

HSCC (India) Limited
as Executing Agency on behalf of
MINISTRY OF HEALTH & FAMILY WELFARE,
Government of India, New Delhi

Dated: 10.11.2017

AMENDMENT No. – 2

Project Name: Tender for “Construction of Hospital & Academic Complex at All India Institute of Medical Sciences, Nagpur (Maharashtra)”.

Tender No. HSCC/PMSSY/AIIMS/ Nagpur/H&A/2017, dated: 18.10.2017

The bidders may note the following amendments in the Tender Documents issued:

Clause Ref.	Existing Provision	May be read as
Clause No. 25 Volume II (General Conditions of Contract)	Except where otherwise provided in the contract, all questions and disputes relating to the meaning of the specifications, design, drawings and instructions here-in before mentioned and as to the quality of workmanship or materials used on the work or as to any other question, claim, right, matter or thing whatsoever in any way arising out of or relating to the contract, designs, drawings, specifications, estimates, instructions, orders or these conditions or otherwise concerning the works or the execution or failure to execute the same whether arising during the progress of the work or after the cancellation, termination, completion or abandonment thereof shall be dealt with as mentioned hereinafter: (i) If the contractor considers any work demanded of him to be outside the requirements of the contract, or disputes any drawings, record or decision given in writing by the Engineer-in-Charge on any matter in connection with or arising out of the contract or carrying out of the work, to be	Except where otherwise provided in the contract, all questions and disputes relating to the meaning of the specifications, design, drawings and instructions here-in before mentioned and as to the quality of workmanship or materials used on the work or as to any other question, claim, right, matter or thing whatsoever in any way arising out of or relating to the contract, designs, drawings, specifications, estimates, instructions, orders or these conditions or otherwise concerning the works or the execution or failure to execute the same whether arising during the progress of the work or after the cancellation, termination, completion or abandonment thereof shall be dealt with as mentioned hereinafter: (i) If the contractor considers any work demanded of him to be outside the requirements of the contract, or disputes any drawings, record or decision given in writing by the Engineer-in-Charge or if the Engineer in Charge considers any act or

	<p>unacceptable, he shall promptly within 15 days request the authority indicating in schedule 'F' (Reviewing Authority) in writing for written instruction or decision. Thereupon, the Reviewing Authority shall give his written instructions or decision within a period of one month from the receipt of the contractor's letter.</p> <p>If the Reviewing Authority fails to give his instructions or decision in writing within the aforesaid period or if the contractor is dissatisfied with the instructions or decision of the Reviewing Authority, the contractor may, within 15 days of the receipt of the Reviewing Authority's decision, appeal to the authority as indicated in schedule 'F' (Appealing Authority) who shall afford an opportunity to the contractor to be heard, if the latter so desires, and to offer evidence in support of his appeal. The Appealing Authority shall give his decision within 30 days of receipt of contractor's appeal.</p> <p>If the contractor is dissatisfied with the decision of the Appealing Authority, the contractor may within 30 days from the receipt of the Appealing Authority's decision, appeal before the Dispute Redressal Committee (DRC) along with a list of disputes with amounts claimed in respect of each such dispute and giving reference to the rejection of his disputes by the Appealing Authority. The Dispute Redressal Committee (DRC) shall give his decision within a period of 90 days from the receipt of Contractor's appeal. The constitution of Dispute Redressal Committee (DRC) shall be as indicated in Schedule 'F'.</p> <p>If the Dispute Redressal Committee (DRC) fails to give his decision within</p>	<p>decision of the contractor on any matter in connection with or arising out of the contract or carrying out of the work, to be unacceptable and is disputed, such party shall promptly within 15 days of the arising of the disputes request the Director (E), HSCC India Ltd. who shall refer the disputes to Dispute Redressal Committee (DRC) within 15 days along with a list of disputes with amounts claimed if any in respect of each such dispute. The Dispute Redressal Committee (DRC) shall give the opposing party two weeks for a written response, and, give its decision within a period of 60 days extendable by 30 days by consent of both the parties from the receipt of reference from Director (E), HSCC India Ltd.. The constitution of Dispute Redressal Committee (DRC) shall be as indicated in Schedule 'F'. Provided that no party shall be represented before the Dispute Redressal Committee by an advocate/legal counsel etc. If the Dispute Redressal Committee (DRC) fails to give its decision within the aforesaid period or any party is dissatisfied with the decision of Dispute Redressal Committee (DRC) or expiry of time limit given above, then either party may within a period of 30 days from the receipt of the decision of Dispute Redressal Committee (DRC), give notice to the Director (E), HSCC India Ltd., in charge of the work for appointment of arbitrator on prescribed proforma under intimation to the other party.</p> <p>It is term of contract that each party</p>
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	<p>the aforesaid period or any party is dissatisfied with the decision of Dispute Redressal Committee (DRC), then either party may within a period of 30 days from the receipt of the decision of Dispute Redressal Committee (DRC), give notice to the Client for appointment of arbitrator on prescribed proforma as per Appendix XV, failing which, the said decision shall be final binding and conclusive and not referable to adjudication by the arbitrator.</p> <p>(ii) Except where the decision has become final, binding and conclusive in terms of Sub Para (i) above, disputes or difference shall be referred for adjudication through arbitration by a sole arbitrator appointed by the Designated Authority of the Executing Agency, If the arbitrator so appointed is unable or unwilling to act or resigns his appointment or vacates his office due to any reason whatsoever, another sole arbitrator shall be appointed in the manner aforesaid. Such person shall be entitled to proceed with the reference from the stage at which it was left by his predecessor.</p> <p>It is a term of this contract that the party invoking arbitration shall give a list of disputes with amounts claimed in respect of each such dispute along with the notice for appointment of arbitrator and giving reference to the rejection by the Appealing Authority of the appeal.</p> <p>It is also a term of this contract that no person, other than a person appointed by (Designated Authority of the Executing Agency), as aforesaid, should act as arbitrator and if for any reason that is not possible, the matter shall not be referred to arbitration at all.</p> <p>It is also a term of this contract that if the</p>	<p>invoking arbitration must exhaust the aforesaid mechanism of settlement of claims/disputes prior to invoking arbitration.</p> <p>The Director (E), HSCC India Ltd. shall in such case appoint the sole arbitrator or one of the three arbitrators as the case may be within 30 days of receipt of such a request and refer such disputes to arbitration. Wherever the Arbitral Tribunal consists of three Arbitrators, the contractor shall appoint one arbitrator within 30 days of making request for arbitration or of receipt of request by Engineer-in-charge to Director (E), HSCC India Ltd. for appointment of arbitrator, as the case may be, and two appointed arbitrators shall appoint the third arbitrator who shall act as the Presiding Arbitrator. In the event of</p> <p>a. A party fails to appoint the second Arbitrator, or</p> <p>b. The two appointed Arbitrators fail to appoint the Presiding Arbitrator, then Director (E), HSCC India Ltd. shall appoint the second or Presiding Arbitrator as the case may be.</p> <p>(ii) Disputes or difference shall be referred for adjudication through arbitration by a Tribunal having sole arbitrator where Tendered amount is Rs. 100 Crore or less. Where Tendered Value is more than Rs. 100 Crore, Tribunal shall consist of three Arbitrators as above. The requirements of the Arbitration and Conciliation Act, 1996 (26 of 1996) and any further statutory</p>
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	<p>contractor does not make any demand for appointment of arbitrator in respect of any claims in writing as aforesaid within 120 days of receiving the intimation from the Engineer-in-charge that the final bill is ready for payment, the claim of the contractor shall be deemed to have been waived and absolutely barred and the Executing Agency shall be discharged and released of all liabilities under the contract in respect of these claims.</p> <p>The arbitration shall be conducted in accordance with the provisions of the Arbitration and Conciliation Act, 1996 (26 of 1996) / The Jammu and Kashmir Arbitration and Conciliation Act, 1997 (35 of 1997) (as the case may be) or any statutory modifications or re-enactment thereof and the rules made thereunder and for the time being in force shall apply to the arbitration proceeding under this clause.</p> <p>It is also a term of this contract that the arbitrator shall adjudicate on only such disputes as are referred to him by the appointing authority and give separate award against each dispute and claim referred to him and in all cases where the total amount of the claims by any party exceeds Rs. 1,00,000/-, the arbitrator shall give reasons for the award.</p> <p>It is also a term of the contract that if any fees are payable to the arbitrator, these shall be paid equally by both the parties.</p> <p>It is also a term of the contract that the arbitrator shall be deemed to have entered on the reference on the date he issues notice to both the parties calling them to submit their statement of claims and counter statement of claims. The venue of the arbitration shall be such place as may be fixed by the arbitrator in his sole discretion. The fees, if any, of the</p>	<p>modifications or reenactment thereof and the rules made there under and for the time being in force shall be applicable.</p> <p>It is a term of this contract that the party invoking arbitration shall give a list of disputes with amounts claimed, if any, in respect of each such dispute along with the notice for appointment of arbitrator and giving reference to the decision of the DRC. It is also a term of this contract that any member of the Arbitration Tribunal shall be a Graduate Engineer with experience in handling public works engineering contracts at a level not lower than Chief Engineer (Joint Secretary level of Government of India). This shall be treated as a mandatory qualification to be appointed as arbitrator.</p> <p>Parties, before or at the time of appointment of Arbitral Tribunal may agree in writing for fast track arbitration as per the Arbitration and Conciliation Act, 1996 (26 of 1996) as amended in 2015. Subject to provision in the Arbitration and Conciliation Act, 1996 (26 of 1996) as amended in 2015 whereby the counter claims if any can be directly filed before the arbitrator without any requirement of reference by the appointing authority, the arbitrator shall adjudicate on only such disputes as are referred to him by the appointing authority and give separate award against each dispute and claim referred to him and in all cases where the total amount of the claims by any party exceeds Rs. 1,00,000/-, the arbitrator shall give reasons for the award. It is also a term</p>
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	<p>arbitrator shall, if required to be paid before the award is made and published, be paid half and half by each of the parties. The cost of the reference and of the award (including the fees, if any, of the arbitrator) shall be in the discretion of the arbitrator who may direct to any by whom and in what manner, such costs or any part thereof shall be paid and fix or settle the amount of costs to be so paid.</p>	<p>of the contract that if any fees are payable to the arbitrator, these shall be paid as per the Act.</p> <p>The place of arbitration shall be New Delhi. In case there is no mention of place of arbitration, the arbitral tribunal shall determine the place of arbitration. The venue of the arbitration shall be such place as may be fixed by the Arbitral Tribunal in consultation with both the parties. Failing any such agreement, then the Arbitral Tribunal shall decide the venue.</p>
<p>Volume – I Notice Inviting Bids Clause 1.6(ii)</p>	<p>Architectural Drawings, Structure framing plan and general arrangement drawings shall be provided by HSCC. However detailed structure/architecture drawings shall be prepared by the Contractor. Contractor will also prepare detailed shop drawings based on the concept drawings given by client/ Executing Agency for all services e.g. Electrical, Plumbing, Fire fighting, fire detection, HVAC & Plant layout etc. The contractor shall make all necessary co-ordination. The contractor shall get the structural drawings duly vetted from IIT and the expenditure incurred for IIT vetting will be reimbursed by HSCC.</p>	<p>The architectural drawings and structural drawings for the work is available</p> <p>Or</p> <p>The architectural drawings and structural drawings shall be made available in phase manner, as per requirement of the same as per approved programme of completion submitted by the contractor after the award of work.</p>
<p>Volume – I Section –III Scope of Work Clause 2</p>	<p>Architectural Drawings, Structure framing plan and general arrangement drawings shall be provided by HSCC. However detailed structure/architecture drawings shall be prepared by the Contractor. Contractor will also prepare detailed shop drawings based on the concept drawings given by Executing Agency for all services e.g. Electrical, Plumbing, Fire fighting, fire detection, HVAC & Plant layout etc. The contractor shall make all necessary co-ordination.</p>	<p>Detailed engineering drawings including architectural drawings, structural drawings, drawings for all services, landscaping drawings, electrical services drawings, internal telecommunication and networking, fire detection and protection systems drawings (where required) & drawings, drawings for water supply & PHE etc will be supplied by HSCC.</p>

	The contractor shall get the structural drawings duly vetted from IIT and the expenditure incurred for IIT vetting will be reimbursed by HSCC	The contractor shall get the structural drawings duly vetted from IIT and the fee paid to IIT for vetting will be reimbursed by HSCC.
Volume – III Specific Conditions of Contract (SCC) Definitions & Interpretation Clause 4.1 Scope of Contract	Detailed architectural RFC Drawings for Architecture shall be provided by Executing Agency to the contractor. The Contractor will prepare, shop drawings based on the drawings given by Executing Agency for all services etc. Structural, Electrical, Plumbing, etc. based on the schematic drawings given by the Executing Agency, as required. The contractor shall make all necessary co-ordination	Detailed architectural RFC Drawings for Architecture and Structure shall be provided by Executing Agency to the contractor. The Contractor will prepare, shop drawings based on the drawings given by Executing Agency for all services etc. Electrical, Plumbing, etc based on the schematic drawings given by the Executing Agency, as required. The contractor shall make all necessary co-ordination.
Volume – III Specific Conditions of Contract (SCC) Definitions & Interpretation Clause 5(d) Working Drawing/Shop Drawings/Design	Architectural drawings, Structural Framing Plan and General Arrangement Drawings shall be provided by Executing Agency to the contractor. However, to ensure the uninterrupted progress of work, and timely completion, the contractor may be required to do further detailing as per the site requirement on his own. The detailed structure/architecture drawings shall be prepared by the Contractor based on the drawings given by the Executing Agency. The Contractor will prepare shop drawings based on the drawings given by client/ Executing Agency for all services eg. Electrical, Plumbing, fire fighting, fire detection, HVAC & Plant layout etc. The contractor shall get the structural drawings duly vetted from IIT at their own cost. All drawings shall be signed by Contractor's authorised representative with name, seal and date before submission to Engineer-in-charge. In case there is delay in any drawings and	Structural and Architectural drawings shall be provided by Executing Agency to the contractor. However, to ensure the uninterrupted progress of work, and timely completion, the contractor may be required to do further detailing as per the site requirement on his own. The contractor shall get the structural drawings duly vetted from IIT and the fee paid to IIT for vetting will be reimbursed by HSCC. The Contractor will prepare shop drawings based on the drawings given by client/ Executing Agency for all services eg. Electrical, Plumbing, etc. All drawings shall be signed by Contractor's authorised representative with name, seal and date before submission to Engineer-in-charge. In case there is delay in any drawings and design viz shop drawings, as made drawings etc. in preparation,

	design viz shop drawings, as made drawings etc. in preparation, design, quality, submission, etc. the Executing Agency may ask the Contractor to change their design consultant immediately or get the same done on risk and cost of the Contractor.	design, quality, submission, etc. the Executing Agency may ask the Contractor to change their design consultant immediately or get the same done on risk and cost of the Contractor.
Volume – I Clause 1.4.1 Similar Work (as amended vide Amendment No.1 dated 25.10.2017)	*“Similar Works” shall mean a Project comprising Construction of any Institutional multistoried RCC framed structure building minimum Five storeys above ground level (basement, machine room and mummy shall not be counted as a storey) including finishing works, internal water supply, sanitary installations, internal electrical installations, Fire Fighting Works and Centralized HVAC works, all executed under one composite agreement.	Similar Work Shall mean a Project comprising Construction of any Institutional multistoried RCC framed structure building like Hospitals, Hotels, Airports, Large offices, etc. minimum Five storeys above ground level (basement, machine room and mummy shall not be counted as a storey) including finishing works, internal water supply, sanitary installations, internal electrical installations, Fire Fighting works and Centralized HVAC works, all executed under one composite agreement.
Volume –I NIT Completion Period	18 Calendar Months for all buildings of the Academic Campus, including completion of all services (within the scope of this tender) required for making these buildings operational 22 Calendar Months for all other buildings and works	18 Calendar Months for all buildings of the Academic Campus, i.e., Medical College, Nursing College, Admin Block, Library, including completion of all services (within the scope of this tender) required for making these buildings operational 22 Calendar Months for all other buildings and works Completion Period:
Volume –II General Conditions of Contract Schedule F Clause 10 CA	Base price of all the materials covered under Clause 10CA (Base price to be mentioned valid at the time of last stipulated date of receipt of Tender including extension, if any. *Cement- OPC Rs. 5300/- Tonne.	Base price of all the materials covered under Clause 10CA (Base price to be mentioned valid at the time of last stipulated date of receipt of Tender including extension, if any. *Cement- OPC Rs. 3900/-

	*Reinforcement Steel- Primary Manufacturer Rs.42525/-Tonne Structural Steel : Rs. 44940/-Tonne	Tonne(Excluding GST) *Reinforcement Steel- Primary ManufacturerRs.34500/- Tonne (Excluding GST) Structural Steel : Rs. 35500/- Tonne (Excluding GST)
BOQ Item No. 1.02 Description Of Item	Supplying and stacking of good earth at site including royalty and carriage up to 1 Km (earth measured in stacks will be reduced by 20% for payment).	Supplying and stacking of good earth at site including royalty and carriage (earth measured in stacks will be reduced by 20% for payment).
BOQ Item No. 5.47 Description Of Item	Sensor Sliding Door Providing and fixing automatic sliding door operator of approved brand and manufacture for a door of clear passage width ranging from 2500-3000 mm consisting of 6.25 mtr long operator with track profiles, glass clamping rails, floor guide, Radar eagle 6 sensors, 5 programme switch with knob, light barrier EM lock and cable for programme switch all complete of approved brand and quality, complete to the satisfaction of engineer in charge. nothing extra is payable if some civil work is required for fixing of the system.(Cost of door/ glass to be paid seperately)	Sensor Sliding Door Providing and fixing automatic sliding door operator of approved brand and manufacture for an opening of size 3.0x2.1 mtr (door made of 12 mm thick clear toughened glass with edge polished and holes for fixing fittings etc) consisting of 6.25 mtr long operator with track profiles, glass clamping rails, floor guide, Radar eagle 6 sensors, 5 programme switch with knob, light barrier EM lock and cable for programme switch all complete of approved brand and quality, complete to the satisfaction of engineer in charge. nothing extra is payable if some civil work is required for fixing of the system.

Clause Reference: Schedule F (Milestone): Following amendment may be noted.

Mile Stone No	Description of Milestone (Physical)	Time allowed in days (from date of start)	Amount to be with- held in case of non - achievement of milestone.
1	Substantial Completion of Foundation	6 months	0.25% of Tendered value
2	Substantial Completion of RCC works upto Plinth Beam Level	9 months	0.25% of Tendered value
3	Substantial Completion of RCC works upto Floor 3 Level for Hospital Block	11 months	0.25% of Tendered value
4	Preparation of a sample Toilet	12 months	0.50% of Tendered value

5	Substantial Completion of all RCC works in Super Structure for the buildings of the Academic Campus	12 months	0.25% of Tendered value
6	Substantial Completion of Brickwork of the Buildings of Academic Campus	14 months	0.25% of Tendered value
7	Substantial Completion of all RCC works in Super Structure for the remaining buildings	14 months	0.25% of Tendered value
8	Substantial Completion of Brickwork of the Hospital Block	16 months	0.25% of Tendered Value
9	Substantial Completion of all buildings of the Academic Campus including Finishing and services	18 months	1% of Tendered value
10	Substantial Completion of finishing for all structures	21 months	1.00% of Tendered value
11	Substantial completion of project in all respect including testing and commissioning	22 months	0.75% of Tendered value

- The reply to the queries raised by the bidders during the pre-bid meeting held at HSCC Corporate Office, Noida on 3rd November 2017 at 1600 hrs is enclosed at Annexure I.
- The last date of submission and opening of bids has been extended as follows:
Last date to fill/upload the tender through e-tendering: **upto 1500 hrs on 24.11.2017**
Date of opening of bids: **on 24.11.2017 at 1530 hrs**
- The validity of Bid Security/Earnest Money Deposit (EMD) to be submitted by the bidders with their bid in the form of Bank Guarantee (BG) shall be considered from the Original due date of submission, i.e., from 14.11.2017.
- Addendum to Tender Drawings Vol.-VI is enclosed for the subject work as Annexure III. Bidders may take note accordingly.
- The font errors have been observed in the B.O.Q. (Bill of Quantities) Vol.-V uploaded for the subject tender. Accordingly, the **corrected B.O.Q. (Bill of Quantities) - Vol.-V** has been uploaded on HSCC e-tender portal <http://www.tenderwizard.com/HSCC>.
Bidders are requested to quote their rates according to the corrected B.O.Q. (Vol.-V) only.
- It is again clarified that the following buildings form part of the Academic Campus and have a completion period of 18 months including completion of all services (within the scope of this tender) required for making these buildings operational:



- a. Medical College
- b. Nursing College
- c. Admin Block
- d. Library

This amendment shall form integral part of bid document and should be submitted along with the bid.

All other terms & Conditions of the Tender shall remain unchanged.

Prospective bidders are advised to regularly scan through HSCC e-tender portal <http://www.tenderwizard.com/HSCC> and <http://www.hsccltd.co.in> as corrigendum/amendments etc., if any, will be notified on this portal only and separate advertisement will not be made for this.

(- Sd-)
Chief General Manager,
HSCC (India) Ltd.,

Construction of Hospital and Academic Campus at All India Institute of Medical Sciences, Nagpur, Maharashtra				
S.No	Clause, Section & Vol No/ Description	As per Bid Document	Bidder's Queries	Reply
Bidder No. 1				
General & Commercial				
1	Clause 10 B (i), Vol II, GCC, Pg. 31 of 123 Secured Advance on Non Persihable Material		As per CPWD norms, Request to provide 90% of the assessed value of material as secured advance.	No change. Shall be as per tender conditions.
2	Clause 25, Vol II, GCC, Pg. 58 of 123 Settlement of Disputes & Arbitration	Except where the decision has become final, binding and conclusive in terms of Sub Para (i) above, disputes or difference shall be referred for adjudication through arbitration by a sole arbitrator appointed by the Designated Authority of the Executing Agency	We request you to modify the clause as follows: Arbitration shall be conducted by a tribunal headed by the arbitrator chosen by the nominated arbitrators of Employer and Contractor. Please confirm.	Please refer to Amendment No.2
3			We request you to provide us the following documents: 1) Soil Investigation report 2) Master Plan 3) Area Statement of Buildings for this package	1. The soil Investigation report shall be made available to the successful bidder/Contractor after award of work. However, Bidders are advised to inspect and examine the site and its surroundings and satisfy themselves before submitting their tender/bids. Please also refer to CLause 1.17 of Volume I, 2. The master plan is already a part of the tender drawings.
4	General Order of priority of documents	General	Request you to confirm the order of priority of documents in case of discrepancy among tender documents.	Shall be as per Tender Conditions. Bidders may also refer to GCC (Volume II).
5	Volume I NIB & ITB / Page 19 List of specialized item / jobs for Electrical /HVAC/OT etc. work (As applicable)	1.26. This being a composite tender, the Bidder must associate with himself agencies otherwise eligible to tender for other components individually including specialized services for which an affidavit/undertaking as per format enclosed at Form H should be submitted along with the Technical Bid.	If the bidder himself is having experince of executing specialized works, we presume that in such case bidder need not submit Form - H for engaging speciist agencies. Kindly confirm. However, the bidder shall submit a documentary proof demonstrating his experience in specialized works.	No change. Shall be as per tender conditions.
6	Volume III SCC Page-7. Clause 5D Working drawings/ shop drawings/Design		We understand that detailed design for Structure, Architecture and MEP works post award is the scope of the contractor. Please confirm.	Please refer to Amendment No.2
Civil and Structure				
7	Vol V, BOQ Item No. 8.17 Aluminium Roofing		The item description is not readable. Request you to kindly provide the same.	Corrected copy of BOQ has been uploaded. Also refer Amendment No. 2
8	Vol V, BOQ Item No. 3.11, 3.12, 3.13		We request you to kindly specify the approved makes for expansion joints like Deevin/3R Solutions/Tristar / Kantaflex / Hercules / Sanfield	Work is to be carried out as per CPWD specifications and tender conditions.

9	Vol V, BOQ Item No. 5.07	Providing and fixing IS I marked flush door shutters conforming to IS :2202 (Part I) nondecorative type, core of block board construction with frame of 1st class hard wood and well matched commercial 3 ply veneering with vertical grains or cross bands and face veneers on both faces of shutters:	Please specify the section of wooden frame to be considered.	Work is to be carried out as per CPWD specifications and tender conditions.
10	Vol V, BOQ Item No. 7.16	P/L 8mm thick (- N13329) HD- laminated wooden flooring including skirting of approved brand and manufacture(class use of 31/33 AC 4 plank size 1290 X 194 mm & groove construction with edge impregnate with seal to secure long lasting joints, secured together with the help of suitable glue, conforming to EN 13329 including the cost of 0.6 mil. PE Film and 2 mm PU Foam with accessories like Skirting, T Profile, beading, stair nose etc all complete.	We request you to kindly specify the approved makes for wooden flooring like Greenply / Pergo / Trott / Zylos	Work is to be carried out as per CPWD specifications and tender conditions.
11	Vol V, BOQ Item No. 10.05	Providing and fixing glass Reinforced C oncrete (G.R.C) Sreens in approved size, pattern design, thickness and color of approved make...	We request you to kindly provide the drawings for GRC Screens.	Base rate of GRC screen shall be 380/- per sqft.(excluding GST) FOR site.
12	Vol V, BOQ Item No. 10.11	Providing and fixing Auditorium Chairs as per specification given below...	We request you to kindly specify the approved makes for auditorium chairs	Work is to be carried out as per tender conditions.
PHE				
13	Vol 5 & PHE BOQ, SL NO.1.03a Sanitary Fittings	White Vitreous China - Flat back wash basin size 550x 400 mm with single 15 mm C. P. brass pillar tap	Kindly provide us the model number for wash basin.	No change. Shall be as per tender conditions.
14	Vol 5 & PHE BOQ, SL NO.1.05 Sanitary Fittings	Providing and fixing white vitreous china pedestal for wash basin completely recessed at the back for the reception of pipes and fittings	Kindly provide us the model number for wash basin.	No change. Shall be as per tender conditions.
15	Vol 5 & PHE BOQ, SL NO.1.22 Sanitary Fittings	P&E wall Soap Holder with brackets', complete fittings of roca or other equivalent approved make (Jaquar or other equivalent model as per approved make)	Kindly provide us the model number.	No change. Shall be as per tender conditions.
16	Vol 5 & PHE BOQ, SL NO.1.24 Sanitary Fittings	Providing and fixing C P brass towel rail complete of approve quality and colour.(Jaquar or other equivalent make.)	Kindly provide us the model number.	No change. Shall be as per tender conditions.
17	Vol 5 & PHE BOQ, SL NO.1.26 Sanitary Fittings	providing & fixing double robe hook	Kindly provide us the model number.	No change. Shall be as per tender conditions.
18	Vol 5 & PHE BOQ, SL NO.1.28 Sanitary Fittings	Supply and instaling of Grab Bar S type-304,18-gauge(1mm) stainless steel tubing with, satin-finish.1 -1/2"(25.4 mm) outside dia.Concealed mounting flanges- 18-8 S ,type-304, stainless steel palte: end flanges with two holes for attachments to wall. stainless steel with satin-finish. Each cover snaps over mounting flange to conceal mounting screws.make Euronics or equivalent-600 mm(L)	Kindly provide us the model number.	No change. Shall be as per tender conditions.
19	Vol 5 & PHE BOQ, SL NO.1.29 Sanitary Fittings	Providing & fixing S S body solid state fully hygienic no touch Hand Drier of approved make rated for continuous repeat usage with solid state time delay LS - protection, with independent ambient light level & seasonal control temperatures including providing necessary C .I./M.S . brackets painted with two or three coats of enamel paint of approved shade over a coat of primer, wiring cables from drier to plug, plug tops etc. complete including cutting and making good the walls wherever required.	Kindly provide us the model number.	No change. Shall be as per tender conditions.

20	Vol 5 & PHE BOQ, SL NO.3.32 Water supply	Providing and Fixing concealed . ath&S ho□e□ a i□e□ a□d di□e□te□ □utti□g a□d □aki□g good the □all □o□plete as pe□ i□st□u□tio□s of the e□gi□ee□-i□-□ha□ge.	Given description is not in readable font. Kindly provide the clear description.	Corrected copy of BOQ has been uploaded. Also refer Amendment No. 2
21	Vol 5 & PHE BOQ, SL NO.3.33 Water supply	Providing and - ixing h□e□head sho□e□□□□□□□□□□diaha□i□g ae□ato□s/flo□□est□i□to□toa□hie□e the desi□ed flo□□ate □ithS ho□e□ A □□ □o□plete as pe□ i□st□u□tio□s ofthe e□gi□ee□-i□-□ha□ge □Clo□□ate : □.□ [t a at □□ t si p□essu□e□	Given description is not in readable font. Kindly provide the clear description.	Corrected copy of BOQ has been uploaded. Also refer Amendment No. 2
22	Vol 5 & PHE BOQ, SL NO.3.34 Water supply	Providing and - Fixing C P . athspout□ith□allfla□ge ha□i□g ae□ato□s/flo□□est□i□to□toa□hie□e the desi□ed flo□□ate □o□plete as pe□ i□st□u□tio□s ofthe e□gi□ee□- i□-□ha□ge o□as pe□e□ui□ale□t □ake. □Clo□□ate : □.□ [t a at □□ t si p□essu□e□	Given description is not in readable font. Kindly provide the clear description.	Corrected copy of BOQ has been uploaded. Also refer Amendment No. 2
23	Vol 5 & PHE BOQ, SL NO.5.01 Solar water heater	Providing and fixing G.I.fittings and clamps, i/c cutting and making good the walls etc.	We understand that this item is including GI Pipes & fittings. Kindly confirm.	Yes, it is pipe & fitting complete.
24	Vol 5 & PHE BOQ, SL NO.7.28, N.S.11 External water supply	Providing and fixing motorized butterfly valve/rotary actuator (C I body, S S 316 disc, EPDM boot seat, S S 416 shaft, R PT- - bushing @ PN16 rating) for filling of water tank complete with electrical water level control panel, including bypass connection for the same dia with manually operated butterfly valve and all piping and accessories complete in all respects - - or Cluster Level UG Domestic and - Flushing T anks Clusterwise	Given rates are not in readable font. Kindly provide the readable font for rates.	Corrected copy of BOQ has been uploaded. Also refer Amendment No. 2
25	Vol 5 & PHE BOQ, SL NO.12.07, WTP & Pumps	Supplying, installing, testing and commissioning vertical on line multi stage centrifugal pumping set with mechanical seal C.I. volute and S S impeller & S S shaft connected to a T- - C induction motor of suitable HP for 415 volts, 3 phase, 50 cycles A.C . supply with 150 mm dia pressure gauge with S S /gunmetal isolation cock, vibration eliminating pads, base plate wiring upto panel and equipment for water level controller to start and stop the pump automatically at predecided levels of the water in the tank with provision of protection for dry run etc. complete in all respect. The efficiency of the pump shall be more than 60% (The shop drawing or the pumps along with its characteristics curves, model and technical data etc. are to be submitted for approval before purchase of pump).	Kindly confirm that the item is (1w+1s) or 1w only.	4 Set (2 W+2 S)

26	Vol 5 & PHE BOQ, SL NO.13.01, ETP	Providing and fixing packaged type Effluent treatment plant including design/shop drawing and obtain the approval from HS C C before erection, commissioning, construction of ETP including civil, mechanical, electrical, piping work complete in all respect on turnkey basis.The system should be fully automatic with level control,compact, odor free and shall consume low power. ETP will be placed near STP site of the building of suitable size for 100 K L D required to treat the effluent of lab, laundry, kitchen and hospital facilities by using suitable technology complete in all respect including oil and grease trap/chemical reaction with suitable chemical dosing such as entons reagent or any other suitable for effluent/mixer/settler/neutralisation chamberbdosing pump and agitator, holding tank, including multigrade filter stand by motor pump, blower etc. pumps and piping, filter, sludge holding tank, filter press, testing kit, electrical panel, air blower, R CC Equilisation tank/holding tank.Treated water transfer pump and sump of suitable art. ity	We presume that ETP capacity is 100 KLD and civil works are excluded. Kindly confirm. Also provide us the technical specification for ETP & STP	Civil works will be measured and paid under relevant items.
27	Vol 5 & PHE BOQ, SL NO.14.01, STP	Planning, Designing, Detailing, Supplying, Erection, Testing and Commissioning of Sewage treatment plant based on MBBR (Moving bed Bio Reactor)/- AB technology of average flow rate of 1000 cu.m/day (2 streams) for sewer including provision of recirculation of treated sewage/effluent for the use of horticulture/flushing/A/c purposes including design and execution of all civil,structural, electrical, mechanical, plumbing and processing, ancillary equipments and works etc required to complete the package, getting approval from state pollution control board and other statutory bodies as well as from consultant (consultant) /Client including the cost of STP building for electrical room, treated sewage under ground storage tank etc. STP shall be design in such a way that it has a provision to easy extension for phaseII load (appr. 500 KLD).The planning & designing has to carried out for phase-I & II, HOWEVER THE EXECUTION WILL BE CARRIED OUR FOR PHASE-1 ONLY.	We understand that each stream will have 500 cum/day. The capacity of STP is 500cum for phase 1 and 500 cum for phase 2. Hence, we can quote for 500 cum of phase 1 capacity alone . Kindly confirm. Also, we request you to confirm that civil works required shall be measured and paid under relevant items.	the capacity of STP is 1000 KLD in phase 1 & additional provision for future of 500 KLD has to be considered in design & planning. However the execution will be carried out for 1000 KLD only.
FPS				
28	S.No.1.43 of Fire Fighting System of Page 7 of 16 of Volume 5- BOQ LT panel -CO2 Flooding System	Providing and fixing complete CO2 flooding system of approved make and model for main LT panel including two nos. 22 kg seamless cylinder required quantity of MS seamless pipe, manifold, NRV, high pressure flexible hose,weighing arrangement, pneumatic valve, CO2 nozzles including painting and MS support.The size of main LT panel will be as per Electrical scope of work. The shop drawing/datasheet of CO2 flooding system shall be provided by Agency for approval of HSCC before start of the work. The CO2 flooding panel shall also meet out the local Fire Officers latest requirement and anything extra or any modification required by Fire Officer shall be carried out by Agency without any extra cost.	Kindly provide us the dimension for LT Panel.	The size of LT panel will be as per approved shop drawing.

29	S.No.1.44 of Fire Fighting System of Page 8 of 16 of Volume 5- BOQ HT panel -CO2 Flooding System	Providing and fixing complete C O2 flooding system of approved make and model for main HT panel including two nos. 45 kg seamless cylinder required quantity of MS seamless pipe manifold, high pressure flexible hose, weighing arrangement, pneumatic valve, C O2 nozzles including painting and MS support. The size of main HT panel will be as per Electrical scope of work. The shop drawing/datasheet of C O2 flooding system shall be provided by Agency for approval of HS C C before start of the work. The C O2 flooding panel shall also meet the local - fire Officers latest requirement and anything extra or any modification required by Fire Officer shall be carried out by Agency without any extra cost.	Kindly provide us the dimension for HT Panel.	The size of HT panel will be as per approved shop drawing.
Electrical				
30	Vol-III SCC / ADDITIONAL SPECIFIC CONDITIONS OF CONTRACT AND SPECIFICATIONS / Page 39 B) RELATING TO ELECTRICAL INSTALLATIONS	8.0 Drawings The Contractor shall submit six sets of working electrical drawings based on tender drawing including reflected ceiling plan coordinating other essential building services for the Executing Agency's approval.	We presume that coordination drawings for the services shall be provided by Client/consultant. However shop drawings shall be submitted by contractor for approval.	No change. Shall be as per tender conditions.
31	Vol-III SCC / ADDITIONAL SPECIFIC CONDITIONS OF CONTRACT AND SPECIFICATIONS / Page 43 B) RELATING TO ELECTRICAL INSTALLATIONS	22.0 Completion Drawings (As Built Drawings) 22.1 On completion of the work and before issue of certificate of virtual completion, the Contractor shall submit to the Engineer completion plan drawn to a scale in tracing cloth with ink indicating the following, along with three blue print copies of the same:	In spite of tracing cloth with ink, drawings printed in plain paper of standard size shall be submitted.	No change. Shall be as per tender conditions.
32	VOLUME – IV Technical Specification SPEC Page E-10 R0 4.0 L.T. SWITCHGEARS	4.1.8 TESTING Testing of each circuit breaker shall be carried out at the works as per IS 2516 and the original test certificate shall be furnished in triplicate. The tests shall incorporate at least the following. i. Impulse withstand test. ii. Power frequency withstand test. iii. Short circuit test. iv. Temperature - rise test under rated conditions.	Mentioned tests are falling under Type test. For any type test, only type test report for test conducted on similar/higher rated breaker shall be submitted. Please confirm.	No change. Shall be as per tender conditions.
33	VOLUME – IV Technical Specification SPEC Page E-15 R0 5.00 BUS TRUNKING/ RISING MAINS	5.4 Construction: The enclosure will be made from 16 SWG GI/ CRCA sheet steel powder coated of approved shade.	Material for construction of Busduct shall be as per the approved manufacturers type tested design standards. Please confirm.	Shall be as per latest IS/CPWD specifications.
34	VOLUME – IV Technical Specification SPEC Page E-88 R0 LIST OF APPROVED MAKES FOR ELECTRICAL SYSTEM	37. LED light fitting & Fixture - Philips / GE/ Crompton Greaves.	Out of the approved makes furnished GE is not manufacturing or offering luminaries presently. Hence request to kindly provide additional makes for LED light fitting and fixture.	No change. Shall be as per tender conditions.

35	<p>BILL OF QUANTITIES OF ELECTRICAL WORKS FOR CONSTRUCTION OF HOSPITAL & ACADEMIC CAMPUS AT AIIMS NAGPUR Page No. 166/297</p> <p>SUBHEAD 1: RISING MAINS</p>	<p>Supply installation testing and commissioning of plug in type indoor sandwich type with high conductivity Aluminium Conductor 415 V 3phase 4 wire vertical Aluminium Rising main Class B or better in following sizes including bends flexible provision of the tap off's as per requirement Adoptor boxes for cable connection if required are inclusive 2 nos of aluminium earthing strips 50 X 6mm through out the length of the rising mains end cover including all types of support and necessary hardware for installation of the rising main etc. complete as per specifications and as required.</p> <p>1.01 i) 400 A, 415 volts ii) 630 A, 415 volts ii) 800 A, 415 volts iii) 1000 A, 415 volts iii) 1600 A, 415 volts iii) 2000 A, 415 volts</p>	<p>Quantity for Rising main Accessories such as Bends, Flange Ends, End Covers, etc. are not provided in BOQ. Hence request to kindly furnish quantity for the following accessories.</p> <ol style="list-style-type: none"> 1. Bends 2. Flange End 3. End Cover 4. Plug-in Tapoff provision per floor 	<p>Shall be as per actual requirement of site.</p>
36	<p>BILL OF QUANTITIES OF ELECTRICAL WORKS FOR CONSTRUCTION OF HOSPITAL & ACADEMIC CAMPUS AT AIIMS NAGPUR Page No. 168/297</p> <p>SUB HEAD 2: MV PANELS</p>	<p>2.01 MV Panel Section 1 & Section 2 (Ground 1st 2nd 3rd 4th & 5th floor)</p> <p>AUTO TRANSFER SWITCH (ATS)</p>	<p>Technical Specification for Auto Transfer Switch is not available as part of tender NIT. Request to kindly provide the same.</p>	<p>ATS must comply IEC 60947-6-1 standard having AC-33B utilisation category with inbuilt self controller switch and controller both should have 35 KA or more rating.</p>
37	<p>BILL OF QUANTITIES OF ELECTRICAL WORKS FOR CONSTRUCTION OF HOSPITAL & ACADEMIC CAMPUS AT AIIMS NAGPUR Page No. 205/297</p> <p>SUB HEAD 5: WIRING</p>	<p>5.01 Point wiring as mentioned above Group C</p>	<p>Request to kindly provide average wiring length to be considered for this line item.</p>	<p>Can be calculated from tender drawings.</p>
38	<p>BILL OF QUANTITIES OF ELECTRICAL WORKS FOR CONSTRUCTION OF HOSPITAL & ACADEMIC CAMPUS AT AIIMS NAGPUR Page No. 206/297</p> <p>SUB HEAD 5: WIRING</p>	<p>5.02 Wiring for twin control light points as mentioned above</p>	<p>Request to kindly provide average wiring length to be considered for this line item.</p>	<p>Can be calculated from tender drawings.</p>
39	<p>BILL OF QUANTITIES OF ELECTRICAL WORKS FOR CONSTRUCTION OF HOSPITAL & ACADEMIC CAMPUS AT AIIMS NAGPUR Page No. 207/297</p> <p>SUB HEAD 5: WIRING</p>	<p>5.16 Supply Installation Testing & Commissioning of 360 degree Ceiling recess mountable 360 degree multifunction sensor that combines motion detection (PIR) Infrared remote control reception (IR) and ambient light level detection (P-) into one device.</p>	<p>Model Nos. for the Sensor is not provided in BOQ line item description. Hence request to kindly furnish the model Nos. of sensor against each of the approved makes to be considered for this line item.</p>	<p>Shall be as per approved make list.</p>

40	BILL OF QUANTITIES OF ELECTRICAL WORKS FOR CONSTRUCTION OF HOSPITAL & ACADEMIC CAMPUS AT AIIMS NAGPUR Page No. 207/297 SUB HEAD 5: WIRING	5.17 Supply Installation Testing & Commissioning of Standalone Ceiling Mounted Motion PIR sensor 360 degree.	Model Nos. for the Sensor is not provided in BOQ line item description. Hence request to kindly furnish the model Nos. of sensor against each of the approved makes to be considered for this line item.	Shall be as per approved make list.
41	BILL OF QUANTITIES OF ELECTRICAL WORKS FOR CONSTRUCTION OF HOSPITAL & ACADEMIC CAMPUS AT AIIMS NAGPUR Page No. 207/297 SUB HEAD 5: WIRING	5.18 Supply Installation Testing & Commissioning of Standalone Wall Mounted Motion PIR sensor 90 degree.	Model Nos. for the Sensor is not provided in BOQ line item description. Hence request to kindly furnish the model Nos. of sensor against each of the approved makes to be considered for this line item.	Shall be as per approved make list.
42	BILL OF QUANTITIES OF ELECTRICAL WORKS FOR CONSTRUCTION OF HOSPITAL & ACADEMIC CAMPUS AT AIIMS NAGPUR Page No. 207/297 SUB HEAD 6: LIGHT FIXTURE AND FANS	6.01 (i) 1 x 20 W LED box type fluorescent light fixture (Philips BN108C LED 20S PSU CDL WH including Mounting Accessories with minimum system lumen 2100 or approved equivalent from list of Makes)(120b/ 120bw)	Request to kindly furnish the model Nos. of luminarie against each of the approved makes to be considered for this line item.	Equivalent model of approved make will be accepted.
43	BILL OF QUANTITIES OF ELECTRICAL WORKS FOR CONSTRUCTION OF HOSPITAL & ACADEMIC CAMPUS AT AIIMS NAGPUR Page No. 208/297 SUB HEAD 6: LIGHT FIXTURE AND FANS	6.01 (ii) 2 x 20 W LED box type fluorescent light fixture (Philips BN108C LED 40S PSU CDL WH including Mounting Accessories with minimum system lumen 2100 or approved equivalent from list of Makes)(220b/ 220bw)	Request to kindly furnish the model Nos. of luminarie against each of the approved makes to be considered for this line item.	Equivalent model of approved make will be accepted.
44	BILL OF QUANTITIES OF ELECTRICAL WORKS FOR CONSTRUCTION OF HOSPITAL & ACADEMIC CAMPUS AT AIIMS NAGPUR Page No. 208/297 SUB HEAD 6: LIGHT FIXTURE AND FANS	6.01 (iii) LED Recessed flush mounted light fixture (Full Glow (1200mm) Philips RC380B G2 LED 34S 6500 L120 W30 PSU OD or Crompton LCTLR-40-CDL as per requirement with minimum system lumen 3000 or approved equivalent from list of Makes)(R MSQ3b IC U)	Request to kindly furnish the model Nos. of luminarie against each of the approved makes to be considered for this line item.	Equivalent model of approved make will be accepted.
45	BILL OF QUANTITIES OF ELECTRICAL WORKS FOR CONSTRUCTION OF HOSPITAL & ACADEMIC CAMPUS AT AIIMS NAGPUR Page No. 208/297 SUB HEAD 6: LIGHT FIXTURE AND FANS	6.01 (iv) LED recessed flush mounted light fixture (Full Glow (600mm) Philips RC380B G2 LED34S 6500 PSU OD WH or Crompton LCTLRN-36-FO-CDL per requirement with minimum system lumen 3000 or approved equivalent from list of Makes)(R MSQ3b IC U)	Request to kindly furnish the model Nos. of luminarie against each of the approved makes to be considered for this line item.	Equivalent model of approved make will be accepted.

<p>46</p>	<p>BILL OF QUANTITIES OF ELECTRICAL WORKS FOR CONSTRUCTION OF HOSPITAL & ACADEMIC CAMPUS AT AIIMS NAGPUR Page No. 208/297</p> <p>SUB HEAD 6: LIGHT FIXTURE AND FANS</p>	<p>6.01 (v) LED recessed flush mounted light fixture (Full Glow (600mm) Philips RC380B G2 LED34S-6500 PSD OD WH or per requirement with minimum system lumen 3000 or approved equivalent from list of Makes) (FOR DALI)</p>	<p>Request to kindly furnish the model Nos. of luminarie against each of the approved makes to be considered for this line item.</p>	<p>Equivalent model of approved make will be accepted.</p>
<p>47</p>	<p>BILL OF QUANTITIES OF ELECTRICAL WORKS FOR CONSTRUCTION OF HOSPITAL & ACADEMIC CAMPUS AT AIIMS NAGPUR Page No. 208/297</p> <p>SUB HEAD 6: LIGHT FIXTURE AND FANS</p>	<p>6.01 (vi) LED Surface mounted light fixture (Philips SP824P LED 29S 5000 GR OD or Crompton LCTLS-40-CDL as per requirement with minimum system lumen 3000 or approved equivalent from list of Makes)(236SM01)</p>	<p>Request to kindly furnish the model Nos. of luminarie against each of the approved makes to be considered for this line item.</p>	<p>Equivalent model of approved make will be accepted.</p>
<p>48</p>	<p>BILL OF QUANTITIES OF ELECTRICAL WORKS FOR CONSTRUCTION OF HOSPITAL & ACADEMIC CAMPUS AT AIIMS NAGPUR Page No. 208/297</p> <p>SUB HEAD 6: LIGHT FIXTURE AND FANS</p>	<p>6.01 (vii) 1 x 10 W Bulk Head light fixture (Philips WT202 W L-D 6S CW PSU S1 PC or approved equivalent from list of Makes)(BH)</p>	<p>Request to kindly furnish the model Nos. of luminarie against each of the approved makes to be considered for this line item.</p>	<p>Equivalent model of approved make will be accepted.</p>
<p>49</p>	<p>BILL OF QUANTITIES OF ELECTRICAL WORKS FOR CONSTRUCTION OF HOSPITAL & ACADEMIC CAMPUS AT AIIMS NAGPUR Page No. 208/297</p> <p>SUB HEAD 6: LIGHT FIXTURE AND FANS</p>	<p>6.01 (viii) 1 x 14 W Mirror top with diffuser in 2ft variant (Crompton Greaves LINNET # LCL-14-CDL or approved equivalent from list of Makes)(wtoilet)</p>	<p>Request to kindly furnish the model Nos. of luminarie against each of the approved makes to be considered for this line item.</p>	<p>Equivalent model of approved make will be accepted.</p>
<p>50</p>	<p>BILL OF QUANTITIES OF ELECTRICAL WORKS FOR CONSTRUCTION OF HOSPITAL & ACADEMIC CAMPUS AT AIIMS NAGPUR Page No. 208/297</p> <p>SUB HEAD 6: LIGHT FIXTURE AND FANS</p>	<p>6.01 (x) LED Recessed flush mounted down light fixture (Philips DN194B LED 15S 6500 PSU WH or Crompton LCD D-18-CDL/TL/WW or approved equivalent from list of Makes)(DL 1)</p>	<p>Request to kindly furnish the model Nos. of luminarie against each of the approved makes to be considered for this line item.</p>	<p>Equivalent model of approved make will be accepted.</p>

51	<p>BILL OF QUANTITIES OF ELECTRICAL WORKS FOR CONSTRUCTION OF HOSPITAL & ACADEMIC CAMPUS AT AIIMS NAGPUR Page No. 208/297</p> <p>SUB HEAD 6: LIGHT FIXTURE AND FANS</p>	<p>6.01 (xi) LED Recessed flush mounted down light fixture (Philips DN194B LED 15S 6500 PSU WH or Crompton LCDD-18-CDL/TL/WW or approved equivalent from list of Makes)(DL 1)</p>	<p>Request to kindly furnish the model Nos. of luminarie against each of the approved makes to be considered for this line item.</p>	<p>Equivalent model of approved make will be accepted.</p>
52	<p>BILL OF QUANTITIES OF ELECTRICAL WORKS FOR CONSTRUCTION OF HOSPITAL & ACADEMIC CAMPUS AT AIIMS NAGPUR Page No. 208/297</p> <p>SUB HEAD 6: LIGHT FIXTURE AND FANS</p>	<p>6.01 (xii) 1 x 18 W LED Surface mounted down light fixture (Crompton Greaves Pearl Round LCD SPL R-18-CDL or approved equivalent from list of Makes)</p>	<p>Request to kindly furnish the model Nos. of luminarie against each of the approved makes to be considered for this line item.</p>	<p>Equivalent model of approved make will be accepted.</p>
53	<p>BILL OF QUANTITIES OF ELECTRICAL WORKS FOR CONSTRUCTION OF HOSPITAL & ACADEMIC CAMPUS AT AIIMS NAGPUR Page No. 208/297</p> <p>SUB HEAD 6: LIGHT FIXTURE AND FANS</p>	<p>6.01 (xiii) 1X 3 / 5 W LED Surface /Recessed flush mounted light fixture to be used as night lamp Ceiling mounted (NL CM)</p>	<p>Model Nos. for the Luminaire is not provided in BOQ line item description. Request to kindly furnish the model Nos. of luminarie against each of the approved makes to be considered for this line item.</p>	<p>Equivalent model of approved make will be accepted.</p>
54	<p>BILL OF QUANTITIES OF ELECTRICAL WORKS FOR CONSTRUCTION OF HOSPITAL & ACADEMIC CAMPUS AT AIIMS NAGPUR Page No. 208/297</p> <p>SUB HEAD 6: LIGHT FIXTURE AND FANS</p>	<p>6.01 (xiv) 1X 3 / 5 W LED Recessed flush mounted light fixture to be used as night lamp wall mounted (NL WM)</p>	<p>Model Nos. for the Luminaire is not provided in BOQ line item description. Request to kindly furnish the model Nos. of luminarie against each of the approved makes to be considered for this line item.</p>	<p>Equivalent model of approved make will be accepted.</p>
55	<p>BILL OF QUANTITIES OF ELECTRICAL WORKS FOR CONSTRUCTION OF HOSPITAL & ACADEMIC CAMPUS AT AIIMS NAGPUR Page No. 208/297</p> <p>SUB HEAD 6: LIGHT FIXTURE AND FANS</p>	<p>6.01 (xv) 1 x 10 W wall Bracket (Philips LED-1 x 10 W 45617/17 V ase or approved equivalent from list of Makes)(W B)</p>	<p>Request to kindly furnish the model Nos. of luminarie against each of the approved makes to be considered for this line item.</p>	<p>Equivalent model of approved make will be accepted.</p>

56	BILL OF QUANTITIES OF ELECTRICAL WORKS FOR CONSTRUCTION OF HOSPITAL & ACADEMIC CAMPUS AT AIIMS NAGPUR Page No. 208/297 SUB HEAD 6: LIGHT FIXTURE AND FANS	6.01 (xvi) 1X 36 LED Surface mounted down light fixture (Crompton Greaves Pensile LCSA1-36-CDL/S or approved equivalent) (DL2)	Request to kindly furnish the model Nos. of luminarie against each of the approved makes to be considered for this line item.	Equivalent model of approved make will be accepted.
57	BILL OF QUANTITIES OF ELECTRICAL WORKS FOR CONSTRUCTION OF HOSPITAL & ACADEMIC CAMPUS AT AIIMS NAGPUR Page No. 208/297 SUB HEAD 6: LIGHT FIXTURE AND FANS	6.01 (xvii) 1X 50 LED Recess mounted down light fixture (Crompton Greaves Prakhar LCDNR-50-CDL/WW or approved equivalent)	Request to kindly furnish the model Nos. of luminarie against each of the approved makes to be considered for this line item.	Equivalent model of approved make will be accepted.
58	BILL OF QUANTITIES OF ELECTRICAL WORKS FOR CONSTRUCTION OF HOSPITAL & ACADEMIC CAMPUS AT AIIMS NAGPUR Page No. 208/297 SUB HEAD 6: LIGHT FIXTURE AND FANS	Supply of following ceiling fans (BEE 5 Star Rated) complete with double ball bearing motor blades downrod canopies capacitor modular type electronic fan regulator suitable for operation on 230 voltsb 50 Hz. 1 phaseb AC supply complete as required. I) 1400mm Sweep III) 900mm Sweep	As per the approved Fan manufacturers confirmation, BEE-5 Star rating is available only for 1200mm sweep ceiling fan and is not available for 1400mm / 900mm sweep ceiling fans. Please confirm shall we consider fans without star rating for 1400mm and 900mm sweep ceiling fan as per market availability.	900/1400mm fan will be ISI marked.
HVAC				
59	Vol 5 BILL OF QUANTITIES FOR HVAC WORKS Factory Witness Testing	Water Cooled Centrifugal Chillers with VFDs	We presume only factory witness testing has to be considered for only one Centrifugal Chiller per capacity & model. Kindly confirm.	Clarification/Amendment:- No witness testing. One randomly selected chiller shall be tested at 04 points mentioned in BOQ at tender conditions.
60	Vol 5 BILL OF QUANTITIES FOR HVAC WORKS Factory Witness Testing	General	We presume only Centrifugal chiller has to be Factory Witness Tested and no other HVAC equipment require Factory Witness Testing. Kindly confirm.	No change. Shall be as per tender conditions.
61	Vol 5 BILL OF QUANTITIES FOR HVAC WORKS 2.0 WATER CIRCULATION PUMPS	Type of Pumps	Request you to provide us the liberty to choose the type of pump among end suction back pull out long coupled/short coupled, monoblock, vertical inline, horizontal split casing, vertical split casing for primary,secondary, tertiary and condenser water pumping applications.	Clarification/Amendment:- Condenser water pump: End suction back pullout. Primary chilled water pump: End suction back pull out. Secondary chilled water pump: Inline pump. Tertiary chilled water pump: Inline pump.
Bidder No. 2				
62	Volume II Pg 32 - Interest & Recovery	The mobilization advance and plant and machinery advance in (ii) & (iii) above bear simple interest at the rate of 10 per cent per annum	It is requested to provide an interest free mobilisation advance and P&M advance.	No change. Shall be as per tender conditions.

63	Volume II Pg 16 - Clause 2A - INCENTIVE FOR EARLY COMPLETION	In case, the contractor completes the work ahead of stipulated date of completion or justified extended date of completion as determined under clauses 5.3, 12 & 15, a bonus @ 1% (one per cent) of the tendered value per month computed on per day basis, shall be payable to the contractor, subject to a maximum limit of 5% (five per cent) of the tendered value	Clauses of LD and incentive be suitably modified to ensure equitability. LD be reduced to 5% or incentive be increased to 10% and oblige.	No change. Shall be as per tender conditions.
64	Volume II Pg 108 - 2(ix)	Percentage on cost of materials and labour to cover all Overheads and profits. - 15%	We presume that while working out the rates for extra items, taxes and labour cess will be added to the rates arrived after adding 15% towards OH & profit. Kindly confirm.	No change. Shall be as per tender conditions.
65	Volume III Pg 30 - Volume III Clause 32.2 Contractor's Working Area	Suitable working area will be provided by the Engineer to the Contractor.	We presume that the working area will be provided free of cost and sufficiently large enough to accommodate batching plant, fabrication yard, labour camp etc. Kindly confirm	No Change. Shall be as per Tender conditions. Bidders are advised to inspect and examine the site and its surroundings and satisfy themselves before submitting their tender/bids. Please also refer to Clause 1.17 of Volume I.
66	Volume III Pg 31 - Clause 32.6	Site office and Infrastructure	Kindly provide details of the client facilities required i.e. office area, area of rooms, no. of rooms, no of office utilites, etc	Area of site office shall be approx 300sqm. All other details shall be as per tender conditions.
67	Volume III pg 19 - 22.1.2	Insurance of Works and Contractor's Equipment	It is requested to consider insurance validity period up to completion period.	No change. Shall be as per tender conditions.
68	Volume IV Pg 19	List Of Approved Makes : Civil Works	We request you to provide the details of approved vendor for glass Reinforced Concrete (G.R.C) Screens	Base rate of GRC screen shall be Rs. 380 per sqft (Excluding GST) FOR site.
69	Volume IV AC- Page -96	LIST OF APPROVED MAKES AND MANUFACTURERS - HVAC Subcontractors	It is requested that following vendors may please be included in the list: Kindly confirm. 1. Dewpoint 2. Savlon Aircon Pvt Ltd. 3. Nikhil Comforts 4. Weatherspell Aircon Engineers Pvt Ltd We hereby assure to provide the requisite credentials of the above said vendors as and when required.	No change. Shall be as per tender Conditions.
70	Volume VI Drawings	-	The drawings provided are in PDF format. It is requested to provide AutoCAD drawings.	Soft copy of drawings in pdf format is already available as Tender Drawings (Volume VI)
71	Volume V BOQ	-	As the costs of tiles, flooring stones and cladding stone vary over a wider range, it is requested that the basic rates be given and price variation be paid based on difference between actual purchase price & basic rates. Kindly confirm.	Work is to be carried out as per CPWD specifications and tender conditions.

72	Volume I NIT	Last date to fill/upload the tender through e-Tendering is 14.11.2017 upto 15:00 hrs.	The tender involves extensive working for specialized items like Electrical, HVAC, Fire fighting, Plumbing, PHE etc. We request you to kindly extend the date of submission by four weeks after the date of receipt of clarifications. It is also requested that we may kindly be allowed to submit additional queries in another week's time.	The last date of submission of bids is extended upto 24th November, 2017. Please refer to Amendment No.2
Bidder No. 3				
CIVIL				
73	General	Tender Submission Date:	Please extend the submission date of tender at least 21 working days of current submission date	The last date of submission of bids is extended upto 24th November, 2017. Please refer to Amendment No.2
74	General	Autocad Drawings	We request you to kindly provide us the Autocad drawings.	Soft copy of drawings in pdf format is already available as Tender Drawings (Volume VI)
75	General	BOQ	kindly provide us BOQ in excel format.	BOQ in PDF format has already provided as Volume V.
76	General	Area Statement	Kindly provide us the building wise and floor wise area statement.	Tender drawings are already available.
77	General	Mobilization Advance	We request you to consider 10% interest free mobilization advance against Bank Guarantee in two equal installments.	No change. Shall be as per tender Conditions.
78	General	Retention: Cash retention	We request to consider the retention money against Bank Guarantee to have smooth cash-flow at site.	No change. Shall be as per tender Conditions.
79	General	DSR Rates in tender	We presume that DSR rates are including GST. Kindly confirm the same.	No change. Shall be as per tender Conditions.
80	General	Flyash	Kindly provide us percentage of flyash can be used at concrete.	shall be as per CPWD specifications and Tender Conditions.
81	General	Excavation	Request you to provide designated disposal yard for all surplus & non serviceable material within near proximity.	Contractor has to make his own arrangement. Bidders are advised to inspect and examine the site and its surroundings and satisfy themselves before submitting their tender/bids.
82	General	Hardware fittings of approved make	Kindly provide us series/Model number as per make for lock & bolt as there is large variation in price.	Shall be as per tender Conditions.
83	General Basic cost	FLOORING :Basic Rate for Tiles,Kota,Granite,Marble	We request to provide basic rate for All types of Granite, vitrified Tiles ,ceramic tile, kota stones, marble , colour glazed tiles etc as per the BOQ flooring items as according to colour , texture & sizes which we presume are not finalised yet , we request you to provide us the base rate for each of the aforesaid items to bring all the bidders in the same platform.	Work is to be carried out as per CPWD specifications and tender conditions.
84	General Layout Drawing	Layout Drawing	We request you to provide the layout drawing of the entire project for better understanding the project in a better way & also enable us to understand where the site office,batching plant,stores,godowns to be set.	Master Plan is already a part of Tender Drawing.

85	General UPVC Windows & doors	UPVC Windows & doors	Request you to kindly provide the drawings since it is specialized work or request you to provide the sizes .	shall be as per CPWD specifications and Tender Conditions.
86	General Soil Investigation report	Soil Investigation report	We request you to provide the soil investigation report along with the bore log data for better understanding of soil characteristics.	1. The soil Investigation report shall be made available to the successful bidder/Contractor after award of work. However, Bidders are advised to inspect and examine the site and its surroundings and satisfy themselves before submitting their tender/bids. Please also refer to Clause 1.17 of Volume I,
87	BOQ Use of Cement	NOTE- (1) Cement content considered in this item is @ 330 kg/cum.Excess/ less cement used as per design mix is payable/ recoverable separately." (2) Fly ash conforming to grade I of IS 3812 (Part-1) only be used as part replacement of OPC as per IS : 456. Uniform blending with cement to be ensured in accordance with clauses 5.2 and 5.2.1 of IS:456 -2000 in the items of BMC and RMC.	We presume 330kg/cum is cementious content including flyash. Kindly confirm.	As per BOQ 330 kg/cum is cement content and not cementious content.
88	BOQ Item No:5.55 Automatic Sliding Door	Providing and fixing automatic sliding door operator of approved brand and manufacture for a door of clear passage width ranging from 2500-3000 mm consisting of 6.25 mtr long operator with track profiles, glass clamping rails, floor guide, Radar eagle 6 sensors, 5 programme switch with knob, light barrier EM lock and cable for programme switch all complete of approved brand and quality, complete to the satisfaction of engineer in charge. nothing extra is payable if some civil work is required for fixing of the system.(Cost of door/ glass to be paid seperately)	The Price of Doors varies according to the width. Hence , please provide us the exact size of the door to arrive at exact costing.	Work is to be carried out as per tender conditions.
89	BOQ Toilet Cubical	Providing & fixing Classique Invincible Toilet Cubicle of approved make of sizes as per drawing which includes 600 mm door size width made of heat, bacteria, water, chemical ,scratch, impact and anti bacterial resistant 12 mm thick solid compact laminate panels (tested by Shriram Test House or equivalent approved laboratory). Finish of the compact laminate should be Suede/*Raw Silk or as approved by the engineer in charge, which includes door, pilasters & intermediate panels finished with approved texture/shade as per the details drawings & as per IS 2046 (Indian Standard) and as per fire retardant BS-476/97 Standard.	Kindly provide the drawings for toilet cubicles.	Work is to be carried out as per tender conditions.
90	BOQ Polycarbonate Sheet	Providing and fixing 10mm thick clear multi wall solar control polycarbonate sheets of approved quality and shade in desired shape in roofing including the cost of EPDM gaskets , sealing tape , aluminium profile and all necessary accessories complete as per architectural drawings and as directed by Engineer incharge. The item includes designing the complete system and supplying & getting approved from client and / or reputed engineering institue like IIT etc. The detailed shop drawings including supplying structural design calculations based on relevent codal provisions and carrying out water penetration test as per standards followed in India.	We request you to provide the drawing for the same to asses the radius of curvature which will help us to arrive at exact costing.	Work is to be carried out as per tender conditions.

91	FLOORING- BOQ 7.01 FLOORING	Cement concrete flooring 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate) finished with a floating coat of neat cement, including cement slurry, but excluding the cost of nosing of steps etc. complete.	Kindly specify whether groove cutting and sealant filling is required or not.	Work is to be carried out as per CPWD specifications and tender conditions.
92	Technical specification- Approved Make list Ordinary Portland Cement 43 Grade	ACC, Ultratech, Vikram, Shree Cement, Ambuja, Jaypee Cement, Century Cement & J.K.Cement	Kindly add "Penna, Ramco," cement also in the list	No change. Shall be as per tender Conditions.
93	Technical specification- Approved Make list Reinforcement Steel	SAIL, RINL, TISCO	Kindly add "JSW, also in the list	No change. Shall be as per tender Conditions.
94	Technical specification- Approved Make list Structural Steel Sections:Beams, Channels, Tees, Flats, Angles Bars (Round, Square, Hexagonal)	TATA, SAIL, RINL	Kindly add VSP	No change. Shall be as per tender Conditions.
95	Technical specification- Approved Make list Ceramic Tiles /Glazed Tiles	Kajaria, Somany, Naveen	Kindly add RAK	No change. Shall be as per tender Conditions.
96	Technical specification- Approved Make list RMC	ACC, Ultratech, L&T, Lafarge	Kindly add IJM,ACC	No change. Shall be as per tender Conditions.
97	Technical specification- Approved Make list Shuttering Ply	Greenply, Kitply, Merino, Duro, Century	Kindly add Punjab Ply Industries, Black Cobra brand	No change. Shall be as per tender Conditions.
98	Technical specification- Approved Make list Flush door shutters	Greenply, Duro, Kitply, Century	Kindly add "Black Cobra / Kitply "	No change. Shall be as per tender Conditions.
99	Technical specification- Approved Make list Laminate	Greenlam, Merino, Formica, Kitply, Century	Kindly add Associate, virgo	No change. Shall be as per tender Conditions.
100	Technical specification- Approved Make list Float Glass	Saint Gobain, Asahi, Pilkington, Glaverbel, Modi Guard	Kindly add Hindustan National Glass (HNG)	No change. Shall be as per tender Conditions.
101	Technical specification- Approved Make list Metal ceiling/Grid Ceiling	Armstrong, Durlum, Saint Gobain	Kindly add New Age	No change. Shall be as per tender Conditions.
102	Technical specification- Approved Make list Aluminium	Hindalco, Jindal, Indal	Kindly add Bhuruka	No change. Shall be as per tender Conditions.
103	Technical specification- Approved Make list Epoxy flooring	Fosroc, BASF, STP, Sika, Dr Beck	Kindly add Cipy polyurethane	No change. Shall be as per tender Conditions.
104	Technical specification- Approved Make list PU Paint	Fosroc, Pidilite, Cico, BASF, Sika, Berger, Nerolac	Kindly add Asian paints	No change. Shall be as per tender Conditions.
105	Technical specification- Approved Make list Diesel generator		Kindly add "Powerica LTD as supplier"	No change. Shall be as per tender Conditions.
106	Technical specification- Approved Make list Bus ducts / Raising mains	L & T , ABB , Siemens, Schnedier, GE, Legrand	Kindly add "c & s"	No change. Shall be as per tender Conditions.
107	Technical specification- Approved Make list 11KV VCB panel Board / RMU	Siemens, L & T , ABB , Schneider	Kindly consider "Local Panel Builders"	No change. Shall be as per tender Conditions.
108	Technical specification- Approved Make list Transformer	ABB, GE, Schneider, Alstom	Kindly add "Kirloskar"	No change. Shall be as per tender Conditions.
109	Technical specification- Approved Make list Main LT Panel / APFC Panels / Main AC panels	Siemens, L & T , ABB , Schneider	Kindly consider "Local Panel Builders"	No change. Shall be as per tender Conditions.
110	Technical specification- Approved Make list PVC conduit	Supreme, Prince, Finolex, AKG	Kindly add " Nelco, VIP "	No change. Shall be as per tender Conditions.
111	Technical specification- Approved Make list Fire detection System - Adresseable	Honeywell-Notifier, Edward, Bosch, Siemens	Kindly add " Ravel, Secutron "	No change. Shall be as per tender Conditions.
112	Technical specification- Approved Make list GI / MS pipes Heavy class	Jindal-Hissar, Tata, Surya-Prakash	Kindly add " Jindal-Star "	No change. Shall be as per tender Conditions.

113	Technical specification- Approved Make list HVAC Sub-contractors	Voltas, Bluestar, Suididha, Unique Engineers, ETA, Sterling & Wilson	Kindly add " M/s VKBS "	No change. Shall be as per tender Conditions.
114	Technical specification- Approved Make list Power Cables / Control cables	Honeywell-Notifier, Edward, Bosch, Siemens	Kindly consider as per Electrical approved make list"	No change. Shall be as per tender Conditions.
115	Technical specification- Approved Make list Butterfly valve	Audco, L & T, Honeywell	Kindly add " Zoloto "	No change. Shall be as per tender Conditions.
116	SPECIFIC CONDITIONS OF CONTRACT (SCC) CL No:31.4 (Pg. No 26) Delay in starting the work	No compensation shall be allowed for any delay caused in the starting of the work on account of acquisition of land, encroachment or in the case of clearance of works, on account of any delay in according sanction to estimates in issue of drawings, decisions etc. However, the extension of time shall be granted as per relevant conditions of Contract.	1.We presume that all clearance that will be required to commence the work has already been taken by the client.Please confirm. 2.We request you to kindly provide us the encroachment free working site prior to start up the work. We also request you to pay idle charge if any delay occurs on account of handing over of site or issuance of drawing as per actual.	No change. Shall be as per tender Conditions.
117	SPECIFIC CONDITIONS OF CONTRACT (SCC) CL No:31.8 (Pg. No 27) Cutting of Trees	Permission of cutting of trees if required will be obtained by Contractor.	Cutting of trees is related to the environment issues and hence any permission fo the same may please be taken by HSCC. Please confirm.	No change. Shall be as per tender Conditions.
118	SPECIFIC CONDITIONS OF CONTRACT (SCC) CL No:31.10iv (Pg. No 28) Water & Power	The temporary connection for electric line and water line from local authorities shall be taken by the contractor who will bear the expenditures	1. We presume bore wells are allowed within the site premises without any extra charge. Please confirm. 2. We request you to provide Power for construction & area lighting at a single point at free of cost. Further distribution shall be borne by us.	No change. Shall be as per tender Conditions.
119	SPECIFIC CONDITIONS OF CONTRACT (SCC) CL No:32.3 (Pg. No:31) Contractor's Temporary Structures	The Contractor shall make his own arrangement at his own expense for labour camp / accommodation of his labour and staff and their conveyance to Site as no workers/ staff shall unless with the specific approval of the Engineer be allowed to stay within the Site. Gate passes shall be issued by the Engineer to authorize the Contractor's staff and workers to enter the Site.	We request you to provide us the land for labour hutment within the site premises at free of cost.	No change. Shall be as per tender Conditions. Bidders are advised to inspect and examine the site and its surroundings and satisfy themselves before submitting their tender/bids. Please also refer to CLause 1.17 of Volume I,
120	SPECIFIC CONDITIONS OF CONTRACT (SCC) CL No:32.6 (Pg. No:31) Site office and Infrastructure	A reasonably furnished site office and transit accommodation having a sample room, A.C. meeting room, A.C. staff rooms with file storage facility along with computers & printers and its consumables, a telephone with STD facility, Fax Machine, internet and toilets & pantry and a vehicle (Swift Dzire or equivalent) complete with driver, fuel and consumables shall be provided for Executing agency/HSCC by the Contractor at his own cost for the duration of the Contract.	We request you to provide us the detailed lay out of the site office along with the details (quantification)of the facilities to be provided by Contractor.	Area of site office shall be approx 300sqm. All other details shall be as per tender conditions.
121	NOTICE INVITING BIDS (Pg. No9 Cl No:1.3) Completion period of work (months)	18 Calendar Months for all buildings of the Academic Campus, including completion of all services (within the scope of this tender) required for making these buildings operational 22 Calendar Months for all other buildings and works	Considering the scope of work and its integrity and complexity , the stipulated duration of the project is very Stringent and is practically not feasible. Hence request you to amend the project duration to 24 Months.	Shall be as per tender Conditions.
122	SPECIFIC CONDITIONS OF CONTRACT (SCC) CL No:20 (Pg. No:17) Variations	The contractor shall make no such variations without an order in writing by the Executing Agency, provided that no order in writing shall be required for increase up to 30% or decrease in the quantity of any work where such increase or decrease is not the result of an order given under this Clause, but is the result of the quantities exceeding or being less than those stated in the schedule of items.	1.We presume that the "deviation limit", as provided in "Schedule-F" shall mean "Positive or Negative" variation limit.Please confirm. 2.We request you to keep the variation limit within(+/-) 10% instead of (+/-) 30%.	Shall be as per tender Conditions.

123	Schedule F (Pg. No 109) CL No 2(ix) Mile Stone		Completion of project shall be as per schedule time, however milestone shall be only for monitoring purpose, Request you to waive off Amount to be with- held in case of non - achievement of milestone.	Shall be as per tender Conditions.
124	GCC Cl No:2(Pg. No 14) COMPENSATION FOR DELAY	Compensation for delay of work @ 1.5 % of tendered value per month of delay to be computed on per day basis Provided always that the total amount of compensation for delay to be paid under this Condition shall not exceed 10% of the Tendered Value of work or of the Tendered Value of the item or group of items of work for which a separate period of completion is originally given.	We request you to amend the LD Clause as 0.5% of balance job value per month & the total LD to be restricted 5% of the balance job value.	No change. Shall be as per tender Conditions.
125	GCC Cl No:7(Pg. No 14) Schedule F Pg. no 110 PAYMENT ON INTERMEDIATE CERTIFICATE TO BE REGARDED AS ADVANCES	1.In case of delay in payment of intermediate bills after 45 days of submission of bill by the contractor provided the bill submitted by the contractor found to be in order, a simple interest @ 7.5% per annum shall be paid to the contractor from the date of expiry of prescribed time limit which will be compounded on yearly basis. 2.10 crore	1. Considering the importance of the fast track project , cash flow will play an important role for successful completion of the project within the time schedule. Hence request you to consider the following PAYMENT TERMS to ease the cash flow. . a. 75% of the Invoice Amount to be release within 7 days of submission of the amount. b. Balance 25% to be released after 21 days of submission of the Bill. 2. We also request you to kindly waive of the minimum amount of submission for first two RA Bills & last two RA bills, to ease of cash flow of the project.	No change. Shall be as per tender Conditions.
126	SECTION-III NIT & IFB CL NO 4iii SCOPE OF WORK	Getting all approvals / permissions / planning permits of the statutory / local / governmental agencies as required incidental to construction/ completion.	The Contractor shall be responsible for permission related to the work under scope of this contract , such as Labour License , etc. However , all approvals related to operational activities along with sanction of project from Govt. Bodies shall be in the scope of the Owner / HSCC. Please confirm.	No change. Shall be as per tender Conditions.
127	General Electrical	Electrical	Kindly request you to provide • Main schematic diagram required • External Lighting and routing drawing required • Electrical setting out plan required	Shall be provided to successful bidder after award of work.
128	General HVAC	HVAC	Kindly request you to provide • Plant room drawing required • Chilled water line raiser drawing required • HVAC setting out plan required • Section detail drawing for all equipment's, chilled water lines and ducts required.	Preparation of shop drawing are in the scope of bidders.
129	General Fire Fighting	Fire Fighting	Kindly request you to provide • Fire fighting setting out plan required • Pump room detail drawing required	Preparation of shop drawing are in the scope of bidders.
130	Drawings HVAC	HVAC Schmatic & Layout drawings are not available in tender documents	We request you to kindly provide HVAC Schmatic & Layout drawings for our reference and better understanding of the system.	Shall be provided to successful bidder after award of work.
131	Electrical SLD HVAC	Electrical SLD for HVAC package is not available in tender	Kindly provide Electrical SLD for HVAC package for our reference and better understanding of the system.	Shall be provided to successful bidder after award of work.

132	HVAC BOQ - 2.1, 2.2, 2.3 & 2.4 HVAC	Supply, installation, testing and commissioning of split casing/vertical inline type centrifugal chilled water	We assume that split casing centrifugal pump in this line item means end suction back pull out pumps	<p>Clarification/Amendment:- Condenser water pump: End suction back pull out.</p> <p>Primary chilled water pump: End Suction back pull out.</p> <p>Secondary chilled water pump: Inline pump.</p> <p>Tertiary chilled water pump: Inline pump .</p>
133	HVAC BOQ - 2.2 HVAC	Separate control panel with separate VFD for each set of pumps	We assume that set of pumps refers to pumps for each zone i.e. Combined control panel for all secondary pumps of a single zone is acceptable	Shall be as per tender Conditions. Each set of pumps of secondary pumps of different zones will have separate control panel.
134	HVAC BOQ - 2.3 HVAC	Separate control panel with separate VFD for each set of pumps	We assume that set of pumps refers to pumps for each zone i.e. Combined control panel for all tertiary pumps of a single zone is acceptable	Shall be as per tender Conditions. Each set of pumps of secondary pumps of different zones will have separate control panel.
135	HVAC BOQ - 2.4 HVAC	Condenser pump with cladded insulation	Insulation and cladding is not required for condenser water pumps	Not required.
136	HVAC BOQ - 3 HVAC	Induced Draft Cooling Tower	Please specify whether counterflow or crossflow cooling towers are to be considered	No change. Shall be as per tender Conditions.
137	HVAC BOQ - 5.2 HVAC	Supply, installation, testing and commissioning of sheet metal sectionalised construction draw thru type in double skin construction. Each Air Handling Units shall be with pre filter section with prefilters, mixing chamber, minimum 2 bend PVC eliminators, chilled water cooling coil, hot water coil (AHRI/ Eurovent) certified of copper tube & Al fins construction, squirrel cage induction motor with VFD starters(IP-54) mounted on AHU for supply and return air fans, motor efficiency class IE-3	We assume that OT AHUs are 2 tier AHUs with forced exhaust system & without heat recovery wheel. Please provide return air CFM for these units	Supply and return fan of same capacity with VFD starter.
138	HVAC BOQ - 5.6 HVAC	TFA - Unit mounted Electrical Control Panel in IP 55, weather proof design with incomer disconnect switch/MCCB, VFD for supply air fan, exhaust air fan & wheel motor and complete in all respects including safeties, interlocks, metering & indication, fully BMS compatible and as approved.	We request you to please accept separate electrical panel for these TFA units, instead of unit mounted panels	Acceptable.
139	HVAC - BOQ	Cooling Tower/ Secondary & Tertiary Pumps / AHU - Shall be with IP 55 panel with VFD	We assume that since panels shall be with IP 55 rating, VFDs with IP 20 protection class will be acceptable, as the VFD shall be installed within IP55 panel	Cooling tower and pump VFD shall be IP-55. AHU VFD IP-54.
140	HVAC BOQ - 15.1, 15.4, 17.1, 17.4 HVAC	Butterfly valves with SS Disc	As per industry standard, we request you to please accept butterfly valves & NRV with CI body & SG Iron disc / CI disc	No change. Shall be as per tender Conditions.
141	HVAC BOQ - 17.3 HVAC	Balancing Valve with built in measuring facility	We assume this refers to manual Balancing Valve.	Manual balancing valve.
142	HVAC BOQ - 20 HVAC	Fire Dampers to be UL listed, Where as the same has been specified in tender to be approved by CBRI roorkee, as per UL555	We assume that fire dampers with CBRI certification as per UL555 shall be acceptable.	Acceptable.
143	HVAC - Tender - 2.4 HVAC	Panel thickness shall be 25mm for indoor AHU & 40mm for outdoor AHU	Since AHU location (Indoor / Outdoor) is not specified in BOQ, request you to confirm the same.	No change. Shall be as per tender Conditions.

144	HVAC - Tender - 2.4 HVAC	AHU outer skin shall be precoated 0.8mm thick CRC sheet, chemically treated having scratch free pre plasticized coating and 0.8mm GI inner Skin	As per industry standard we request you to please accept precoated 0.8mm GI outerskin & 0.8mm plan GI inner skin	No change. Shall be as per tender Conditions.
145	HVAC - Tender - 2.4 HVAC	Drain pan shall be constructed out of 1.25mm thick SS304 sheet insulated with 15mm thick PUF	As per industry standard we request you to please accept 20G SS304 drain pan with 13mm thick Nitrile Rubber Insulation	No change. Shall be as per tender Conditions.
146	HVAC - Tender - 11 HVAC	Expansion tanks - 5000 ltrs and 3000ltrs capacity	Please specify as to what capacity is to be considered for expansion tank and for hot water tank respectively	No change. Shall be as per tender Conditions.
147	HVAC - Tender - 2.7 AHU - Fresh air controls - Page 27 of 96 HVAC	AHU - An adjustable motorized damper of aluminium sheet along with birdscreen air inlet louver shall be provided for fresh air entry	In BOQ same has been specified with manual volume control damper (item 22.4). Please confirm whether motorized damper or manual volume control damper is to be considered	No change. Shall be as per tender Conditions.
148	HVAC - Tender - 3.3 Accessories - Page 29 of 96 HVAC	AHU - Balancing valve at coil outlet	Since PICV has been considered as per BOQ for AHUs, same is not required. Please confirm	Shall be as per BOQ. Balancing valves are priced separately.
149	HVAC - Tender - 3 - Page 28 of 96 HVAC	Panel thickness for CSUs has not been specified	Kindly confirm if CSU panel thick also to be taken as 25mm with 0.8mm GI precoated outer skin & 0.8mm GI inner skin (same as AHU)	Same as AHU.
150	HVAC - Tender Specification - 3 CSU - Page 29 of 96 HVAC	CSU - Each unitary unit shall be provided with a heating / Cooling snap acting thermostat and a 3 way solenoid valve	As per BOQ CSU is specified with PICV, where as tender specification 3 way valve has been mention. Seeing as that this system is with variable pumping system we have considered PICV. Please confirm	Shall be as per BOQ.
151	HVAC - Tender Specification - PAC 1.4 - Page 37 of 96 HVAC	Fans shall be DIDW forward curved	As per manufacturer standard the same shall be plug type with ECM	Shall be as per BOQ.
152	HVAC - Tender Specification - FCU 2.4 - Page 43 of 96 HVAC	Drain pan shall be constructed out of 1mm thick SS sheet insulated with 25mm thick EPS	As per industry standard we request you to please accepst FCU drain pan with 13mm PUF	PUF is acceptable but with same thickness.
153	HVAC - Tender Specification - Kitchen Scrubber 2.1 - Page 63 of 96 HVAC	As per tender specification the kitchen scrubber shall be 16G GI sheet metal fan section, mixing box and SS304 made spray	BOQ calls for double skin construction for scrubber. Please confirm the body construction of scrubber.	Shall be as per BOQ.
154	Tender Specification - Axial flow fan 3.f - Page 58 of 96 HVAC	Axial & Centrifugal ventilation Fans - The speed of fan shall not exceed 960 RPM with impellar dia above 1000mm & 1440RPM for impeller dia less than 1000mm	We request you to please accept fan speed up to 1440RPM for all fan sizes	No change. Shall be as per tender Conditions.
155	Tender Specification - AHU 2.1 - Page 25 of 96 HVAC	AHU Fan section - Fan shall be selected for speed not exceeding 1000 RPM for fan dia more that 350mm		No change. Shall be as per tender Conditions.
156	Tender Specification - Duct Works 2.2 - Page 68 of 96 HVAC	Ducting construction has been specified with MS Flanges	We request you to please accept ducting with TDF flanges (as per SMACNA standards)	Shall be as per BOQ. TDF as per SMACNA is acceptable.
157	List of Approved Makes HVAC	Centrifugal Chiller Make	We request you to please accept "Voltas - Dunhambush" make centrifugal chiller Few of our installation of DB Centrifugal chiller with VFD in Public sector application are as follows. 1.Lucknow Highourt 2. RBI Mysore 3. Bangalore International Airport 4. District Court, Delhi 5. Kolkara Airport 6. IIT Rpar	No change. Shall be as per tender Conditions.
158	List of Approved Makes HVAC	VAV make of Trane / Trox / JCI / Caryaire / Belimo	Please approve Dynacraft make VAV with belimo actuators, since Belimo doesn't manufacture VAV	No change. Shall be as per tender Conditions.
159	List of Approved Makes HVAC	Main LT Panel : L&T / SIEMENS / ABB / SCHNEIDER	We request you to approve CPRI approved vendor for electrical panel supply, for ease of coordination and faster deliveries	No change. Shall be as per tender Conditions.

160	List of Approved Makes HVAC	AHU Panel : Tricolite / Adlec / C&S / Jackson / Milestone		No change. Shall be as per tender Conditions.
161	List of Approved Makes HVAC	Heat Recovery unit with Wheel : Flaktwood / Novelaire / DRI / Greenheck / Bryair	We request you to please accept the same with Heat Recovery units of approved AHU vendor with HRW of Flaktwood / Novelaire / DRI / Greenheck / Bryair as specified in list of makes	No change. Shall be as per tender Conditions.
162	List of Approved Makes HVAC	Butterfly Valves : AUDCO / L&T / Honeywell	We request you to please accept Advance make butterfly valves	No change. Shall be as per tender Conditions.
163	List of Approved Makes HVAC	Ducting : Ductofab / Rolastar / Technofab	We request you to please accept VJ AIR PRODUCTS / DLN ENGINEERING / VISAKHA DUCT PROFILES for ducting makes, for better coordination and faster delivery of ducting. TATA / SAIL / JINDAL make GI sheet will only be used as per list of makes	No change. Shall be as per tender Conditions.
164	List of Approved Makes HVAC	Cables : CCI / Universal / Finolex / Rallison	We request you to please accept KEC / KEI / POLYCAB makes also for cabling	No change. Shall be as per tender Conditions.
165	List of Approved Makes HVAC	Cable Trays : OBO / LEGRAND / COOPER / BEC	We request you to please accept PROFAB / PUSHPAK / PATNY makes also for cable trays	No change. Shall be as per tender Conditions.

Bidder No. 4

CIVIL				
166	EMD		Please provide beneficiary account details for preparation of Bank Guarantee towards Earnest Money Deposit.	The bank guarantee shall be in favour of HSCC (India) Limited The Bank details are as given below: 1. Punjab National Bank, Sector 27, Noida 2. IFSC Code : PUNB0272600 3. Account No.: 2726001800000011
167	BOQ		Please provide BOQ in MS Excel format for our internal working.	BOQ in PDF format has already been provided as Volume V.
168	Soil Investigation Report		Please provide soil investigation report.	The soil Investigation report shall be made available to the successful bidder/Contractor after award of work. However, Bidders are advised to inspect and examine the site and its surroundings and satisfy themselves before submitting their tender/bids. Please also refer to CLause 1.17 of Volume I
169	BOQ Item No. 16 & 17 (Wooden & Metal Fire Check Doors)		We propose to add "Sukriti" as approved make for wooden & metal fire check doors.	No change. Shall be as per tender Conditions.
170	Fire Rated Glass		We propose to add "Pyroguard" as approved make for Fire rated glass.	No change. Shall be as per tender Conditions.
171	Fire Rated Hardware		We propose to add "Marshall" as approved make for Fire rated Hardwares.	No change. Shall be as per tender Conditions.

172	GST		We understand Applicable GST percentage on these project is 12%. Please confirm?	Shall be as per applicable Laws & Tender Conditions.
173	Bid Submission Date		Please extend Bid submission date by 2 weeks.	The last date of submission of bids is extended upto 24th November, 2017. Please refer to Amendment No.2
HVAC				
174	Bill of Quantities of HVAC works for “ Hospital and Academic Campus “ ‘A’ – Equipments 1.0 Water chilling units Maximum head loss 5 mt. water head for evaporator	HVAC Sub-Head ‘A’ – Equipments 1.0 Water chilling units	The approved pressure drop requirements for centrifugal chilling units for both evaporator and condenser as per 2017 CPWD general specifications for heating, Ventilation and air-conditioning (HVAC) works 2017 is 10 mts. (Reference - Page no. 36 , Head – 2.1.2 Design Parameters , Sub Head 2,1.2.1 Chilling Unit). Accordingly, we would request you to kindly accept pressure drop upto 8 mt. as the allowable limit for evaporator also.	Evaporator side 8 m pressure drop is acceptable.
175	Bill of Quantities of HVAC works for “ Hospital and Academic Campus “ ‘A’ – Equipments 1.0 Water chilling units COP minimum of 6.5	HVAC Sub-Head ‘A’ – Equipments 1.0 Water chilling units	As per LATEST ECBC Norms, for ECBC plus building , either COP or IPLV should be complied . Min COP or IPLV asked in ECBC 2017 for EBC plus building are 6.5 & 8.9 respectively. Please note that Since our chillers will be with VFD, and hence IPLV of offered chiller shall be > 9.25. Hence all our chillers which have 6.3 COP at full load with VFD not only qualify for ECBC plus building but also for super ECBC Buildings. Hence request you to accept 6.3 COP in place of mentioned 6.5 COP.	No change. Shall be as per tender Conditions.
176	Bill of Quantities of HVAC works for “ Hospital and Academic Campus “ ‘A’ – Equipments 1.0 Water chilling units BOQ IKW/ TR < 0.64 (including all losses)	HVAC Sub-Head ‘A’ – Equipments 1.0 Water chilling units	IKW/ TR < 0.65 KW/ TR (including all losses) - Since the condenser water temperature is 88 F, chiller will deliver 1000 tr at 0.65 KW/ TR at site conditions. Please note that Chiller works only 1% at full load, hence request you to accept 0.65 kW/TR.	No change. Shall be as per tender Conditions.
177	Bill of Quantities of HVAC works for “ Hospital and Academic Campus “ ‘A’ – Equipments 1.0 Water chilling units NPLV less than 0.37	HVAC Sub-Head ‘A’ – Equipments 1.0 Water chilling units	Since the condenser water temperature is 88 F, NPLV should be < 0.38.	NPLV < 0.38 acceptable.
178	Bill of Quantities of HVAC works for “ Hospital and Academic Campus “ ‘A’ – Equipments 1.0 Water chilling units Chiller Performance sheet	HVAC Sub-Head ‘A’ – Equipments 1.0 Water chilling units	The AHRI Certified performance sheet shall include losses of Active harmonic filters.	No change. Shall be as per tender Conditions.
179	HVAC Specification AC Page No.58 Clause 3.0, Point a. Impeller shall be of die cast aluminum alloy with integrally cast aerofoil sectioned blades and hub.	Axial Flow Fan	Blades shall be Cast /fabricated aluminum aerofoil shaped	No change. Shall be as per tender Conditions.

180	HVAC Specification AC Page No.58 Clause 3.0, Point e. and HVAC Specification Page No.60 Clause 6.0 Fan motor shall be selected in such a way that sound level is lowest (max. 75 db at 3 m distance) while running.	Axial Flow Fan	We request you to clarify whether the noise level will be measured in room condition (Hemispherical reverberant room condition) or in free field condition (Spherical).	Shall be as per BOQ.
181	HVAC Specification AC Page No.58 Clause 3.0, Point e. Motor shall be capable of running continuously with 5% drop in rated phase voltage at 15% increase in design power.	Axial Flow Fan	± 5% Voltage fluctuation	No change. Shall be as per tender Conditions.
182	HVAC Specification AC Page No.58 Clause 3.0, Point f. The speed if the fans shall not exceed 960rpm for fans with impeller dia above 1000mm and 1440rpm for fans with impeller dia 1000mm and less.	Axial Flow Fan	Fan Capacity (CFM)/ Static Pressure/ noise level/Efficiency/running Kw are most important parametrs for fans selection and same shall be adhered to while selecting a fan. We request you to limit the maximum RPM of fan to 2900 RPM.	No change. Shall be as per tender Conditions.
183	HVAC Specification AC Page No.58 Clause 3.0, Point g. Fans and accessories shall be painted with two coats of redoxide primer zinc chrome primer confirming to IS: 2074 or superior, over which two cots of synthetic enamel of approved shade shall be applied.	Axial Flow Fan	We request you to add that the casing can also be made from galvanized steel with a coating of Zinc with 275GSM thickness.	Acceptable .
184	HVAC Specification AC Page No.60 Clause 6.0, Point a. The fire rated smoke exhaust fans generally shall be described above suitable for 250°C for minimum 2hrs	Axial Flow Fan(Fire Rated ventilation fan)	We request you to change the same to "all high temperature fans to be used for fire application shall bear the certification/listing of UL/CE (in addition of being AMCA certified) conforming to UL-705 "Power Ventilator for smoke exhaust" or EN12101-3-2002 smoke and heat control system specification for powered smoke and heat exhaust ventilator."	No change. Shall be as per tender Conditions.
185	HVAC Specification AC Page No.61 Clause 6.0, Point d . The collar shall be long to cover fans and motor	Axial Flow Fan(Fire Rated ventilation fan)	As per AMCA, short casing/Long casing/ Medium Casing fans are not specified. Every manufacturer has different casing lengths where some motors may fit inside the fan casing and some motors may extend outside the casing. Kindly confirm either the minimum length of casing required or modify the same as "casing length shall be as per manufacturer."	No change. Shall be as per tender Conditions.
186	HVAC BOQ. Axail flow fans (AMCA Cetrified)	Axail flow fans (AMCA Cetrified)	We request you to mention fans shall be AMCA certified for Sound and Air Performance (AMCA 210 and AMCA 300)	No change. Shall be as per tender Conditions.

187	HVAC List of Make - Sr. no- 10 and 14 Air Handling Units (High Static) with cooling coils and Fan Coil Units. Carrier/Caryaire/Blue-star/ZECO/Systemair/Voltas/VTS/Flaktwood/ Waves/Edgtech	Air Handling Units (High Static) with cooling coils and Fan Coil Units	As Our AHU's and FCU's are already approved in HSCC-PMSSY Hospitals Projects. We request you to please approve Unique make AHU's and FCU's in Approved List of Make.	No change. Shall be as per tender Conditions.
Bidder No. 5				
188	Volume 6 - Tender Drawing	Master Layout for Site	Please provide the Master Layout showing current building scope for over all Planning, Site Set up & Scope understanding.	Already provided in Tender Drawing. Also refer to Amendment No.2
189	Volume 5 - Bill of Quantity		Please provide BOQ in "EXCEL" format for estimation purpose.	BOQ in PDF format has already provided as Volume V.
190	Site Set up		Please confirm whether batching plant, cement store & Site office can be set up inside plot premises.	No change. Shall be as per tender Conditions. Bidders are also advised to inspect and examine the site and its surroundings and satisfy themselves before submitting their tender/bids. Please also refer to Clause 1.17 of Volume I.
191	Site Set up		Please confirm whether labour hutment can be set up inside plot premises.	No change. Shall be as per tender Conditions. Bidders are also advised to inspect and examine the site and its surroundings and satisfy themselves before submitting their tender/bids. Please also refer to Clause 1.17 of Volume I.
192	BOQ Item No 3.11, 3.12 & 3.13	Expansion Joint Work	Please provide detail drawing, make & approved vendors for expansion joint work.	Work is to be carried out as per CPWD specifications and tender conditions.
193	BOQ Item No 7.03 & 7.04, 7.14, 7.15	Marble Flooring	Please provide basic rate of Marble stone.	Work is to be carried out as per CPWD specifications and tender conditions.
194	BOQ Item No 7.05, 7.17	Granite Flooring	Please provide basic rate of Granite stone.	Work is to be carried out as per CPWD specifications and tender conditions.
195	BOQ Item No 7.06 & 7.07	Kota Flooring	Please provide basic rate of Kota stone.	Work is to be carried out as per CPWD specifications and tender conditions.
196	BOQ Item No 7.08 & 7.09	Ceramic Tile Flooring & wall Dado	Please provide basic rate of Ceramic Tile.	Work is to be carried out as per CPWD specifications and tender conditions.

197	BOQ Item No 7.10 & 7.11	Vitrified Tile Flooring & Skirting	Please provide basic rate of Vitrified Tile.	Work is to be carried out as per CPWD specifications and tender conditions.
198	BOQ Item No 10.04 -	Stainless steel cramps for dry stone cladding	Please provide the Grade of Stainless Steel for Cramps of Stone Cladding	Work is to be carried out as per CPWD specifications and tender conditions.
199	SCC Cl. 32.6	Site Office & Infrastructure	Please provide area for client Site office & infrastructure	Area of site office shall be approx 300sqm. All other details shall be as per tender conditions.
200	Notice inviting Bids - Clause No. 1.3 - Table 1 & Notice Inviting tender Clause No. 1.5	18 Calendar Months for all buildings of the Academic Campus , including completion of all services (within the scope of this tender) 22 Calendar Months for all other buildings and works	Please specify the name of Buildings being bifurcated under academic campus .	The following buildings shall be part of the Academic Campus Medical College, Nursing College, Admin Block, Library Building
201	Volume 5 - Bill of Quantity	PDF File Provided for BOQ is not readable on Page no. 58, 59, 106	Please re-issue the BOQ PDF File/ Excel File.	Corrected BOQ has been uploaded Please refer Amendment No. 2
202	Tender Submission Date	14.11.2017 upto 15:00	We request to extend bid submission date by 2 weeks.	The last date of submission of bids is extended upto 24th November, 2017. Please refer to Amendment No.2
HVAC				
203	BOQ- 5.0-AIR HANDLING UNIT Item No 5.1	Item no 5.1.1 to 5.1.92 H-GF-02-24000 CFM /6 RD Cooling Coil /1 RD Heating Coil / 80mm Static(With Pre & Fine Filter)	1. Mentioned static pressure for AHU is ESP or TSP? Please confirm. 2. TR capacities of AHU's is to be provided.	1. Total static pressure. 2. Shall be as per tender.
204	BOQ-Item No 5.2 - OT AHU's	Item no 5.2.1 to 5.2.5 2600cfm with 6 row cooling coil / 1 row heating coil	1. TR capacities & static pressure for OT AHU's is to be provided.	Shall be as per tender. St 135 mm as per BOQ.
205	BOQ-Item No 5.3 - CEILING SUSPENDED AHU	Item no 5.3.1 to 5.3.6 CSU-GF-01-3000cfm /4RD Cooling Coil/ 40mm static	1. Mentioned static pressure for AHU is ESP or TSP? Please confirm. 2. TR capacities of AHU's is to be provided.	1. Total static pressure. 2. Shall be as per tender.
206	BOQ-Item No 5.4- FAN COIL UNITS	Item no 5.4.1 to 5.4.4 5.4.1) 1 TR 5.4.2) 1.5 TR 5.4.3) 2 TR 5.4.4) 2.5 TR	1. static pressure & Cfm capacities for FCU's is to be provided.	Low st pressure type.
207	BOQ-Item No 5.5- Precision Cooling Air Conditioner	Item no 5.5.1 to 5.5.2 5.5.1) Capacity :8.5 TR 5.5.2) Capacity :5.5 TR	1. static pressure & Cfm capacities for PAC is to be provided.	No change. Shall be as per tender Conditions.
208	BOQ-Item No 6- Ventilation Fans	Item no 6.1, 6.2,6.3 Air Quantity : 7500 Cfm Static Pressure:100mm wg	1.Mentioned static pressure for Fans is ESP or TSP? Please confirm. 2. Fans are AMCA certified Required / Not? Please confirm.	Total static pressure. AMCA certified.
209	BOQ-Item No 8- Ventilation Fans	8.1) Inline fans 8.2) Tube Axial Fans(AMCA Certified) 8.3) Tube Axial Fans(Fire Rated & AMCA Certified) 8.4) Centrifugal fans	1. All fans are AMCA certified required or not please confirm. 2. Mentioned static pressure is ESP or TSP Please confirm.	1. Shall be as per tender. 2. Total static pressure.
210	BOQ-Item No 8- Air Washer Unit	Item no 9.1 to 9.4 9.1) 37000 cfm with 50mm static pressure	1. Mentioned static pressure is ESP or TSP Please confirm.	Total static pressure.
211	BOQ-Item No 4- HOT WATER GENERATOR	Item no 4.1 For Monsoon Reheat hospital block zone1,zone2, zone3	Status shown is (2W+1S) but quantity mentioned is 4. please confirm?	quantity is 4.

212	BOQ-Item No 5- AIR HANDLING UNITS	Item no 5.1 a. Fan Section and canvas connection, Mixing Box, Thermal break profile. (double skin type)	Please confirm whether to consider mixing box in all AHU?	Yes. Shall be as per tender.
213	BOQ-Item No 12- Mansoon Reheating arrangement	Item No 12.1 Mansoon Reheating arrangement	please provide approved make	No change. Shall be as per tender Conditions.
214	BOQ-Item no 5.6- TFA with Heat Recovery wheel AHU	Supply Installation Testing & commissioning of double skin floor mounted type Sectionalized construction of draw through type with thermal break design air handling unit as per specification & complete with the following:	Please provide the Technical specification for the TFA with HRW Units	No change. Shall be as per tender Conditions.
215	BOQ	COP minimum of 6.5	As per LATEST ECBC Norms, for ECBC plus building , either COP or IPLV should be complied . Min COP or IPLV asked in ECBC 2017 for EBC plus building are 6.5 & 8.9 respectively. Please note that Since our chillers will be with VFD, and hence IPLV of offered chiller shall be > 9.25. Hence all our chillers which have 6.3 COP at full load with VFD not only qualify for ECBC plus building but also for super ECBC Buildings. Hence request you to accept 6.3 COP in place of mentioned 6.5 COP.	No change. Shall be as per tender Conditions.
216	BOQ	BOQ IKW/ TR < 0.64 (including all losses)	IKW/ TR < 0.65 KW/ TR (including all losses) - Since the condenser water temperature is 88 F, chiller will deliver 1000 tr at 0.65 KW/ TR at site conditions. Please note that Chiller works only 1% at full load, hence request you to accept 0.65 kW/TR.	No change. Shall be as per tender Conditions.
217	BOQ	NPLV less than 0.37	Since the condenser water temperature is 88 F, NPLV should be < 0.38. Please accept	NPLV < 0.38 acceptable.
218	BOQ	Pressure drop in evaporator shall be 5m	These chillers are Large tonnage chillers and pressure drop of 5 M specially on evaporator is not possible. Request you to kindly accept 8 M pressure drop in both evap & condenser.	Evaporator side 8 m pressure drop is acceptable.
219	BOQ	Chiller Performance sheet	The AHRI Certified performance sheet shall include losses of Active harmonic filters. Please confirm	No change. Shall be as per tender Conditions.
ELECTRICAL				
220	Vol 05, BOQ- BOQ Sr.No. 21.09, BOQ Sr. No 7.02	Supplying and fixing of following sizes of steel conduit along with accessories in surface/recess including painting in case of surface conduit or cutting the wall and making good the same in case of recessed conduit as required.	We understand that MS Medium conduit to be used wherever steel conduit is mentioned in tender. Please confirm.	Shall be as per IS/CPWD specifications.
221	Vol 04- Page no. 281 list of approved makes	CCTV camera - Honeywell/ Pelco /Bosch/Sony/Axis	Please confirm IP Video software also to be considered Honeywell/ Pelco /Bosch/Sony/Axis.	Yes.
222	Vol 04- Page no. 281 list of approved makes	Main LT Panel/ APFC panels /Main AC panel - Make (Siemens/ L&T/ABB/Schneider)	Please confirm that panels can be routed through authorised channel partner of Siemens/ L&T/ABB/Schneider	No change. Shall be as per tender conditions.
223	Page no. 281 list of approved makes	HT/LT- XLPE cables (Universal/Finolex/ Rallison or equivalent as approved by HSCC)	Please approve KEI and Polycab cables.	No change. Shall be as per tender conditions.
224	Vol 05, BOQ- BOQ sr. no.10	Light Fittings	Out of the Approved Makes Philips / GE/ Crompton Greaves, GE India business is shut down and therefore we request your approvals for Wipro/ Bajaj Make	No change. Shall be as per tender conditions.
225	Vol 05, BOQ- BOQ sr. no.1.2	TRANSFORMER	Out of the approved makes for transformer, ABB does not manufacture Oil Distribution transformer upto 2500KVA. Request you to Kindly approve VOLTAMP	No change. Shall be as per tender conditions.

PHE AND FIRE FIGHTING				
226	PHE BOQ - 1.29	Hand Drier	Please provide approved Make and model no	No change. Shall be as per tender conditions.
227	PHE BOQ - 18.62	PTMT ball cock	Please provide approved Make	No change. Shall be as per tender conditions.
228	PHE BOQ - 3.32, 3.33 and 3.34	Not readable	Please provide the description for items	<p>3.32-Providing and Fixing concealed Bath & Shower Mixer and diverter cutting and making good the wall complete as per instructions of the engineer-in-charge.</p> <p>3.33- Providing and Fixing Over head shower 100 mm dia having aerators/flow restrictor to achieve the desired flowrate with Shower Arm complete as per instructions of the engineer-in-charge (Flowrate : 8.4 LPM at 45 Psi pressure).</p> <p>3.34- Providing and Fixing CP Bath spout with wall flange having aerators/flow restrictor to achieve the desired flowrate complete as per instructions of the engineer-in-charge or as per equivalent make. (Flowrate : 8.4 LPM at 45 Psi pressure)</p>

229	General	STP	Please provide inlet and outlet water parameter	<p>A.Raw water effluent charecteristics- Flow Rate 1000cub.m/day,peak factor-3, Raw Effluent Charecteristics- BOD-300 mg/l,COD-600 mg/l,TSS-350 mg/l,N-Total-45 mg/l, PO4-50 mg/l. B.Treated Effluent Charecteristics- after STP before ultrafiltration unit/softner BOD-< 5mg/l. COD-< 50 mg/l. TSS-< 5mg/l. N-Total-<5 mg/l PO4-P<2 mg/l. C Treated water after ultrafiltration shall be fit for domestic use in flushing etc., as per norms.</p>
COMMERCIAL QUERIES				
230	GCC Clause No. 2 - compensation for Delay	the Maximum amount of Compensation for delay shall not exceed 10% of tender Value	We request you to limit the Delay damages up to 5% of contract value	No change. Shall be as per tender Conditions.
231	SCC - Cl. 4.1.1 - Approval Required		Please confirm that all the Pre and post construction clearance/statutory approvals from government authorities are in contractor scope.	No change. Shall be as per tender Conditions.
232	SCC - Cl. 4.1.1 - Approval Required		All Statutory fees for Pre & post construction approvals shall be reimbursed to the contractor at actual, Please confirm.	No change. Shall be as per tender Conditions.
233	Notice Inviting Bids Point 1.9	Bid shall be accompanied with Earnest money of Rs. 5.67 Crores in shape of demand draft of a scheduled bank issued in favour of "HSCC (India) Limited" Payable at New Delhi/Noida or fixed deposit receipt or Banker's cheque or bank Guarantee in favour of "HSCC (India) Limited" as per Form B, having validity for six months or more from the last date of receipt of tenders or any extension thereof.	We kindly request you to provide Client bank name, branch address and IFSC code for preparation of Earnest Money Deposit in form of BG as it is mandatory requirement from our bank and as per RBI guidelines.	<p>The bank guarantee shall be in favour of HSCC (India) Limited</p> <p>The Bank details are as given below: 1. Punjab National Bank, Sector 27, Noida 2. IFSC Code : PUNB0272600 3. Account No.: 272600180000011</p>

234	GCC Cl 1 A - Page.14 - Security Deposit	Security Deposit at the rate of 5% of the gross amount of each running and final bill till the sum deducted will amount to security deposit of 5% of the tendered value of the work.	We request to consider Bank Guarantee against Security deposit instead of cash retention.	No change. Shall be as per tender Conditions.
235	GCC Cl 10B - Page 32 - Mobilisation advance	The mobilization advance and plant and machinery advance bear simple interest at the rate of 10 per cent per annum and shall be calculated from the date of payment to the date of recovery, both days inclusive, on the outstanding amount of advance.	We request interest free mobilisation advance.	No change. Shall be as per tender Conditions.
236	GCC Cl 25 - Settlement of disputes and Arbitration	Disputes to be addressed to Appealing Authority and later to Dispute Redressal committee. If DRC fails to give decision dispute shall be referred to a sole Arbitrator appointed by Engineer In charge.	We request you that, arbitration shall be applicable in accordance with the Arbitration & Conciliation Act, 1996 and its amendments	Please refer to Amendment No.2 for revised Clause No. 25

Bidder No. 6

237	Clause 1.4.1	PPP/DBFOT/BOT/DBO projects : Now a days, our Govt. launching new projects mostly on PPP mode and therefore we request you to consider PPP projects in similar nature of work. Ref. To clause no.1.4.1 of NIT page no.1, Statutory Auditor's certificate shall be allowed for PPP projects executed by the bidder to justify the value of projects. This statutory auditors certificate shall be in line with MObel RFQ documents published by the Planning Commission of India. (Format of the same attached here2with for your ready reference).		No change. Shall be as per tender Conditions.
238		Further any one building project divided by the Government in two different phases (core and shell and finishing work) along with infrastructure work shall be considered as a single project subject to one consolidated (bifurcating two phases) completion certificate to be submitted by the bidder.		No change. Shall be as per tender Conditions.
239	Clause Vol.1 NIT Clause 1.6	Refer to Vol-1 NIT Clause 1.6. As per clause contractor shall get the structural drawings duly vetted from IIT and....		Refer to Amendment No. 2
240		Successful bidder cannot get vetting of all structural drawing since all Design Basis Report, Structural Framing Plan, Arch. Plan and sections are in scope of HSCC, the executing agency. Since the structural framing plan is in scope of executing agency, the vetting of structural drawing shall also be in scope of executing agency. Please confirm.		Refer to Amendment No. 2
241	Vol.II GCC Clause 10B(i) -	Secured Advance on nonperishable materials.		
242	Vol.II GCC Annexure 3 Schedule F	Clause of contract I not specifying the applicability of clause 10B (i) for secured advance. Please confirm that clause 10 B(i) is applicable		Shall be as per tender conditions.
243	Volume III SCC - Clause 4.1.1	Approvals required. Since the successful bidder are not the owner of the property, obtaining GRIHA 3 Star rating should not be in scope of contractor. Please confirm.		No change. Shall be as per tender conditions.
244		Please provide the section/elevation drawings for the Nursing College. Also please furnish the second floor plan for Dharamshala.		Tender drawing is available.
245		Please refer to elevation drawing for Library Building. The drawing shows Tower for which section drawing is required. Please furnish the same.		Refer tender drawings.
246		Please provide dimension to all drawings of Auditorium Building.		Refer tender- Architectural/Structural Drawings.

247		Please provide the road layout & section, hard landscape, soft landscape, external service layout plan for better understanding of the Project.		Refer tender drawings/BOQ.
248	BOQ	Please refer to BOQ item no. 3.11, 3.12, 3.13 - Please provide the approved make for expansion joint system.		No change. Shall be as per tender Conditions.
249	BOQ	Please refer to BOQ item no. 7.16 - Please provide the approved brand/manufacture for 8mm HDF laminated wooden flooring.		No change. Shall be as per tender Conditions.
250	BOQ	Please refer to BOQ item no.7.25 - Please provide the approved brand/manufacture for pure wool cut/loop pile carpet.		No change. Shall be as per tender Conditions.
251	BOQ	Please refer to BOQ item no. 7.27 - Please provide the approved brand/manufacture for sport flooring.		No change. Shall be as per tender Conditions.
252	BOQ	Please refer to BOQ item no.10.05 - Please provide the tender stage drawing for GRC screen to get the quote for the same from the manufacturer.		Base rate of GRC screen shall be Rs. 380 per sqft (Excluding GST) FOR site. Work is to be carried out as per tender conditions.
253	HVAC	As per given approved make list HVAC contractors make list is given for said HVAC work, whereas we have also executed and completed HVAC jobs by our in-house MEP team, request you to please approve the same or provide PQ criteria for HVAC works.		No change. Shall be as per tender Conditions.
254		Request you to please approve Daikin-MCQUAY and Kirloskar make for water cooled centrifugal chiller.		No change. Shall be as per tender Conditions.
255		Request you to please approve AIRFLOW make for Tube Axial and Centrifugal fans.		No change. Shall be as per tender Conditions.
256		Request you to please approve Zeco Make for GI factory fabricated ducting.		No change. Shall be as per tender Conditions.
257		Request you to please approve Advance make for Manual Butterfly valves.		No change. Shall be as per tender Conditions.
258		Request you to please approve Belimo and SIEMENS make for PIBC valves.		No change. Shall be as per tender Conditions.
259		Please provide layout and schematic drawings for HVAC plant room with equipments location (i.e., Chiller, pumps, cooling tower)		Shall be provided to successful bidder after award of work.
260	IBMS	There is no BOQ for IBMS system in tender. Kindly confirm scope of IBMS system. If there, then request you to please approve TRA and L&T make for IBMS system.		IBMS is not the part of this tender
261	Firefighting	Refer Volume III SCC Clause 7.1 Performance Guarantee. As the design, specification and drawing is in client scope of work, bidder is not responsible for any calculation and cannot provide alternative equipment. Please confirm.		No change. Shall be as per tender conditions.

262	Plumbing	Volume 5 BOQ Page 106 - Item no.3.32 to 3.34 is not readable.		<p>3.32-Providing and Fixing concealed Bath & Shower Mixer and diverter cutting and making good the wall complete as per instructions of the engineer-in-charge.</p> <p>3.33- Providing and Fixing Over head shower 100 mm dia having aerators/flow restrictor to achieve the desired flowrate with Shower Arm complete as per instructions of the engineer-in-charge (Flowrate : 8.4 LPM at 45 Psi pressure).</p> <p>3.34- Providing and Fixing CP Bath spout with wall flange having aerators/flow restrictor to achieve the desired flowrate complete as per instructions of the engineer-in-charge or as per equivalent make. (Flowrate : 8.4 LPM at 45 Psi pressure)</p>
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Additional Queries HVAC

263	Vol 5_Bill of Quantities of HVAC works for “ Hospital and Academic Campus “ 'A' – Equipments 1.0 Water chilling units	Water Cooled Centrifugal Chillers with VFDs including Active Harmonic Filters, Automatic Tube Cleaning System, ASME Stamping on both the shells, Foundation works and high COP of 6.6 @ AHRI, 0.64 IKW/TR @ tender conditions inclusive of all losses.	Unit Rate mentioned for water cooled centrifugal chillers presumably including VFDs including Active Harmonic Filters, Automatic Tube Cleaning System, ASME Stamping on both the shells, Foundation works and high COP of 6.6 @ AHRI, 0.64 IKW/TR @ tender conditions inclusive of all losses , site preliminaries, contractors OH & Profit margin seems to be very low (Rs.15,831/TR). Costing may please be reviewed and revised appropriately.	Shall be as per tender.

264	BOQ; Item No.1 Water Chiller Units, Sub Clause 1.1	Supply, Installation, Testing and Commissioning of water cooled centrifugal type Water chiller machines (ARI Certified) each having a capacity of 1000 TR (actual) at chilled water inlet/outlet temperature of 54°F /44°F with chilled water circulation rate of 2400 USGPM and condenser water inlet/outlet temperature of 88°F / 98°F with circulation rate of 3000 USGPM , suitable for operation on refrigerant R134a each comprising of the following complete as per specification and as required.	Kindly note Trane don't have suitable Centrifugal Chillers to offer with R-134a refrigerant. However, Trane can offer R-514A & R-1233zd (E) chillers with a Global Warming Potential of less 2 to offer for your prestigious project. Kindly note that R-514A & R-1233zd (E) are also included in National Building Code 2016 released on 15th March, 2016 and also approved by CPWD via office memorandum number. DG/AMENDMENT SPECIFICATIONS (E&M)/01 DATED 10.10.2017. These refrigerants are also approved in multiple government projects like, World Trade Centre (10,800 TR), Nauroji Nagar (NBCC), Delhi; ITPO, Pragati Maidan (9475 TR), Delhi; 2400 Seater Auditorium (1900 TR), Kolkata; Dwarka Convention Centre (14,000 TR). Delhi. Request you to kindly incorporate R-514A & R-1233zd (E) in your project.	Acceptable subject to its cost effective availability in india by the manufacturer at the time of submission of data sheet. AHRI selection sheet with the proposed refrigerant shall also be made available as per tender conditions.
265	CENTRAL AIR CONDITIONING PLANT 1.1 (Centrifugal Compressors); 1.1.1. Type	Centrifugal compressor shall be open/ semi-sealed/ totally sealed type. It shall be working on refrigerant 134a.	Kindly note Trane don't have suitable Centrifugal Chillers to offer with R-134a refrigerant. However, Trane can offer R-514A & R-1233zd (E) chillers with a Global Warming Potential of less 2 to offer for your prestigious project. Kindly note that R-514A & R-1233zd (E) are also included in National Building Code 2016 released on 15th March, 2016 and also approved by CPWD via office memorandum number. DG/AMENDMENT SPECIFICATIONS (E&M)/01 DATED 10.10.2017. These refrigerants are also approved in multiple government projects like, World Trade Centre (10,800 TR), Nauroji Nagar (NBCC), Delhi; ITPO, Pragati Maidan (9475 TR), Delhi; 2400 Seater Auditorium (1900 TR), Kolkata; Dwarka Convention Centre (14,000 TR). Delhi. Request you to kindly incorporate R-514A & R-1233zd (E) in your project.	Acceptable subject to its cost effective availability in india by the manufacturer at the time of submission of data sheet. AHRI selection sheet with the proposed refrigerant shall also be made available as per tender conditions.
266	CENTRAL AIR CONDITIONING PLANT 1.1.10 Drive Motor	Synchronous speed of the motor shall not exceed 3000 RPM.	Request you to allow maximum drive motor speed of 3500 RPM. Trane Compressor has a direct drive connected to the motor and shall not exceed above 3500 as against gear drive compressor where the compressor rpm is more than 4000 RPM.	standard design of manufacturer is acceptable.
267	HVAC Drawings	HVAC Schematic & Layout drawings are not available in tender documents	We request you to kindly provide HVAC Schematic & Layout drawings for our reference and better understanding of the system.	Shall be provided to successful bidder.
268	HVAC Electrical SLD	Electrical SLD for HVAC package is not available in tender	Kindly provide Electrical SLD for HVAC package for our reference and better understanding of the system.	Shall be provided to successful bidder.
269	HVAC Construction Power & Water	-	Please clarify construction power and water scope for installation, testing and commissioning of system	Shall be as per tender.

270	Vol 5_BILL OF QUANTITIES FOR HVAC WORKS HVAC BOQ - 2.1, 2.2, 2.3 & 2.4	Supply, installation, testing and commissioning of split casing/vertical inline type centrifugal chilled water	We understand contractor can choose either split casing or vertical inline pumps for these items nos. kindly confirm.	Clarification/Amendment:- Condenser water pump: End suction backpullout. Primary chilled water pump: End Suction back pull out. Secondary chilled water pump: Inline pump. Tertiary chilled water pump: Inline pump .
271	Vol 5_BILL OF QUANTITIES FOR HVAC WORKS HVAC BOQ - 2.2	Separate control panel with separate VFD for each set of pumps	We assume that set of pumps refers to pumps for each zone i.e. Combined control panel for all secondary pumps of a single zone is acceptable. Kindly confirm.	Shall be as per tender. Each set of pumps of secondary pumps of different zones will have separate control panel.
272	Vol 5_BILL OF QUANTITIES FOR HVAC WORKS HVAC BOQ - 2.3	Separate control panel with separate VFD for each set of pumps	We assume that set of pumps refers to pumps for each zone i.e. Combined control panel for all tertiary pumps of a single zone is acceptable. Kindly confirm.	Shall be as per tender. Each set of pumps of tertiary pumps of different zones will have separate control panel.
273	Vol 5_BILL OF QUANTITIES FOR HVAC WORKS HVAC BOQ - 2.4	Condenser pump with cladded insulation	Insulation and cladding is not required for condenser water pumps. Kindly confirm.	Not required.
274	Vol 5_BILL OF QUANTITIES FOR HVAC WORKS HVAC BOQ - 5.2	Supply, installation, testing and commissioning of sheet metal sectionalised construction draw thru type in double skin construction. Each Air Handling Units shall be with pre filter section with prefilters, mixing chamber, minimum 2 bend PVC eliminators, chilled water cooling coil, hot water coil (AHRI/ Eurovent) certified of copper tube & Al fins construction, squirrel cage induction motor with VFD starters(IP-54) mounted on AHU for supply and return air fans, motor efficiency class IE-3	We assume that OT AHUs are 2 tier AHUs with forced exhaust system & without heat recovery wheel. Please provide return air CFM for these units.	Supply and return fan of same capacity with VFD starter.
275	Vol 5_BILL OF QUANTITIES FOR HVAC WORKS HVAC BOQ - 5.6	TFA - Unit mounted Electrical Control Panel in IP 55, weather proof design with incomer disconnect switch/MCCB, VFD for supply air fan, exhaust air fan & wheel motor and complete in all respects including safeties, interlocks, metering & indication, fully BMS compatible and as approved.	We request you to please accept separate electrical panel for these TFA units, instead of unit mounted panels. Kindly confirm.	Shall be as per Tender.
276	Vol 5_BILL OF QUANTITIES FOR HVAC WORKS HVAC - BOQ	Cooling Tower/ Secondary & Tertiary Pumps / AHU - Shall be with IP 55 panel with VFD	We assume that since panels shall be with IP 55 rating, VFDs with IP 20 protection class will be acceptable, as the VFD shall be installed within IP55 panel. Kindly confirm.	Cooling tower and pump VFD shall be IP-55. AHU VFD IP-54.
277	Vol 5_BILL OF QUANTITIES FOR HVAC WORKS HVAC BOQ - 15.1, 15.4, 17.1, 17.4	Butterfly valves with SS Disc	As per industry standard, we request you to please accept butterfly valves & NRV with CI body & SG Iron disc / CI disc. Kindly confirm.	Shall be as per tender.
278	Vol 5_BILL OF QUANTITIES FOR HVAC WORKS HVAC BOQ - 17.3	Balancing Valve with built in measuring facility	We assume this refers to manual Balancing Valve. Kindly confirm.	Manual balancing valve.

279	Vol 4_TECH SPECS FOR HVAC WORKS HVAC - Tender - 2.4	Panel thickness shall be 25mm for indoor AHU & 40mm for outdoor AHU	Since AHU location (Indoor / Outdoor) is not specified in BOQ, request you to confirm the same.	Shall be as per tender.
280	Vol 4_TECH SPECS FOR HVAC WORKS HVAC - Tender - 2.4	AHU outer skin shall be precoated 0.8mm thick CRC sheet, chemically treated having scratch free pre plasticized coating and 0.8mm GI inner Skin	As per industry standard we request you to please accept precoated 0.8mm GI outerskin & 0.8mm plan GI inner skin. Kindly confirm.	Shall be as per Tender.
281	Vol 4_TECH SPECS FOR HVAC WORKS HVAC - Tender - 2.4	Drain pan shall be constructed out of 1.25mm thick SS304 sheet insulated with 15mm thick PUF	As per industry standard we request you to please accept 20G SS304 drain pan with 13mm thick Nitrile Rubber Insulation. Kindly confirm.	Shall be as per Tender.
282	Vol 4_TECH SPECS FOR HVAC WORKS HVAC - Tender - 11	Expansion tanks - 5000 ltrs and 3000 ltrs capacity	Please specify as to what capacity is to be considered for expansion tank and for hot water tank respectively. Kindly confirm.	Shall be as per Tender. Chilled water 5000 lts. Hot water 3000 lts.
283	Vol 4_TECH SPECS FOR HVAC WORKS HVAC - Tender - 2.7 AHU - Fresh air controls - Page 27 of 96	AHU - An adjustable motorized damper of aluminium sheet along with birdscreen air inlet louver shall be provided for fresh air entry	In BOQ same has been specified with manual volume control damper (item 22.4). Please confirm whether motorized damper or manual volume control damper is to be considered. Kindly confirm.	Shall be as per tender.
284	Vol 4_TECH SPECS FOR HVAC WORKS HVAC - Tender - 3.3 Accessories - Page 29 of 96	AHU - Balancing valve at coil outlet	Since PIBCV has been considered as per BOQ for AHUs, balancing valve is not required. Kindly confirm.	Shall be as per BOQ. Balancing valves are priced separately.
285	Vol 4_TECH SPECS FOR HVAC WORKS HVAC - Tender - 3 - Page 28 of 96	Panel thickness for CSUs has not been specified	Kindly confirm if CSU panel thick also to be taken as 25mm with 0.8mm GI precoated outer skin & 0.8mm GI inner skin (same as AHU). Kindly confirm.	Same as AHU.
286	Vol 4_TECH SPECS FOR HVAC WORKS HVAC - Tender Specification - 3 CSU - Page 29 of 96	CSU - Each unitary unit shall be provided with a heating / Cooling snap acting thermostat and a 3 way solenoid valve	Since PIBCV has been considered as per BOQ for AHUs, balancing valve is not required. Kindly confirm.	Shall be as per BOQ.
287	Vol 4_TECH SPECS FOR HVAC WORKS HVAC - Tender Specification - FCU 2.4 - Page 43 of 96	Drain pan shall be constructed out of 1mm thick SS sheet insulated with 25mm thick EPS	As per industry standard we request you to please accept 20G SS304 drain pan with 13mm thick Nitrile Rubber Insulation. Kindly confirm.	EPS/ PUF is acceptable but with same thickness.
288	Vol 4_TECH SPECS FOR HVAC WORKS HVAC - Tender Specification - Kitchen Scrubber 2.1 - Page 63 of 96	As per tender specification the kitchen scrubber shall be 16G GI sheet metal fan section, mixing box and SS304 made spray	BOQ calls for double skin construction for scrubber. Please confirm the body construction of scrubber. Kindly confirm.	Shall be as per BOQ.
289	Vol 4_TECH SPECS FOR HVAC WORKS Tender Specification - Axial flow fan 3.f - Page 58 of 96	Axial & Centrifugal ventilation Fans - The speed of fan shall not exceed 960 RPM with impellar dia above 1000mm & 1440RPM for impeller dia less than 1000mm	We request you to please accept fan speed up to 1440RPM for all fan sizes. Kindly confirm.	Shall be as per tender.

290	Vol 4_TECH SPECS FOR HVAC WORKS Tender Specification - AHU 2.1 - Page 25 of 96	AHU Fan section - Fan shall be selected for speed not exceeding 1000 RPM for fan dia more that 350mm	We request you to please accept fan speed up to 1440RPM for all fan sizes. Kindly confirm.	Shall be as per tender.
291	Vol 4_TECH SPECS FOR HVAC WORKS Tender Specification - Duct Works 2.2 - Page 68 of 96	Ducting construction has been specified with MS Flanges	We request you to please accept ducting with TDF flanges (as per SMACNA standards). Kindly confirm.	TDF Flange as per SMACNA acceptable.
292	HVAC - Tender Specification List of Approved Makes	Centrifugal Chiller Make	We request you to please accept "Voltas - Dunhambush" make centrifugal chiller Few of our installation of DB Centrifugal chiller with VFD in Public sector application are as follows. 1.Lucknow Highourt 2. RBI Mysore 3. Bangalore International Airport 4. District Court, Delhi 5. Kolkara Airport 6. IIT Rpar	Shall be as per tender.
293	HVAC - Tender Specification List of Approved Makes	VAV make of Trane / Trox / JCI / Caryaire / Belimo	Please approve Dynacraft make VAV with belimo actuators, since Belimo doesn't manufacture VAV. Kindly confirm.	Shall be as per tender.
294	HVAC - Tender Specification List of Approved Makes	Main LT Panel : L&T / SIEMENS / ABB / SCHNEIDER	We request you to approve CPRI approved vendor for electrical panel supply, for ease of coordination and faster deliveries. Kindly confirm.	Shall be as per tender.
295	HVAC - Tender Specification List of Approved Makes	AHU Panel : Tricolite / Adlec / C&S / Jackson / Milestone	We request you to approve CPRI approved vendor for electrical panel supply, for ease of coordination and faster deliveries. Kindly confirm.	Shall be as per tender.
296	HVAC - Tender Specification List of Approved Makes	Heat Recovery unit with Wheel : Flaktwood / Novelaire / DRI / Greenheck / Bryair	We request you to please accept the same with Heat Receovery units of approved AHU vendor with HRW of Flaktwood / Novelaire / DRI / Greenheck / Bryair as specified in list of makes. Kindly confirm.	Shall be as per tender.
297	HVAC - Tender Specification List of Approved Makes	Butterfly Valves : AUDCO / L&T / Honeywell	We request you to please accept Advance make butterfly valves. Kindly confirm.	Shall be as per tender.
298	HVAC - Tender Specification List of Approved Makes	Ducting : Ductofab / Rolastar / Technofab	We request you to please accept VJ AIR PRODUCTS / DLN ENGINEERING / VISAKHA DUCT PROFILES for ducting makes, for better coordination and faster delivery of ducting. TATA / SAIL / JINDAL make GI sheet will only be used as per list of makes. Kindly confirm.	Shall be as per tender.
299	HVAC - Tender Specification List of Approved Makes	Cables : CCI / Universal / Finolex / Rallison	We request you to please accept KEC / KEI / POLYCAB makes also for cabling. Kindly confirm.	Shall be as per tender.
300	HVAC - Tender Specification List of Approved Makes	Cable Trays : OBO / LEGRAND / COOPER / BEC	We request you to please accept PROFAB / PUSHPAK / PATNY makes also for cable trays. Kindly confirm.	Shall be as per tender.

301	Bill of Quantities of HVAC works for “ Hospital and Academic Campus “ ‘A’ – Equipments 1.0 Water chilling units	Maximum head loss 5 mt. water head for evaporator	The approved pressure drop requirements for centrifugal chilling units for both evaporator and condenser as per 2017 CPWD general specifications for heating, Ventilation and air-conditioning (HVAC) works 2017 is 10 mts. (Reference - Page no. 36 , Head – 2.1.2 Design Parameters , Sub Head 2,1.2.1 Chilling Unit). Accordingly, we would request you to kindly accept pressure drop upto 8 mt. as the allowable limit for evaporator also. Kindly confirm.	Evapotrator side 8 m pressure drop is acceptable.
302	Bill of Quantities of HVAC works for “ Hospital and Academic Campus “ ‘A’ – Equipments 1.0 Water chilling units COP minimum of 6.5	HVAC Sub-Head ‘A’ – Equipments 1.0 Water chilling units	As per LATEST ECBC Norms, for ECBC plus building , either COP or IPLV should be complied . Min COP or IPLV asked in ECBC 2017 for EBC plus building are 6.5 & 8.9 respectively. Please note that Since our chillers will be with VFD, and hence IPLV of offered chiller shall be > 9.25. Hence all our chillers which have 6.3 COP at full load with VFD not only qualify for ECBC plus building but also for super ECBC Buildings. Hence request you to accept 6.3 COP in place of mentioned 6.5 COP. Kindly confirm.	Shall be as per tender.
303	Bill of Quantities of HVAC works for “ Hospital and Academic Campus “ ‘A’ – Equipments 1.0 Water chilling units BOQ IKW/ TR < 0.64 (including all losses)	HVAC Sub-Head ‘A’ – Equipments 1.0 Water chilling units	IKW/ TR < 0.65 KW/ TR (including all losses) - Since the condenser water temperature is 88 F, chiller will deliver 1000 tr at 0.65 KW/ TR at site conditions. Please note that Chiller works only 1% at full load, hence request you to accept 0.65 kW/TR.	Shall be as per tender.
304	Bill of Quantities of HVAC works for “ Hospital and Academic Campus “ ‘A’ – Equipments 1.0 Water chilling units NPLV less than 0.37	HVAC Sub-Head ‘A’ – Equipments 1.0 Water chilling units	Since the condenser water temperature is 88 F, NPLV shall be < 0.38. Kindly confirm.	NPLV < 0.38 is acceptable.
305	HVAC Specification AC Page No.58 Clause 3.0, Point a. Impeller shall be of die cast aluminum alloy with integrally cast aerofoil sectioned blades and hub.	Axial Flow Fan	Blades shall be Cast /fabricated aluminum aerofoil shaped. Kindly confirm.	Shall be as per tender.
306	HVAC Specification AC Page No.58 Clause 3.0, Point e. and HVAC Specification Page No.60 Clause 6.0 Fan motor shall be selected in such a way that sound level is lowest (max. 75 db at 3 m distance) while running.	Axial Flow Fan	We request you to clarify whether the noise level will be measured in room condition (Hemispherical reverberant room condition) or in free field condition (Spherical). Kindly confirm.	Shall be as per BOQ.
307	HVAC Specification AC Page No.58 Clause 3.0, Point e. Motor shall be capable of running continuously with 5% drop in rated phase voltage at 15% increase in design power.	Axial Flow Fan	Voltage fluctuation shall be $\pm 5\%$. Kindly confirm.	Shall be as per tender.

308	HVAC Specification AC Page No.58 Clause 3.0, Point f. The speed if the fans shall not exceed 960rpm for fans with impeller dia above 1000mm and 1440rpm for fans with impeller dia 1000mm and less.	Axial Flow Fan	Fan Capacity (CFM)/ Static Pressure/ noise level/Efficiency/running Kw are most important parameters for fans selection and same shall be adhered to while selecting a fan. We request you to limit the maximum RPM of fan to 2900 RPM. Kindly confirm.	Shall be as per tender.
309	HVAC Specification AC Page No.58 Clause 3.0, Point g. Fans and accessories shall be painted with two coats of redoxide primer zinc chrome primer confirming to IS: 2074 or superior, over which two cots of synthetic enamel of approved shade shall be applied.	Axial Flow Fan	We request you to add that the casing can also be made from galvanized steel with a coating of Zinc with 275GSM thickness. Kindly confirm.	Acceptable .
310	HVAC Specification AC Page No.61 Clause 6.0, Point d. The coller shall be long to cover fans and motor	Axial Flow Fan(Fire Rated ventilation fan)	As per AMCA, short casing/Long casing/ Medium Casing fans are not specified. Every manufacturer has different casing lengths where some motors may fit inside the fan casing and some motors may extend outside the casing. Kindly confirm either the minimum length of casing required or modify the same as "casing length shall be as per manufacturer." Kindly confirm.	Shall be as per tender.
311	HVAC BOQ Axail flow fans (AMCA Cetrified)	Axail flow fans (AMCA Cetrified)	We request you to mention fans shall be AMCA certified for Sound and Air Performance. Kindly confirm.	Shall be as per tender.
312	HVAC List of Make - Sr. no- 10 and 14 Air Handling Units (High Static) with cooling coils and Fan Coil Units Carrier/Caryaire/Blue-star/ZECO/Systemair/Voltas/VTS/Flaktwood/ Waves/Edgtech	Air Handling Units (High Static) with cooling coils and Fan Coil Units	As Unique Make AHU's and FCU's are already approved in HSCC- PMSSY Hospitals Projects. We request you to please approve Unique make AHU's and FCU's in Approved List of Make.	Shall be as per tender.

Annexure -II

LIST OF APPROVED MAKES FOR AUDIO / VISUAL SYSTEM

S.No.	ITEM	MAKE
1	Speaker	Bosch , EV, JBL
2	Amplifier / Mixer	Bosch , EV, JBL
3	Mice	Sennheiser , Shure, Bosch
4	Equipment Rack	Data Rack, D-link, Rittal.
6	Cables (HDMI/ VGA)	Kramer, Extron, Crestron
7	Projector	Sony, Barco, Christie
8	Motorized Screen	Drapper, Dalite, Inlight

