>ITEM</u> | APPROVED MAKES |
|---------|-------------------------------------|--|
| 1. | WATER COOLED SCREW CHILLER With VFD | : CARRIER, DAIKIN, VOLTAS, CLIMAVENETA |



Ab

**MANAGEMENT DEVELOPMENT INSTITUTE GURGAON
GURUGRAM, HARYANA**

**TENDER DOCUMENT
VOLUME III OF III
BILL OF QUANTITIES (FINANCIAL BID FOR ABOVE)**

SUPPLY INSTALLATION TESTING & COMMISSIONING OF CHILLER

For

Proposed Construction Works at MDI Campus, Gurugram, Haryana



MDI
GURGAON

Management
Development
Institute

Mehrauli Road, Sukhrali, Gurugram – 122007, Haryana



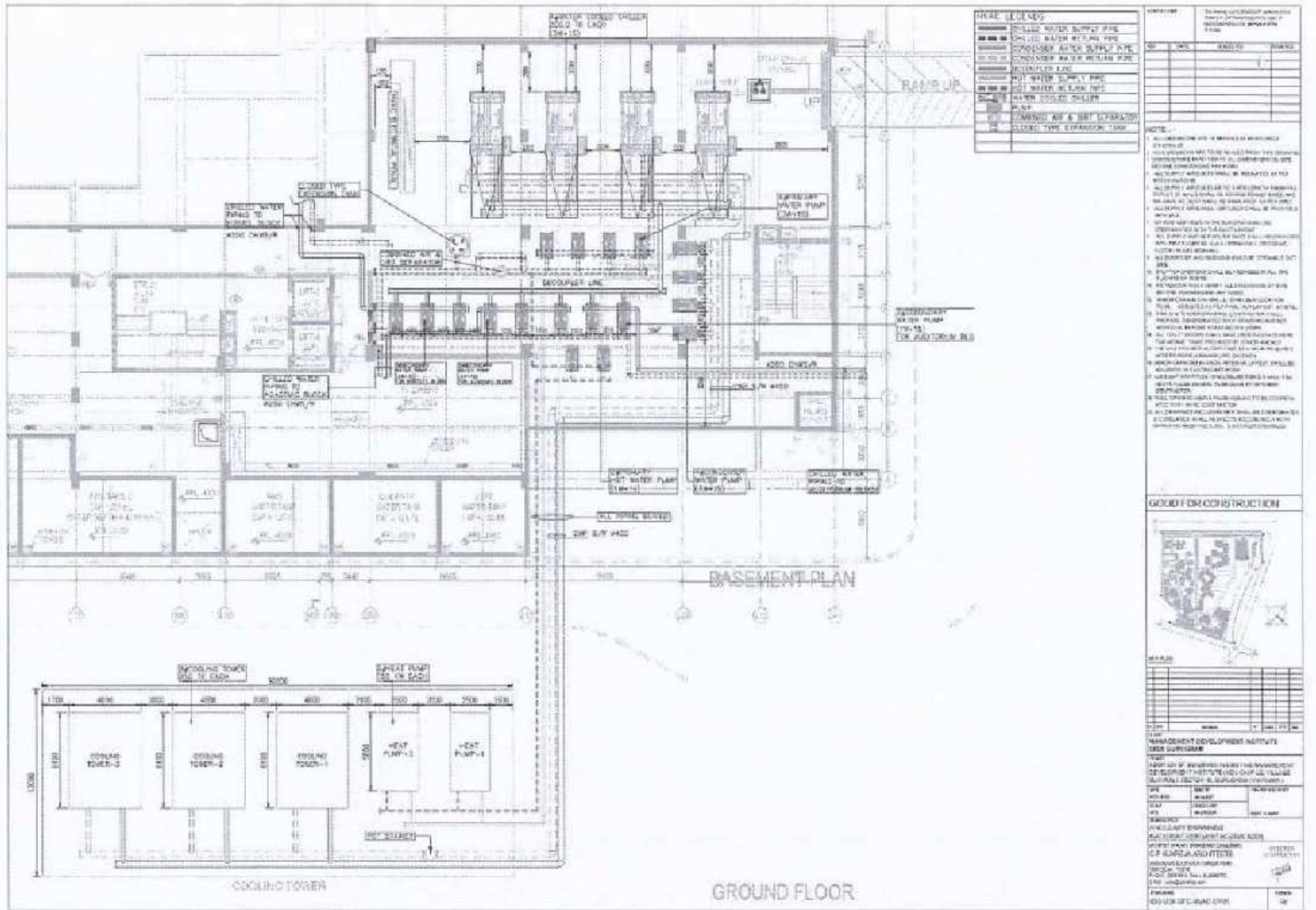
BILL OF QUANTITIES

| 1 | WATER COOLED SCREW CHILLER With VFD | UNIT | Qty | Unit Price | Total |
|---|--|------|-----|------------|-------|
| | Supply, installation, testing and commissioning of AHRI certified water cooled Screw Chiller of 300TR actual capacity complete with single semi hermetically sealed twin / mono rotor screw type compressors, with multiple Shell and tube condenser and evaporator with nitrile rubber insulation, All mounted on steel frame as per specifications, motor shall be of high efficiency suitable for 415±10% volts, 50Hz, 3 phase AC supply, microprocessor based control panel, BMS connectivity provision, including oil separators, pressure relief devices, filter drier moisture indicators and complete operating factory charge of CFC free refrigerant 134a & compressor oil, control safeties and diagnostics display, refrigerant piping, mounting base frame etc. Complete as Unit Mounted /Free standing VFD for compressor to ensure the part load performance and starting current shall not exceed the full load current as per the specifications and as per following parameters :- | | | | |
| | Evaporator shall be factory insulated with Nitrile Rubber as per OEM standard. Flow switch shall be provided at evaporator and condenser duly interlocked for safe operation of chiller. | | | | |
| | The minimum Efficiency must comply with the 4 Star Rating as per ECBC. The OEM has to furnish the Selection Output showing ISEER as per IS16590 standards. The testing of the machine has to be done on test Bed duly certified by AHRI and NABL as well. | | | | |
| | Motor suitable for 415±10%, 50 cycles, 3 phase AC supply | | | | |
| | Operation Parameters: | | | | |
| | Chilled water temperature In - 54 F (12.2 C) | | | | |
| | Chilled water temperature Out - 44 F (6.7 C) | | | | |
| | Evaporator Fouling Factor - 0.0005 FPS | | | | |
| | Evaporator Flow rate - 720 US GPM | | | | |
| | Evaporator Pressure Drop - 4 m | | | | |
| | Condenser water temperature In - 90 F (32.2 C) | | | | |
| | Condenser water temperature Out - 97.5 F (36.3 C) | | | | |
| | Condenser Flow rate - 1200 US GPM | | | | |
| | Condenser Fouling Factor - 0.001 FPS | | | | |
| | Condenser Pressure Drop - 7 m | | | | |
| | 4Nos (3 W+1St) | EACH | 4 | | |
| | Total (A) in Figures | | | | |
| | Total (A) in Words | | | | |
| 2 | Annual maintenance Contracts (AMC) after completion of Defect Liability Period | | | | |
| | 1 st Year | | | | |
| | 2 nd Year | | | | |
| | 3 rd Year | | | | |
| | Total (B) in Figures | | | | |
| | Total (B) in Words | | | | |

Signed & Stamped
Authorized Officer of Contractor/Supplier



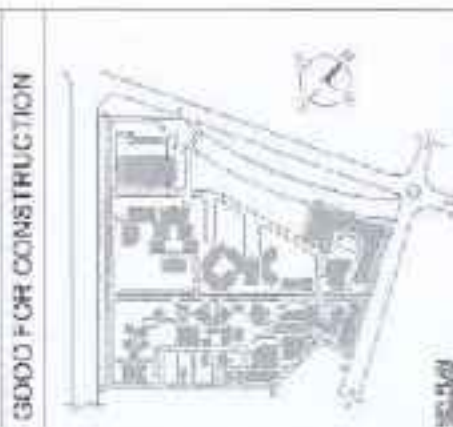
TENDER



| | |
|------|------------|
| DATE | 10/05/2017 |
| BY | |
| NO. | |

NOTE:

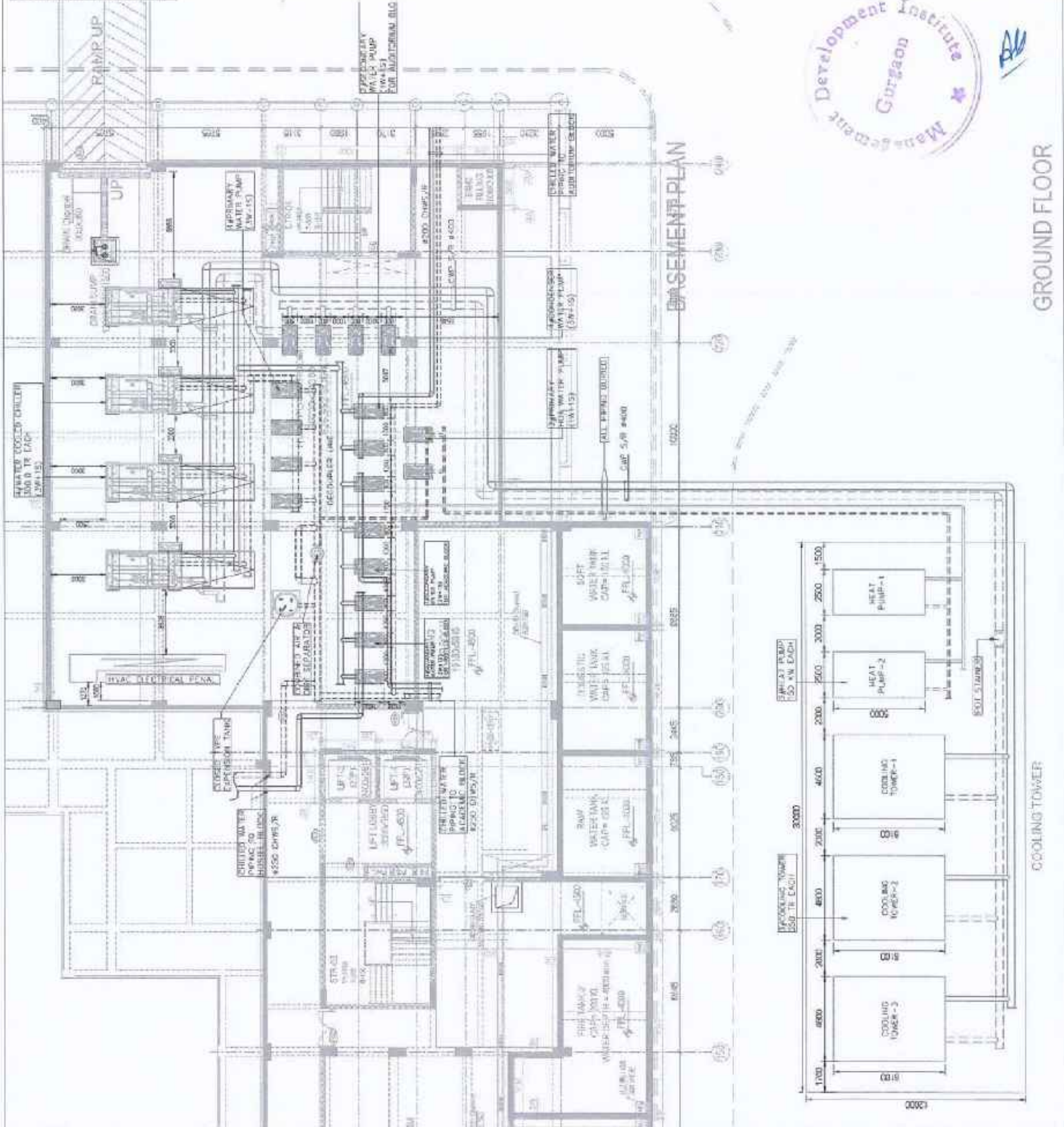
1. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE STATED.
2. ALL CONDUITS ARE TO BE INSTALLED IN ACCORDANCE WITH THE REQUIREMENTS OF THE NATIONAL ELECTRICAL CODE (NEC).
3. ALL DIMENSIONS ARE TO FACE UNLESS OTHERWISE STATED.
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| | |
|----------------------|----------------------------------|
| PROJECT NAME | MANAGEMENT DEVELOPMENT INSTITUTE |
| CLIENT | MANAGEMENT DEVELOPMENT INSTITUTE |
| DESIGNER | MANAGEMENT DEVELOPMENT INSTITUTE |
| DATE | 10/05/2017 |
| SCALE | AS SHOWN |
| PROJECT NO. | MDI/2017/001 |
| DESIGNER'S SIGNATURE | |
| DATE | 10/05/2017 |

HVAC LEGENDS

| | |
|--|-------------------------------|
| | CHILLED WATER SUPPLY PIPE |
| | CHILLED WATER RETURN PIPE |
| | CONDENSER WATER SUPPLY PIPE |
| | CONDENSER WATER RETURN PIPE |
| | HOT WATER SUPPLY PIPE |
| | HOT WATER RETURN PIPE |
| | WATER COOLED CHILLER |
| | COMBINED AIR & DIRT SEPARATOR |
| | LOOSE TYPE EXPANSION TANK |



GROUND FLOOR

COOLING TOWER

