

All Bidders**Amendment -III**

**Subject: CONSTRUCTION OF BIOSAFETY LEVEL-2 &3 (BSL-2 & BSL-3)
LABORATORY AT CONVERGENCE BLOCK, AIIMS, NEWDELHI**

IFB No. : HSCC/SES/BSL/AIIMS/2016

This has reference to above IFB No. for the Subject works.

The following Amendment may be noted which shall be treated as part of the tender document and to be submitted duly signed & stamp along with tender.

BIDDERS' QUERY

S.No	Bidders' Queries	
	<u>Volume-01 : Prequalification Document</u>	Amendment
1.	<p>Clause 3.0 : Under this Clause, it is stated that 'Similar nature of work shall mean successful construction, testing, commissioning and validation of Bio-Safety Laboratory (BSL-3/BSL-4) works/Vaccine laboratory/Clean room works.</p> <p>Since the scope of work construction of High Containment Laboratory of BSL-3, which are completely different from Vaccine laboratory and Clean room works, it is therefore critical, essential and imperative that the bidder's/firms shall have experience of Design and Construction of Bio-Safety Laboratory to ensure compliant facility. Firms qualified based on the experience of vaccine laboratory and clean room works may not have the technical knowhow of designing and construction of containment laboratories, understanding of bio-safety and bio-security issues and may prove to be detrimental to the proposed facility. This may also pose a serious risk to the safety of the laboratory users and the environment.</p> <p>It is therefore suggested to kindly review the given definition, meaning and interpretation of the Similar Work to ensure that the firms should essentially have the experience of Design and Construction High Containment Laboratories.</p>	Tender terms prevail
2.	<p>Application Form No. 4, Annexure-II : Construction Material and Equipment proposed for construction of the Laboratory has been asked under subheads A-F.</p> <p>It is proposed that to allow Comparison and Evaluation of Bidders on <i>Equitable Terms</i> regarding the</p>	Approved makes enclosed as Annexure-I

	<p>makes/manufacturers of construction materials, equipment, electrical fittings and fixtures, HVAC system, Building Management System and Biosafety Fixtures, list of Approved Makes/Manufacturers may be specified and provided by HSCC/AIIMS.</p>	
<p><u>Volume-02 : General Conditions of Contract</u></p>		
3.	<p>Clause 60.7 : Advance Payment : This Clause has been deleted and there is no provision of giving Mobilization Advance to the selected party.</p> <p>It is requested that to ensure smooth cash flow and speedy execution of the works, an Advance Payment may be paid equivalent to 10% of the Contract Price against submission of Bank Guarantee, as is permitted by Government Departments. Please issue suitable amendment in this regard and include Mobilization Advance. Not giving Mobilization Advance will tend to unnecessarily increase in the price quote due to high project finance and interest cost.</p>	Tender terms prevail
<p><u>Volume-03 :Instruction to Bidder and Specific Conditions of Contract</u></p>		
4.	<p>Clause 1.0, Para 4 : It is stated that ‘The scope of work shall also include Civil, Electrical works, HVAC works, external development works, finishing works, all PHE works & fire fighting works etc. and their maintenance during defect liability period including & preparation of all detailed shop drawings, obtaining approval from all local authorities, electrical inspector, water, sewer. Drainage, electricity connection from local bodies, permission/approval for tree cuttings etc. if any.</p> <p>We request the following to be provided and clarified:</p> <p>a) The Design requirements, Design criteria and Schematics for Civil, Electrical, HVAC, PHE & fire fighting works may be provided to understand the requirements for preparation of Bids and for preparation of detailed shop drawings.</p> <p>b) Since the work is to be executed in an existing building, which already has power supply connections. Please clarify what is expected to be done regarding ‘Electricity Connection from Local Bodies’ and the scope of work may be clearly specified. As such, there is no clarity</p>	<p>a) Typical layout and the building drawing are attached as Annexure-II</p> <p>b) Electric connection from local bodies deleted.</p> <p>c) Power will be available from feeder panel of the building.</p>

	<p>and the requirement specified is completely ambiguous and not clear.</p> <p>c) Please provide the details of available power source, feeder panel etc. for the proposed BSL-2 & BSL-3 Laboratory.</p>	
5.	<p>Clause 10.2&37.0 : We understand that Service Tax shall be applicable on the Project. Please confirm.</p> <p>Several Govt. Departments and Institutions are allowing only part payment of Service Tax to the Authorities by the Contractor/Service Provider and the balance applicable Service Tax is paid by Department / Institution directly to the Authorities.</p> <p>Please clarify whether the full applicable Service Tax should be included in the quoted price or only part Service Tax should be include.</p>	Tender terms prevail
6.	<p>Clause 29.1 : It is States that "Performance Security for PART-B to be submitted to AIIMS for post DLP operation & comprehensive maintenance of BSL-2 & 3.</p> <p>We understand that the above Performance Security for PART-B shall be submitted upon award of work of operation & comprehensive maintenance of BSL-3 Lab at the end of DLP. Pls clarify and confirm</p>	Performance Security for PART-B shall be submitted upon award of work of operation & comprehensive maintenance of BSL-2&3 Lab at the end of DLP.
7.	<p>Clause 33.0 : Certificates and Payments</p> <p>The Terms of Payment during the Operation & Maintenance period is not specified. The same may please be clarified and specified.</p>	Quarterly upon satisfactory work done,
8.	<p>Clause 39.2: Site Development: The provisions and requirements given under this clause are not applicable to the subject work. The subject BSL-2 & BSL-3 Laboratories are to be established in an already constructed building.</p> <p>It is therefore requested that this clause may be deleted.</p>	Deleted
9.	<p>Clause 39.2 b): Statutory Requirements</p> <p>Since the work is required to be executed inside an already constructed building. Please Clarify and Clearly specify the Statutory Approvals and Clearances required to be obtained by the Contractor, to avoid any ambiguity during project execution.</p>	Approvals and clearances for DG set exhausts Boiler exhausts etc.
10.	<p>Clause 39.2.5:Under Site Office, it is specified that for maintenance of furnished Site office, telephone, vehicle/car etc.,</p>	Specified limit is Rs.12.00 Lakh

	<p>the Maximum expenditure for site office limits to Rs. 12.0 Lakhs.</p> <p>It is proposed and requested that furnished Site Office, telephone, vehicle/car etc. should be arranged and maintained directly by AIIMS/HSCC and excluded from the Contractors Scope. Please also clarify that if these are to be provided and maintained by the Contractor and the expenditure under this head exceeds the specified limit of Rs. 12.0 Lakhs, will the extra expenditure be reimbursed and paid to the Contractor.</p>	
11.	<p>Clause 39.2.6: Temporary Fencing: Since the subject works are to be executed inside an existing building and only involves internal works, it is therefore requested that the provisions and requirements given under this clause, should be deleted, as the same is not applicable.</p>	Deleted
12.	<p>Clause 39.2.8 : Testing of Materials : The requirements given under this clause are not applicable to this work. Since the subject works are to be executed inside an existing and already constructed building and only involves internal works and there is no structural construction works involved, it is requested that the provisions and requirements given under this clause should be deleted.</p>	Tender terms prevail
13.	<p>Clause 41.0: Obtaining Completion Certificate : It is specified that the contractor is required to obtain all NOC, completion & occupancy certificates from respective local bodies.</p> <p>Since the subject works are to be executed inside an existing and already constructed building and only involves internal works and also the building is already occupied. Therefore the requirements given are not applicable and should be deleted.</p>	Completion & occupancy certificates from respective local bodies is deleted.
14.	<p>Clause 47. : The Tender Document do not contain any list of approved makes.</p> <p>It is requested to kindly provide the list of Approved Makes. This will also enable the Bidders to quote for equivalent brands and similar quality of work.</p>	Approved makes enclosed as Annexure-I
Additional Specific Condition of Contract and Specifications		

	<u>A – GENERAL</u>	
15.	<p>It has been specified at:</p> <p>Point No. 13. Waterless urinals, audio visual console for information system Point No. 18. Signages – special module-Alphabets and back lighting Point No. 23. Provision for new electrical load and water supply need</p> <p>The interpretation and requirements of the above may kindly be elaborated, specified and clarified.</p> <p>Several items and requirements related to external works have been specified. We understand that all these mentioned works are not required to be executed for the project. Please review the requirements given in this clause and clarify.</p>	Tender terms prevail
	<u>B – Relating to Civil, Plumbing & Fire Fighting Works</u>	
16.	<p>Clause 19.2 : It is stated that ‘The contractor shall check at stages and supervise at the point of connection the associated civil, electrical and plumbing works underground and overhead tanks, power supply and installation of makeup water connection, drain connection in the fire fighting tanks and vicinity of plant room etc.</p> <p>Please clarify whether the scope of work shall also include construction of underground and overhead water tanks. Please also clarify whether fire fighting water tank, fire hydrant, wet riser etc. works related to fire fighting system shall also be included in the scope of work.</p>	Tender terms prevail
17.	<p>Clause 24.2 : It is stated that ‘Contractor will be held responsible if any work at site is carried out without having approval of municipal or local bodies’.</p> <p>We understand that the no prior approval from municipal or local bodies is required, as the works are to be executed in an already constructed and occupied building. Please clarify and confirm the same.</p>	Deleted
18.	<p>Clause 24.5 : It is stated that ‘Before start ...ATT,.....signages works etc.’.</p> <p>Please Clarify whether water proofing, ATT and Signage Work are required to be executed and to be included in the Contractors scope or not.</p>	Tender terms prevail

	<u>C – Relating to Electrical Installations</u>	
19.	<p>Clause 3.1 : It is stated that ‘The rates.....and getting permanent electricity connection from concerned local body(s) etc.’</p> <p>We understand that AIIMS already has sanctioned and connected power supply available. It is requested to Clarify the interpretation of this Clause and the clearly specify the work included in the Contractors Scope under this.</p>	Electricity connection shall be obtained from the existing feeder panel of the building
20.	<p>Clause 8.1 : It is stated ‘The drawings indicate the extent and general arrangement of the fixtures, controlling switches, wiring system etc. and are essentially diagrammatic’.</p> <p>No such drawings are given in the Tender Documents. It is therefore requested to kindly provide the above mentioned drawings to understand the requirement, assessment and preparation of Bids.</p>	As the plan and design is in the scope of works, the contractor shall provide to HSCC for prior approval.
21.	<p>Clause 12.1 : It is stated that ‘All materials and equipments shall be ISI marked and shall be of the approved make and design’.</p> <p>There is no Approved Make given in the Tender Documents. Please provide the list of approved makes.</p>	Approved makes enclosed as Annexure-I
22.	<p>Clause 31.0 : It is stated that ‘The contractor shall pay for and arrange for operation & running of entire electrical system, HVAC, filter housing including DG sets and other equipment for a minimum period of one month after satisfactory completion desired by Engineer. Cost of operation and running of entire system including required material e.g. fuel, consumables, tools & tackles, required manpower etc. shall be deemed to be included in the contract’.</p> <p>Since storage of diesel by the contractor may not be permitted in AIIMS premises, it is suggested and requested that for One month of operation of the entire system, the required power, electricity, fuel, Diesel etc. may be provided by AIIMS.</p>	Tender terms prevail
	<u>D – Relating to HVAC Works and Specialized Equipments & System/Services</u>	
23.	<p>Clause 22.0 Following Terms of Payment is given:</p> <p>a. 50% of BOQ contract rates on receipt of equipments/items at site</p>	Tender terms prevail

	<p>b. 40% of BOQ contract rates on erection and installation</p> <p>c. 5% after successful completion of running test and taking over</p> <p>d. 5% after successful final performance testing or completion of defect liability period</p> <p>Since the HVAC Works, Specialized equipment, systems and services constitutes a substantial value of the total work, the above payment terms shall result in poor cash flow and liquidity on the project. It is requested that the above payment terms may be amended as given under Clause 24.0 of Section C (Electrical Installations), which is as under:</p> <p>a. 80% of BOQ rate on receipt of equipment at site</p> <p>b. 10% of BOQ rate on erection and installation of equipment</p> <p>c. 10% after successful completion of testing, commissioning and taking over</p>	
Volume-IV : Technical Specification		
24.	<p>Clause 2.1 Para 3 : It is mentioned that the contractor shall carry out planning for all such scientific laboratory instruments and equipments and provide the services and utilities like power, water, compressed air, drain etc. required for such equipments.</p> <p>Please clarify and confirm which equipments/scientific instruments are included in the contractor's scope and which equipments/scientific instruments will be supplied by AIIMS/HSCC.</p>	Tender terms prevail
25.	<p>Clause 2.1 Para 5 : List of equipments and system to be supplied and installed is given.</p> <p>Diesel Generator Set is specified. Please provide the capacity of DG Set required and to be considered.</p> <p>ETP Plant is specified. Please clarify whether chemical disinfection system or steam based cook tank system is to be considered and provided. Please provide detailed technical specifications, capacity, redundancy etc. of the ETP to be provided.</p>	BLED with steam cook tank system should be provided.
26.	<p>Clause 2.1 Para 4 : It is mentioned that the scope of work shall also include 'Supply and laying of the required power supply cables from the existing electrical room (LT panel room) upto the proposed BSL-3 Lab for its power supply. Extension of existing LT panel by providing feeder panel with switchgears of required capacities to meet the power requirements of BSL-2 and BSL-3 Lab'.</p>	<p>Power will be available from the exiting LT panel of the building.</p> <p>The bidder may visit the site before submission of bid.</p> <p>Typical BSL layout and building drawing as Annexure-II are enclosed.</p>

	<p>Please provide the location and details of electrical room and the LT Panel from where the power supply cable is to be laid. It is requested to provide the drawings of existing LT panel indicating the details of existing feeder and SLD. Please also inform about the status of availability of power sanction for the BSL-3 Lab, from the local electricity department.</p>	
27.	<p>Clause 3.0 :</p> <ul style="list-style-type: none"> a) Please provide the Basement layout indicating the proposed location of the ETP/BLED plant b) Please provide the sectional details of the ninth floor where the BSL-2 & BSL-3 Laboratories are proposed, indicating various levels like floor to floor height, bottom of beam etc. c) Please provide the layout plan of the existing DG area indicating the proposed location of the new DG set for BSL-2 & BSL-3 Laboratory. 	<p>The bidder may visit the site before submission of bid. Typical BSL layout and building drawing as Annexure-II are enclosed.</p>
28.	<p>Clause 4.1 : Considerations to be followed in design are given.</p> <ul style="list-style-type: none"> a) UVGI system at the exhaust line to achieve kill rate based on the specified micro-organisms (Pls also refer the requirements given under clause 6.7). Generally UVGI system is not provided in the exhaust duct. The functioning, efficacy etc. cannot be checked. Please reconsider and review the requirement specified and delete. b) Standby supply and exhaust systems shall be provided for BSL-2 and BSL-3 Laboratories. Please elaborate and clarify on standby provisions specified for supply air side and for exhaust of BSL-2 Laboratory as these are not required as per BMBL guidelines. Kindly reconsider the requirement specified and delete the same. c) It is specified to provide UPS for Exhaust Blowers of BSL-2 and BSL-3. The exhaust blowers of BSL-2 and BSL-3 Laboratories are not required to be powered through UPS. Please review the requirement specified and omit the requirement given. d) It is mentioned that FDA system and Fire Fighting Systems shall be provided as per guidelines/standards. The relevant guidelines/standards are not specified. Please note that in BSL-3 laboratories, generally 	<ul style="list-style-type: none"> a) Deleted b) Tender terms prevail. c) Tender terms prevail. d) Plan & design is in the scope of works of the contractor. e) Separate AHU for BSL-3 and BSL-2 and Common area including change rooms.

	<p>portable fire extinguishers of CO2 or dry powder type are provided. Please review the requirement specified and clarify.</p> <p>e) It is mentioned that each Lab area shall be provided with dedicated AHU. Please elaborate the meaning and interpretation of this requirement. Does it mean separate AHU's for BSL-2 BSL-3 Labs? Please elaborate, clarify and confirm.</p>	
29.	<p>Clause 5. : General Construction:</p> <p>Requirements specified under clause 5.1 and 5.2 are not relevant to the work. Please review the same, delete the requirements given and issue amendment</p>	<p>Tender terms prevail except the word "Operation theatre" in Clause no.5.5.</p>
30.	<p>Clause 5.18 :</p> <p>a) It is given that Door material should be SS-304. Please specify, which doors should be in SS 304.</p> <p>b) It is mentioned that all HEPA filters should have pre-filter of 0.3 micron in upstream side of supply and exhaust. Please note that HEPA filter itself is of 0.3 micron size rating. Providing additional 0.3 micron filter before exhaust HEPA filter is not required for BSL-2 and BSL-3 laboratories. Please review the requirement given.</p> <p>c) ETP room in basement has been asked to be air tight with shower. Please note the ETP room need not be air tight. Please clarify and confirm and also clarify about the treatment of effluent from the ETP room shower.</p> <p>d) It is specified that all engineering components should have redundancy/standby arrangement system, which is a complete vague and open ended. As per BMBL guidelines, redundancy/backup specified is only for the BSL-3 exhaust system. We therefore request you to kindly clearly specify the equipments and system, where redundancy/backup should be considered and provided, so that there is no ambiguity during execution.</p>	<p>a) PUF (40 ±2) Kg/Cum/Rockwool 146-150 Kg/m3) sandwiched double skinned (Each skin 0.6 mm thick) Powder coated GI Panel of 50 mm thick door frame shall be of 1.2 mm thick powder coated GI for lab.</p> <p>b) Pre-filter of 0.3 micron is deleted</p> <p>c) Deleted Air tightness</p> <p>d) Tender terms prevail</p>
31.	<p>Clause 7.0 : It is mentioned that all the required panels, cabling, switchgears and arrangements etc. for the purpose of energizing the BSL-3 Laboratory facility shall be carried out by the contractor.</p>	<p>a) Power will be available from the existing LT panel of the building.</p> <p>b) Drawing of LT panel will</p>

	<p>The requirement specified is completely ambiguous and open ended. Please provide details and clarify the following:</p> <p>a) What is status of availability of power for the proposed BSL-2 and BSL-3 Facility.</p> <p>b) Please provide details and drawings of existing LT panel from where the power supply for the BSL-2 & BSL-3 Laboratory is to be provided.</p> <p>c) Please clarify and confirm whether the scope of work requires execution of any HT work or installation transformer etc.</p> <p>d) What is the status of electrical load sanction to meet the power requirement of proposed BSL-2 & BSL-3 Laboratory.</p> <p>e) Please clarify and confirm whether the work require establishment of any dedicated substation for the proposed BSL-2 and BSL-3 Laboratory.</p> <p>f) It is mentioned 'standby power through existing Diesel Power Generator Set'. Please provide details of existing DG Set.</p> <p>g) Please also confirm whether that existing LT panel has the spare capacity and rating to meet the power requirement of the BSL-2 & BSL-3 Laboratory.</p> <p>h) Please clarify and confirm that who will provide the switchgears, if additional feeder is to be provided in the existing LT panel.</p>	<p>be issued after placement of award.</p> <p>c) Not required.</p> <p>d) Electrical load for proposed BSL-2 & BSL-3 is kept.</p> <p>e) Not required.</p> <p>f) Plan and design is in the scope of works of the contractor.</p> <p>g) LT panel has spare capacity and rating to meet the power requirement of BSL lab.</p> <p>h) In the scope of works of the contractor.</p>
32.	<p>Clause 11.0 : Uninterrupted Power Supply is specified for Exhaust Blowers of BSL-3 Laboratory.</p> <p>It may be noted that the exhaust Blowers of BSL-3 Lab are not required to be powered thru UPS. Kindly review the requirement specified and issue suitable amendment.</p>	Tender terms prevail
33.	<p>Clause 14.1 : Kindly provide the GA Drawing and SLD of existing feeder line/panel from where the power is to be tapped for the proposed BSL-2 & BSL-2 Laboratory, to enable assessment of requirement for extension of existing feeder/busbar, as proposed.</p>	Drawing of LT panel will be issued after placement of award.
34.	<p>Clause 14.4 : At point no. xiii) the Biological Effluent Treatment plant is specified.</p> <p>Please Clarify the following:</p> <p>a) The Capacity of Biological Effluent Treatment</p>	<p>a), b), c), d), e) & f)</p> <p>Plan and design is in the scope of works of the contractor.</p>

	<p>plant</p> <p>b) The Standby Capacity, if any, to be consider</p> <p>c) Whether the steam supply to Biological Effluent Treatment plant shall be provided through the common Steam Boiler or a dedicated Steam Boiler for Biological Effluent Treatment plant shall be provided</p> <p>d) Please clearly specify whether any standby provision for Steam Boiler is required to be provided or not.</p> <p>e) Specify the <i>Safety Features</i> desired and to be provided in the Biological Effluent Treatment plant system</p> <p>f) Provide detailed technical specifications of the Biological Treatment Plant</p>	
35.	<p>Clause 16.0 d) : It is specified that the lab shall be constructed, tested for leakage by pressure decay method.</p> <p>It may be noted that pressure decay test is not required and recommended for BSL-3 Laboratories as per CDC/NIH BMBL Guidelines.</p> <p>Pressure decay test is done only for BSL-4 Facilities. Kindly review the requirement specified, as the same is not technically correct and applicable to BSL-3 Laboratories.</p>	Tender terms prevail
36.	<p>Clause 18.6 : It is specified that contractor shall provide validation of the following:</p> <p>The Validation parameters given are not elaborate and are not as per the requirements of CDC/NIH/BMBL Guidelines.</p> <p>Kindly also note the following :</p> <p>a) Pressure decay test. It may be noted that pressure decay test is not required and recommended for BSL-3 Laboratories as per CDC/NIH BMBL Guidelines. It is done only for BSL-4 Facilities. Kindly review the requirement specified, as the same is not technically correct and applicable to BSL-3 Laboratories.</p> <p>b) Particle test for cleanliness; according to US Federation 209 E. Please note that the given US Fed 209 E is an obsolete standard. It may also be noted that the particle count test is performed in clean</p>	<p>Tender terms prevail</p> <p>b) Deleted</p>

	<p>room facilities. This test is neither applicable nor recommended in BSL-3 Laboratories.</p> <p>Please review the requirement given and issue suitable amendment.</p>	
37.	<p>No Tender Drawing</p> <p>No Tender Drawings have been provided. Please provide detailed Tender Drawings. We request that the above queries may kindly be clarified and details and necessary amendments may kindly be issued at the earliest.</p>	<p>Typical BSL layout and building drawing as Annexure-II are enclosed.</p>
	M/s.PPI Projects Private Ltd.	
38	<p>This has reference to Tender No. HSCC/SES/BSL/AIIMS/2016 Construction, Testing,Commissioning, Validation and other associated works of Bio-Safety Level-2 & 3 (BSL-2 & BSL-3)Laboratory on ‘Turnkey Basis’ at Convergence Block, AIIMS, New Delhi.</p> <p>We want to participate in this tender. You are requested kindly send drawing of this Project on priority.</p>	<p>Typical BSL layout and building drawing as Annexure-II are enclosed.</p>

	M/s.Dyna Filters Pvt. Ltd.	
39	<p>Autocad drawings will help us study technical bid with much ease. Kindly provide the same.</p> <p>Also looking at the criticality of the project and the upcoming holiday season we request you to extend the tender submission date to 10th November 2016.</p>	<p>Typical BSL layout and building drawing as Annexure-II are enclosed.</p> <p>Date of submission of bid is extended to 02.11.2016.</p>

- 40. Burnt Unit** should be placed after the Exhaust unit of BSL Lab. Burnt Unit shall be heat insulated, Sealed type, horizontal/vertical high heat resistant metallic cabinet/container of suitable capacity, Electrically heated, thermostatically controlled for keeping temperature 150 degree C inside the chamber. Temperature Gauge. The Unit shall have metallic pipes connected at its inlet and outlet for connection with exhaust pipelines from Bio Safety Cabinets and HVAC duct lines. The Unit shall rest on the Platform with foundation bolt.
41. During Defect Liability and CMC Period, the contractor should provide annual assessment report of all parameters of equipment supplied by them as per the contract for construction of BSL Lab.

(SA Usmani)
Chief General Manager
HSCC India Ltd
On behalf of Director, AIIMS