



**Construction of Center for Good Governance [CGG] - Residential & Academic Building**  
**at**  
**Baner ,Yashada,**  
**Pune.**

**TENDER FOR**  
**CONSTRUCTION WORKS:**  
**CIVIL & allied WORKS**

**TENDER NO: EMR/7623/CGG-RACW for 2023-24**

**CLIENT/ OWNER**

**YASHWANTRAO CHAVAN ACADEMY OF DEVELOPMENT ADMINISTRATION**  
**Raj Bhavan Complex, Baner Road, Pune 411 007.**  
**Phone No. (020) 25608408/25608268/25608210.**

**Project Management Consultant**

**COEP Technological University Pune (COEP Tech)**  
WELLESELY RD, SHIVAJINAGAR, PUNE-411 005.  
MAHARASHTRA, INDIA.  
TELEPHONE: +91-20-25507203; email / [birajdar@coep.ac.in](mailto:birajdar@coep.ac.in)



# यशवंतराव चव्हाण विकास प्रशासन प्रबोधिनी

(महाराष्ट्र शासनाची अंगीकृत संस्था)

Yashwantrao Chavan Academy of Development Administration  
(A Government of Maharashtra Organisation)



ISO 9001: 2008

## E-TENDER NOTICE NO. **EMR/7623/CGG-RACW** FOR 2023-2024

The Registrar, YASHADA, Pune - 411 007 invites bids for following work from Registered as well as unregistered Contractor, and full filling the qualifying criteria for **B-2 Tender Format** as per Maharashtra Government, Public Work Department G.R. No. CAT/2017/Pra.Kra-08/Bldg-2, dt. 27/9/2018 and Public Work Department Matralaya Mumbai Circular No. CAT/2017/Pra.Kra-08/Bldg-2, dt. 22/10/2018. Bids document can be downloaded from website <https://mahatenders.gov.in> Director General reserves all rights to accept or reject bids. Conditional bids will not be accepted.

### NAME OF WORK AND ESTIMATE COST LIST

Sr. No.	Name of Work	Estimated Cost Rs.	Earnest Money Deposit	Time limit for Completion	Cost of e-tender Form Fee	Class of Contractor
1	2	3	4	5	6	7
1.	<b>Construction of CGG – Residential &amp; Academic Building at Baner, Yashada, Pune</b>	48,80,12,214/-	24,40,061/-	18 Months (Including Monsoon)	Rs.3540/- (With GST 18%)	Registered as well as unregistered Contractor ( For Civil work and For Electrical Class

### E-tender- Time Table

1	Period of Downloading of bid documents/ Sale start and end dates	Dt.05-02-2024 @ 10.00 hrs. to Dt.26-02-2024 @ 18.00 hrs.
2	Pre-bid Meeting In the Office of Chief Engineer, P. W. Region Office, Pune, Old Central Building, Pune-411001.	Dt.12-02-2024 @ 15.00 hrs.
3	Period of Bid Submission/ Bid Submission Start and End date.	Dt.05-02-2024 @ 10.00 hrs. to Dt.26-02-2024 @ 18.00 hrs.
4	Bid Opening Period	Dt.28-02-2024 @ 10.00 hrs. (If Possible) (In the office of YASHADA, Pune.)

Note :-

- All eligible/interested contractors are downloading and mandated to get enrolled on e-tendering portal "<https://mahatenders.gov.in>."
- For online Payment related issues, Kindly contact 180030702232 for clarifications.**
- Other term and condition Displayed in online e-tender forms. Right to reject any or all online bid of work without assigning any reasons thereof is reserved.
- Above Tender Notice is displayed on YASHADA website "www.yashada.org"
- Online Blank Tender Downloading fee and Earnest money shall be paid via online using NEFT/RTGS or payment gateway mode.

**Registrar,  
YASHADA,  
Pune 411 007.**

## INDEX

**Name of Work: Construction of Center for Good Governance [CGG] - Residential & Academic Building at Baner Yashada, Pune**

Sr.No.	Description	Page Nos.	
		From	TO
1	Preface	1	3
2	Invitation for Bid (IFB)	4	7
3	Section-1 Instruction for Bidder	8	39
4	Section-2 Forms of Bid qualification, information and letter of acceptance	40	49
5	Section-3 Conditions of Contract	50	76
6	Section-4 Contract Data Additional General Conditions and specifications	77	101
7	Section-5 Technical Specification of Civil Work (Sch.C)	102	164
	Electrical work (Sch.C)	(Attached separately in soft copy) – Envelope I	
8	Section-6 Form of Bid	165	166
9	<b>Section-7</b> Bill of Quantities - Part-I (Civil Work Portion) Part-II (Material Testing charges) Part-III (Electrical,HVAC, Fire Fighting work portion)	(Attached separately in soft copy) – Envelope II	
10	Section-8 Securities and other forms, Affidavit ( on Rs. 100/- stamp Paper)	168	182
11	Section-9 TENDER DRAWINGS (a)Residential Building and (b)Academic Building	(a) 49 pages and (b) 129 pages	

INVITATIONS FOR BIDS  
(IFB)



यशवंतराव चव्हाण विकास प्रशासन प्रबोधिनी  
(महाराष्ट्र शासनाची अंगीकृत संस्था)

Yashwantrao Chavan Academy of Development Administration  
(A Government of Maharashtra Organisation)



e-Procurement Notice  
INVITATION FOR BIDS (IFB)

Date :  
Bid No:

**Director General, YASHADA, Pune** invites Competitive Bids from the contractors in India who fulfill the Qualifying Criteria in this document for construction of work detailed in the Table.

TABLE

Sr. No.	Name of Work	Approximate value of work Rs.(Excluding GST)	Bid Security 0.5% EMD (Rs.)	Cost of Document (Rs.)	Period of completion
1.	<b>Construction of CGG – Residential &amp; Academic Building at Baner, Yashada, Pune</b>	48,80,12,214/-	24,40,061/-	Rs.3540/- (With GST 18%)	18 Months (Including Monsoon)

- The Tender can be downloaded from **05-02-2024** at **10.00 Hrs upto 26-02-2024** at **18.00 Hrs.** on payment of a nonrefundable fee of **Rs. 3540/- ( Rs. Three thousand Five hundred Forty only )** at the time of download of the Tender.
- The Proposals must be submitted online at the e-tender portal of the YASHADA, Government of Maharashtra ie. [www.mahatenders.gov.in](http://www.mahatenders.gov.in) on or **26-02-2024** at 18.00 Hrs.
- Before submitting the proposal, the bidders shall mandatorily register and enlist themselves (the firm and all key personnel) on [www.mahatenders.gov.in](http://www.mahatenders.gov.in). Further, the bidder shall follow the operating procedure as may be prescribed on the said website.
- Physical Submission:**  
The bidder shall submit the Hard Copy in Sealed Envelopes of Technical & Financial Bids as specified in NIT within 72 hrs. from the online submission ("Bid Lock") along with original Bank guarantees to be submitted in separate Sealed Envelopes super scribing name of work and System Generated E-Tender Number and Name of Agency. **Please read Clause 20.3 for detailed instructions.**
- The period of availability of online bid / date and time of Pre-bid meeting / date and time of online bid submission and date and time of opening of bids are given below.

## **Tender for Construction of CGG –Residential & Academic Building at Baner Yashada Pune**

6. Bidding documents can be downloaded from the web site <https://mahatenders.gov.in>, the documents downloaded from the web site should not be tampered, and if any such tempering is detected before or after the opening of bids, the bidder shall be penalized and black listed .
7. Tender form, conditions of contract, specifications and contract drawings can be downloaded from the e-Tendering portal of YASHADA, Government of Maharashtra web site <https://mahatenders.gov.in>. The Contractors shall make online payment as specified in column 5 of table above using payment gateway. The fees of tender document will be non-refundable.
8. Before submission of on-line bids, bidders must ensure that the scanned copies of all the necessary documents have been attached with bid.
9. The bidders should keep checking the website for any addenda/corrigenda to the notice /bidding documents till the date of on-line submission of bids, and bidders should incorporate the same in their bid documents.
10. The bids will be opened online as per time schedule mentioned in the table above in the presence of bidders who wish to attend on the scheduled date and time in the office of the Registrar, YASHADA, Pune. If the office happens to be closed on the date of opening of bids as specified, the bids will be opened on the next working day at the same time and venue.
11. Bid documents consisting of qualification information and eligibility criterion for bidders, plans specifications, drawings, the schedule of quantities of the various classes of work to be done and the set of terms and conditions of contract to be complied with by the contractors can be seen on website <https://mahatenders.gov.in> and scanned copies of the required documents and information as per section 2 (Formats and annexure) should be attached in the Technical Bid as prescribed in SBD.
12. Uploaded documents of valid successful bidders will be verified with the original before signing the agreement. The valid successful bidder has to provide the original to the concerned authority on receipt of such letter, which will be sent through registered post/email.
13. Bids once submitted cannot be resubmitted or withdrawn after the proposal due date and time.

14. Conditional bids and the bids not meeting the qualification criteria on the date of receipt of bids shall be summarily rejected.
15. The pre-bid meeting will be held as specified in the table above in the office of the **Registrar YASHADA, Pune** to clarify the issues and to answer on any matter that may be raised at that stage as stated in Clause 9.2 of the “instructions to Bidders” bidding document.
16. **Goods and Service Tax (GST)**

As per Section 51 of Maharashtra Goods and Service Act 2017, GST will be levied at source on all contracts given from 01/07/2017. GST will be paid extra on work estimated cost.

TDS will be deducted from Running Account Bills as per the notified rates and from the notified dates by the Government. Bidders are required to submit Registration Number as supplier under GST.

The rates quoted by the Contractor shall be deemed to be inclusive of all taxes other than Goods & Service Tax 2017 that the contractor will have to pay for performance of this contract. The rates quoted by the contractor shall be exclusive of Goods & Service Tax 2017 which shall be paid extra by the employer at prevailing rates. The Employer will perform such duties in regard to the deduction of such taxes at source as per applicable law.

**17. Payment of Stamp Duty**

**It is binding on the contractor to Execute the Agreement in non Judicial stamp paper purchased hum amounting to value applicable to tender cost. It is mandatory to pay appropriate of stamp duty to revenue authority by contractor after acceptance of tender as per Government of Maharashtra , Revenue and forest Department Circular No. 2020 अर्नोक्र.01-2016/प्र.क्र.-218/म-1/(धोरण), दि. 18/03/2021**

18. Contractor has to plant minimum 40 numbers of trees at the site shown by Engineer-in-Charge. As per plant approved by Engineer-in-Charge Contractor shall plant the trees within 15 days after receiving the work order, and maintain the trees for period up to Defat liability period. if contractors fails to plant the tree with in one month after receiving work order, Rs. 500/- per plant will be held from Contractors Bill and that amount will be refund after Certification of Engineer-in-Charge for Successful Plantation. Security deposit shall be refunded only after verification of plants and maintained trees. Otherwise Proportionate amount of security deposit is forfeited as deem fit by Engineer-in-Charge.

# **VOLUME-I**

Section 1 to 4



SECTION - 1  
INSTRUCTIONS TO BIDDERS  
(ITB)  
**VOLUME-I**

**SECTION 1 – INSTRUCTIONS TO BIDDERS (ITB)****Table of Clauses**

		Page No.			Page No.
A.	General		D.	Submission of Bids	23
1.	Scope of Bid	11	19.	Sealing and Marking of Bids	24
2.	Sources of Funds	11	20.	Deadline for Submission of Bids	24
3.	Eligible Bidders	11	21.	Late Bids	24
4.	Qualification of the Bidder	11	22.	Modification and Withdrawal of Bids	24
5.	One Bid per Bidder	16			
6.	Cost of Bidding	16	E.	Bid Opening and Evaluation	
7.	Site Visit	16	23.	Bid Opening	25
			24.	Process to be Confidential	25
B.	Bidding Documents	17	25.	Clarification of Financial Bids	25
8.	Content of Bidding Documents	17	26.	Examination of Bids and Determination of Responsiveness	25
9.	Clarification of Bidding Documents	17	27.	Correction of Errors	28
10.	Amendment of Bidding Documents	18	28.	Deleted	28
			29.	Evaluation and Comparison of Financial Bids	28
C.	Preparation of Bids	19	30.	Deleted	29
11.	Language of Bid	19	F.	Award of Contract	
12.	Documents Comprising the Bid	19	31.	Award Criteria	30
13.	Bid Prices	20	32.	Employer's Right to Accept any Bid and to Reject any or all Bids	30
14.	Currencies of Bid and Payment	20			
15.	Bid Validity	20	33.	Notification of Award and Signing of Agreement	31
16.	Bid Security	21	34.	Performance Security	32
17.	Alternative Proposals by Bidders	23	35.	Advance Payment and Security	32
18.	Format and Signing of Bid	23	36.	Dispute Review Expert	32
			37.	Corrupt or Fraudulent Practices	32

**A. GENERAL**

**Scope of Bid**

The Employer (named in Appendix to ITB) invites online bids for the constructions of works (as defined in these documents and referred to as “the works”) detailed in the table given in IFB. The bidders may submit bids for any or all of the works detailed in the table given in IFB.

The successful bidder will be expected to complete the works by the intended completion date specified in the Contract data.

Throughout these bidding documents, the terms ‘bid’ and ‘tender’ and their derivatives (bidder / tenderer, bid / tender, bidding / tendering etc.) are synonymous.

**a. Sources of Funds**

- 2.1 The expenditure on this project will be met from the budget of State Govt. of Maharashtra.

**Eligible Bidders**

This invitation for Bids is open to all bidders.

All bidders shall provide in Tender part-2 Section 2, page No.10 Forms of Bid and Qualification Information, a statement that the Bidder is neither associated, nor has been associated, directly or indirectly, with the Consultant or any other entity that has prepared the design, specification, and other documents for the Project or being proposed as Project Manager for the Contract. A firm that has been engaged by the Employer to provide consulting services for the preparation of supervision of the works, and any of its affiliates, shall not be eligible to bid.

**Qualification of the Bidder**

All bidders shall provide in Section 2, Forms of Bid and Qualification Information, a preliminary description of the proposed work method and schedule, including drawings and charts, as necessary. The proposed methodology should include programme of construction backed with equipment planning and deployment duly supported with broad calculations and quality assurance procedures proposed to be adopted justifying their capability of execution and completion of work as per technical specifications, within stipulated period of completion.

All bidders shall include the following information and documents with their bids in Section 2.

- (a) Copies of original documents defining the constitution or legal status, place of registration and principal place of business, written power of attorney of the signatory of the Bid to commit the Bidder ;
- (b) Total monetary value of construction work performed for each of the last **Seven Years**.

## Tender for Construction of CGG –Residential & Academic Building at Baner Yashada Pune

- (c) Experience in work of a similar type of works ( Consisting campus Development + Buildings + Infrastructural work + total Electrification + Landscaping / Gardening ets ) and size for each of the last **Seven** Years and details of works underway or contractually committed and clients who may be contacted for further information on those contracts ;
- (d) Major items of construction equipment proposed to carry out the Contract.
- (e) Qualifications and experience of key site management and technical personnel proposed for contract ;
- (f) Reports on the financial standing of the Bidder, such as profit and loss statements and auditor's reports for the past **Seven Years**.
- (g) Evidence of access to line(s) of credit and availability of other financial resources facilities (10% of contract value) certified by the Bankers. (Not more than 3 months old); **(To be Applicable for works costing More than Rs.5 Crores.)**
- (h) Undertaking that the bidder will be able to invest a minimum cash upto 25% of contract value of work during implementation of work ;
- (i) Authority to seek references from the Bidder's bankers ;
- (j) Information regarding any litigation, current or during the last **Seven Years**, in the Bidder is involved, the parties concerned and disputed amount ;
- (k) Proposals for subcontracting components of the Works amounting to more than 10 percent of the Bid Price (for each, the qualifications and experience of the identified sub contractor in the relevant field should be annexed); and
- (l) The proposed methodology and programme of construction, backed with equipment planning and deployment, duly supported with broad calculations and quality control procedures proposed to be adopted, justifying their capability of execution and completion of the work as per technical specifications within the stipulated period of completion as per milestones. **(Applicable for works Costing more than Rs.1.50 Crore)**
- (m) Declaration Signed by Contractor in form attached in section 8.
- (n) Details of Income Tax Circle or ward of the district in in which the tenderer is assessed to Income Tax, Tenderer's PAN No. and complete postal address with Pin code and telephone Numbers. Scanned copy of Income Tax Return for the immediate previous financial year.
- (o) Scanned copy of original valid Goods & Service Tax (GST) Registration Certificate.
- (p) Scanned copy of a list of modern machinery and plants immediately available with the tenderer for use on this work and list of machinery proposed to be utilised on this work but not immediately available and manner in which it is proposed to be procured.
- (q) Scanned copy Professional Tax Registration Certificate in form PTR and PTE.
- (r) Details of work done during last **Seven** years with the value of work unfinished.

## Tender for Construction of CGG –Residential & Academic Building at Baner Yashada Pune

- (s) Details of work of similar type (as mentioned in 'c') carried out the contractor.
- (t) Details of list of works in hand works tenderer for. (Information to be given in Proforma
- (u) Details of works carried out in the Interior, Backword and Hilly Area during the preceding 5 years. (if applicable )
- (v) Scanned copy of Affidavit in respect of genuineness of documents contained in the Envelope No. 1 in the prescribed proforma proved with tender set on 100 Rs. Bond.
- (w) Scanned copy of Declaration Signed by Contractor in the Format Attached in Section 8.
- (x) This information shall be given by the contractor in Envelope No. 1 correctly and completely otherwise his Envelope No. 2 will not be opened.

4.3. Bids from Pre-registered consortiums allowed only for electrical & HVAC Work. Registered in stamp office will be accepted as Joint Ventures.

**A) To qualify for award of the contract, each bidder in its name should have in the last Seven years as referred to in Appendix.**

To qualify for award of the contract, each Tenderer in his name should have in the **Seven** years.

- (a) Achieved a minimum annual financial turnover during last **Seven** years for **Rs. 2440.00 lakhs** in any one year. In support of this, attested copy of Annual Audit Report certified by the Chartered Accountant should be produced.
- (b) Satisfactorily completed ( from start to finish ) during the last **Seven** years as a prime contractor of at least three similar works value not less than for( **Civil Rs. 1641.00 lakhs** ) (40%) ( **Electrical Rs.122.00 lakhs** ) (40%) or two similar works value not less than for ( **Civil Rs. 2052.00 lakhs** ) (50%) ( **Electrical Rs.153.00 lakhs** ) (50%) or one similar works value not less than for ( **Civil Rs. 3283.00 lakhs** ) (80%) ( **Electrical Rs.245.00 lakhs** ) (80%) is not more than one contract of 2022-2023 price level. Financial turnover and cost of completed works of previous years shall be given weightage of 10% per year based on Rupee value to bring them to 2022-2023 price level.

### Special Condition

- (i) Green certified building  
The contractor should have satisfactory completed at least one building with 4 stars & above rated Building which is certified from GRIHA / IGBC/ LEEDS. Only completed & certified building will be considered.
- (c) Quantity executed in any one year (during last five years) the following minimum quantities of work (Approximately 30% of the tendered quantity) **as indicated in Appendix.**
- (d)

#### 1. Civil work:

Sr. No.	Item of work	Unit	30% QTY
1	Concrete M-20 Grade & Above	Cum	2898.45
2	Brickwork+AAC Blockwork+Conc.blockwork	Cum	816.94
3	TMT- Fe - 500 Steel	MT	271.17
4	Plaster	SQM	2910.90
5	Flooring	SQM	4070.43
6	Structural steel	MT	10.35

**Tender for Construction of CGG –Residential & Academic Building at Baner Yashada Pune**

<b>7</b>	<b>Galvanised PUF Sandwich panel roof</b>	<b>SQM</b>	<b>124.30</b>
----------	---	------------	---------------

**2. Electrical Work:**

<b>Sr. no</b>	<b>Item</b>	<b>Quantity</b>	<b>Unit</b>
1.	SITC of point wiring	295.00	Number
2.	SITC Of 15 Passenger Lifts Or Above Capacity Passenger Lifts-	2.00	Number
3.	Supplying, erecting & marking SPMCB 6A to 32A, C-series	150	Number
4.	Supplying, erecting & terminating 2 pair telephone copper cable 0.5 mm dia	350	meter
5.	Supplying, installing, testing and commissioning 5 Star split type variable speed Inverter technology room Air conditioning unit 1.5 TR capacity having minimum ISEER value of 5.4	50	Number

- (d) Prime Contractor should have Valid **Electrical Contractor License** issued by I.E.& L Deptt. Govt.of Maharashtra
- (e) Prime Contractor should have OEM or valid **authorized dealer /Distributorship for Air conditioning unit** of proposed make / brands OR Valid MAF (Manufacturer authorizations Form) of Air conditioning unit of proposed make / brands. ( prescribed format attached.)
- (f) Prime Contractor should have valid license of **Fire Detection & Fire Suppression System Viz Smoke detection, Heat Detection, UV, Beam detector, manual call point and fire alarm system.** of appropriate class issued by director of Maharashtra fire services Mumbai
- (g) Prime Contractor should have OEM or valid **authorized dealer /Distributorship for CCTV Surveillance System** of proposed make / brands OR Valid MAF (Manufacturer authorizations Form) of **CCTV Surveillance System** of proposed make / brands. ( prescribed format attached.)
- (h) Prime Contractor should have OEM or valid **authorized dealer /Distributorship for On Grid Solar Roof Top System** of proposed make / brands OR ValidMAF (Manufacturer authorizations Form) of **On Grid Solar Roof Top System** of proposed make / brands. ( prescribed format attached.)
- (i) Prime Contractor should have Valid **Lift License for manufacturing and maintenance lifts** of proposed make / brands. issued by I.E.& L Deptt. Government of Maharashtra (List Of Preferred make / brands attached)
- (j) Bidder submit the details of Technical Personnel on the roll of the Bidder who will be exclusively spared for this work as per Statement No. IV.
- (k) Bidder submit the Undertaking that they have not been Blacklisted / Banned / Suspended (rescribed form attached)

**(B) Each Bidder should further demonstrate :**

- (a) Availability (**either owned or leased**) of the following key and critical equipment for this work.

**NOTE : (To be deleted for works upto 1.50 Crore, above Rs.1.50 Crore applicable )**

## **Tender for Construction of CGG –Residential & Academic Building at Baner Yashada Pune**

Based on the studies, carried out by the Engineer the minimum suggested major equipment to attain the completion of works in accordance with the proscribed construction schedule are shown in the **Annexure-I**

The bidder should however undertake their own studies and furnish with their bid, a detailed construction planning and methodology supported with layout and necessary drawings and calculations (detailed) as stated in clause 4.3.(1) above to allow the employer to review their proposals. The numbers, types and capacities of each plant/equipment shall be shown in the proposals along with the cycle time for each operation for the given production capacity to match the requirements.

**(b)** availability for this work of personnel with adequate experience as required; as per **Annexure-II**

**(c)** liquid assets and / or availability of credit facilities of no less than amount indicated in Appendix. (Credit lines/letter of credit/certificates from Banks for meeting the funds requirement etc. usually the equivalent of the estimated cash flow for 3 months in peak construction period )

**(For woks above Rs. 1.5 Crore)**

**C.** **To qualify for a package of contracts made up of this and other** contracts for which bids are invited in the IFB, the bidder must demonstrate having experience and resources sufficient to meet the aggregate of the qualifying criteria for the individual contracts.

Sub-contractors experience and resources shall not be taken into account in determining the bidder's compliance with the qualifying criteria except to the extent stated in 4.5 (A)(a) above.

Bidders who meet the minimum qualification criteria will be qualified only if their available bid capacity is more than the total bid value. The available bid capacity will be calculated as under:

## Tender for Construction of CGG –Residential & Academic Building at Baner Yashada Pune

**Assessed Available Bid capacity = (A \* N \* 2 - B),**

Where,

**A** = Maximum value of Annual Financial turnover in any one year during the last FIVE Years ( updated to 2022-23 level) as of Previous years shall be given weightage 10% per year.

**N** = Number of years prescribed for completion of works for which bid are invited.

**B** = Value of 2022-23 price level, of existing commitments and ongoing work to be completed during the next **18 months**.

**Note :** The statement showing the value of Financial Turnover and ongoing work as well as the stipulated period of completion remaining for each of the works listed should be countersigned by the Engineer-in-charge, not below the rank of an Executive Engineer.

Even though the applicants meet the above qualifying criteria, they are subject to be disqualified if they have:

- made misleading or false representation in the form, statements submitted; and / or
- Records of poor performance such as abandoning the works, not properly completing the contract, inordinate delays in completion, litigation history, or financial failures etc and or
- Participated in the previous bidding for the same work and had quoted unreasonably high prices and could not furnish rational justification to the employer.

### **One Bid per Bidder**

Each bidder shall submit only one online - bid for one package. A bidder who submits or participates in more than one Bid (other than as a sub contractor or on cases of alternatives that have been permitted or requested) will cause all the proposals with the Bidder's participation to be disqualified.

### **Cost of Bidding**

The bidder shall bear all costs associated with the preparation and submission of his bid and the Employer will in no case be responsible and liable for those costs.

### **Site Visit**

The Bidder, at the Bidder's own responsibility and risk is encouraged to visit and examine the Site of Works and its surrounding and obtain all information that may be necessary for preparing the Bid and entering into a contract for construction of the Works. The cost of visiting the Site shall be at the Bidder's own expense.



**B.****BIDDING DOCUMENTS****Content of Bidding Documents**

The set of bidding documents comprises the documents listed below and addenda issued in accordance with Clause 10.

<b>Section</b>	<b>Particulars</b>	<b>Volume No.</b>
	Invitation for Bids	
1	Instruction to Bidders	I
2	Qualification information and other forms	
3	Conditions of Contract	
4	Contract Data	
5	Technical Specification	II
6	Form of Bid	III
7	Bill of Quantities	
8	Securities and other forms	
9	Drawings	IV
10	Documents to be furnished by bidder	V

Complete bidding document containing **volumes - I, II, III and IV are available to the bidders on e-tendering portal** <https://mahatenders.gov.in> Documents to be furnished by the bidder in compliance to section 2 will be by him and uploaded online as “ **in “general document ”** (Refer clause 12) .

The bidder is expected to examine carefully all instructions, conditions of contract, contract data, forms, terms, technical specifications, bill of quantities, forms, Annexes, Appendixes and drawings in the Bid Document. Failure to comply with the requirements of Bid Documents shall be at the bidder's own risk. Pursuant to clause 26 hereof, bids which are not substantially responsive to the requirements of the Bid Documents shall be rejected.

**Clarification of Bidding Documents**

A prospective bidders requiring any clarification of the bidding documents may notify the Employer in writing or by Fax /email at the Employer's address indicated in the invitation to bid before the date and time of the pre-bid meeting specified in the Tender Schedule. The Employer will respond to any request for clarification which he received, earlier than 3 days prior to the Bid due date. Copies of the Employer's response will be uploaded in “edit attachment option” of concern

## **Tender for Construction of CGG –Residential & Academic Building at Baner Yashada Pune**

tender on e-tendering portal and viewable to all tenderer, including a description of the enquiry but without identifying its source.

### **Pre-bid meeting**

The bidder or his official representative is invited to attend a pre-bid meeting which will take place at the address, venue, time and date as indicated in **NIT**.

The purpose of the meeting will be to clarify issues and to answer questions on any matter that may be raised at that stage.

The bidder is requested to submit any questions in writing by fax or by e-mail to reach the Employer well before the date & time of the pre-bid meeting.

Minutes of the meeting, including the text of the questions raised (without identifying the source of enquiry) and the responses given will be transmitted by uploading on e-tender portal without delay for information to all intended bidder. Any modifications of the bidding documents listed in sub clause 8.1 which may become necessary as a result of the pre-bid meeting shall be made by the Employer exclusively through the issue of an Addendum pursuant to clause 10 and not through the minutes of the pre-bid meeting.

Non-attendance at the pre-bid meeting will not be a cause for disqualification of a bidder.

### **Amendment of Bidding Documents**

Before the deadline for submission of bids online, the Employer may modify the bidding documents by issuing online addenda.

Any addendum thus issued shall be part of the bidding documents and shall be uploaded in “edit attachment option” of concern tender on e-tendering portal and viewable to all tenderer, including a description of the enquiry but without identifying its source. The uploading of addendum on e-tendering portal shall be deemed to be acknowledgement of receipt of each addendum to the employer. The Employer will assume no responsibility for non cognizance by the bidders.

To give prospective bidders reasonable time in which to take an addendum into account in preparing their bids, the Employer may, at his discretion, extend as necessary the deadline for submission of bids, in accordance with Sub-Clause 20.2 below.

**C.****PREPARATION OF BIDS****Language of the Bid**

All documents relating to the bid shall be in the English language.

**Documents Comprising the Bid**

The bid to be submitted by the bidder as Volume V of the bid document (refer Clause 8.1) shall be in two separate parts:

**Part I** shall be named "Technical Bid" and shall comprise

- (i) Bid Security in the form specified in section 8
- (ii) Qualification Information and supporting documents as specified in Sect. 2.
- (iii) Certificates, undertakings, affidavits as specified in Section 2.
- (iv) Any other information pursuant to Claus 4.2 of these instructions.
- (v) Undertaking that the bid shall remain valid for the period specified in Cl 15.1.
- (vi) Acceptance/ non acceptance of Dispute Review Expert proposed in Cl. 36.1.

**Part II** shall be named "**Financial Bid**" and shall comprise

- (i) Form of Bid a specified in Section 6.
- (ii) Priced Bill of Quantities for items specified in Section 7.
- (iii) Bank Guarantee/Demand Draft of Additional Performance Security Depositspecified in cl. 16.7

The bidder shall prepare two copies of the bid, marking them 'Original' and 'Copy' respectively.

Following documents, which are not submitted with the bid, will be deemed to be part of the bid.

<b>Section</b>	<b>Particulars</b>	<b>Volume No.</b>
	Invitation for Bids (IFB)	
<b>1</b>	Instruction to Bidders	Volume I
<b>3</b>	Conditions of Contract	
<b>4</b>	Contract Data	
<b>5</b>	Specifications	Volume II
<b>6</b>	Drawings	Volume IV

## Tender for Construction of CGG –Residential & Academic Building at Baner Yashada Pune

### **Bid Prices.**

The contract shall be for the whole works as described in Sub-Clause 1.1, based on the priced Bill of Quantities submitted by the Bidder.

The bidder shall fill rates in 'Rate Column of BOQ Sheet' in figures only for all items of the Works described in the Bill of Quantities. Items for which no rate is entered by the bidder will not be paid for by the Employer when executed and shall be deemed covered by the other rates and prices in the Bill of Quantities. Corrections of any, shall be made by crossing out, initialing, dating and rewriting.

All duties, taxes and other levies payable by the contractor under the contract, or for any other cause shall be included in the rates, prices and total Bid Price submitted by the Bidder.

The rates and prices quoted by the bidder shall be fixed for the duration of the contract and shall not be subject for adjustment of any account.

### **Currencies of Bid and Payment.**

The unit rates and the prices shall be quoted by the bidder entirely in Indian Rupees. All payments shall be made in Indian Rupees.

### **Bid Validity.**

Bids shall remain valid for a period not less than **120 days** after the deadline date for bid submission specified in Clause 20. A bid valid for a shorter period shall be rejected by the Employer as non-responsive. In case of discrepancy in bid validity period between that given in the undertaking pursuant to Clause 12.1 (v) and the Form of Bid submitted by the bidder, the latter shall be deemed to stand corrected in accordance with the former and the bidder has to provide for any additional security that is required.

In exceptional circumstances, prior to expiry of the original time limit, the Employer may request that the bidders may extend the period of validity for a specified additional period. The request and the bidder's responses shall be made in writing or by cable. A bidder may refuse the request without forfeiting his bid security. A bidder agreeing to the request will not be required or permitted to modify his bid but will be required to extend the validity of his bid security for a period of the extension, and in compliance with Clause 16 in all respects.

~~\* In the case of contracts in which the Contract Price is fixed (not subject to price adjustment), in the event that the Employer requests and the Bidder agrees to an extension of the validity period, the contract price, if the bidder is selected for award shall be the bid price corrected as follows:  
(Delete if the contract is for more than 12 months period)~~

~~— The price shall be increased by the factor of 0.2% for each week or part of a week that has elapsed from the expiration of the initial bid validity to the date of issue of letter of acceptance to the successful Bidder.~~

## Tender for Construction of CGG –Residential & Academic Building at Baner Yashada Pune

~~Bid evaluation will be based on the bid prices without taking into consideration the above correction~~

### **Bid Security**

The Bidder shall furnish, as part of his Bid, a Bid security in the amount as shown in column 4 of the table of IFB for this particular work. This bid security shall be in favor of Employer as named in Appendix and shall be in the form as set forth in Sr. No. I - e-tendering procedures under Instructions to Bidders (ITB). **Bid Security Shall be paid via online mode on using Payment gateway mode from the authorized account in the name of the bidder only.**

~~Bank guarantees (and other instruments having fixed validity) issued as surety for the bid shall be valid for 45 days beyond the validity of the bid.~~

Any bid not accompanied by an acceptable Bid Security and not secured as indicated in Sub-Clauses 16.1 and 16.2 above shall be rejected by the Employer as non-responsive.

The Bid Security of unsuccessful bidders will be refunded **within 28 days of the end of the Bid validity period specified in sub clause 15.1**

The Bid Security of the successful bidder will be discharged when the bidder has signed the Agreement and furnished the required Performance Security.

The Bid Security may be forfeited

- a) if the Bidder withdraws the Bid after Bid opening during the period of Bid validity;
- b) If the Bidder does not accept the correction of the Bid Price, if applicable; or
- c) in the case of a successful Bidder, if the Bidder fails within the specified time limit to
  - i. Sign the Agreement; or
  - ii. furnish the required Performance Security.

### **Additional Security Deposit (Performance Security)**

**(i) The contractor shall have to pay the Additional Performance Security Deposit within 8 days from the date of tender opening**, in the form of Demand Draft / Bank Guarantee of any Nationalized or Scheduled Bank in favor of the **Registrar, YASHADA, Pune** payable at **Pune**. Non submission of Additional performance security or submission of less amount of the Additional Performance Security within stipulated period, shall be liable to summarily rejection of his tender.

**(ii)** Time limit for submission of Additional Performance Security Deposit within 8 days from the date of tender opening, shall not be extended in any case at any level.

**(iii)** If the lowest bidder (L1) fails to submit Additional Performance Security Deposit within stipulated time limit of 8 days from the date of tender opening, his offer shall be considered as non-responsive and treated as cancelled. In that case the Second Lowest Bidder (L2) shall be asked to submit Additional Performance Security Deposit the form of Demand Draft / Bank Guarantee of any Nationalized or Scheduled Bank, if he is (L2) is ready to reduce his offer and

**Tender for Construction of CGG –Residential & Academic Building at Baner Yashada Pune**

agrees to carry out the work below the percentage rate quoted by the first lowest bidder(L1).

**(iv)** The amount of the Additional Performance Security shall be calculated by the tenderer in accordance with the following manner.

If the tenderer has quoted below the estimated rates, the Additional Performance Security shall be paid additionally as mentioned below.

If the offer submitted is below cost put to Tender by upto 10% of the estimated cost put to tender	1% of the estimated cost put to tender
If below by more than 10% to 15% of the estimated cost put to tender	1% of the estimated cost put to tender plus an amount equal to the percentage by which the offer is below 10% of the estimated cost put to tender. (e.g. if the offer is 15.00% below, the Performance Security will be $1\%+(15.00-10) = 6.00\%$ of the estimated cost put to tender.
If below by more than 15% of the estimated cost put to tender	2% of the estimated cost remaining amount put to tender plus an amount equal for to the percentage by which the offer is below 15% of the estimated cost put to tender. e.g. 1 - if the offer is 16% below, the performance security will be $(16-15 = 1 \times 2 = 2) 6+2 = 8\%$ of the estimated cost put to tender. e.g. 2 - if the offer is 19% below, the performance security will be $(19-15 = 4 \times 2 = 8) 6+8 = 14\%$ of the estimated cost put to tender. e.g. 3 - if the offer is 25% below, the performance security will be $(25-15 = 10 \times 2 = 20) 6+20 = 26\%$ of the estimated cost put to tender. e.g. 4 - if the offer is 26.25% below, the performance security will be $(26.25-15 = 11.25 \times 2 = 22.50) 6+22.50 = 28.50\%$ of the estimated cost put to tender.

The Bank guarantee shall be valid beyond 28 days from the date of expiry of the Defect

## **Tender for Construction of CGG –Residential & Academic Building at Baner Yashada Pune**

### **Liability Period.**

In case it is found that the documents/Demand draft/Bank Guarantee submitted by the tenderer are false or misleading, his earnest money shall be forfeited and additionally legal action may be initiated against the tenderer.

The work order shall be given to the concerned tenderer after the clearance of the Demand Draft / Bank Guarantee.

### **Refund of Additional Performance Security.**

**The additional Performance Security shall be returned immediately upon satisfactory completion of work; the certificate of which shall be issued by the Executive Engineer before releasing the additional performance security..**

In case of the lowest successful Bidder (L-1) does not pay the additional performance security within stipulated time (within 8 days from the date of opening of financial bid), their Earnest money deposited will be forfeited.

### **Alternative Proposals by Bidders**

Bidders shall submit offers that fully comply with the requirements of the bidding documents, including the conditions of contract (including mobilization advance or time for completion), basic technical design as indicated in the drawing and specifications. Conditional offer or alternative offers will not be considered further in the process of tender evaluation.

### **Format and Signing of Bid**

The bidder shall be required to Submit the bid on line and upload the Technical and Financial Bid by using his Class III Digital Signature of the person who is authorised to submit the Bid, uploaded

The documents are required to be uploaded in “Edit Attachment Option” online. The bidder is required to ensure that the size of each document does not exceed 5 MB.

In case Bidder would like to provide any Supporting Document(s) as a part of the Bid Response, the Bidder may upload such Supporting Document(s) under “General Document Option” of tender.

- 19.0 Vide G.R. no. Com-2020/ . . 14/W , 5 7 14/01/2021, Payment of Security Deposit by Bank Guarantee - online Bank Guarantee verification its the contractor wishes to deposit security deposit by Bank Guarantee after tender approval, then it is mandatory for contractor to verify the Bank Guarantee by paying verification fees of Rs. 1,000/- + GST through link provided below - <http://onlinebg@mahaYashada.com>.

**D.**

**SUBMISSION OF BIDS**

**Submission of Bids**

The Bidder shall refer to Section' **Guidelines to Bidders on the operations of Electronic Tendering System of YASHADA'** for details.

The inner, outer, and separate envelopes containing Technical and Financial Bids shall (a) be addressed to the Employer at the address given in Appendix

**Deadline for Submission of the Bids**

The complete Bids (including Technical and Financial) must be received on e-tendering portal not later than the date indicated in NIT.

The Employer may extend the deadline for submission of bids by issuing an amendment in accordance with Clause 10, in which case all rights and obligations of the Employer and the bidders previously subject to the original deadline will then be subject to the new deadline.

In addition to online uploading of document the bidder shall have to submit one set of hard copy of bid document bound with the volume containing the "Technical Bid" and "Financial Bid" in separate Envelope and clearly marked at any of the specified location (office) herein. The Bidder shall seal the technical and financial bid in separate envelopes duly marking the envelopes. This to envelopes (call as inner envelopes) shall then be put inside one outer envelope one hard copy e-tender uploaded on e-portal website should be submitted within 72 hours after "Bid lock". In the event of the specified date for the submission of hard copy declared a holiday by the employer, the bids will be received upto the appointed time on the next working day. **However, hard copies shall be opened only if there are problems in opening / downloading of tender offers.**

Hard copy can be submitted to any of the locations (office) specified herein.

**The Registrar, Yashada, Pune .**

**21. Late Bids**

Any bidder submitting the Bid Security and Cost of Tender Fee document in Original after deadline prescribed in NIT will not be accepted and returned. The bid (including technical and financial) will not be opened. The complete Bids (including Technical and Financial) must be received by the Employer online not later than the deadline indicated in the schedule.



**22. Modification and Withdrawal of Bids**

Bidders may modify or withdraw their bids by giving notice in writing before the deadline prescribed in Clause 20 or pursuant to Clause 23.

Each Bidder's modification or withdrawal notice shall be prepared, sealed, marked, and delivered in accordance with Clause 18 & 19, with the outer and inner envelopes additionally marked "MODIFICATION" or "WITHDRAWAL", as appropriate.

No bid may be modified after the deadline for submission of Bids except if pursuant to Cl. 23.

Withdrawal or modification of a Bid between the deadline for submission of bids and the expiration of the original period of bid validity specified in Clause 15.1 above or as extended pursuant to Clause 15.2 may result in the forfeiture of the Bid security pursuant to Clause 16.

## **E. BID OPENING AND EVALUATION**

### **23. Bid Opening**

The Employer will open all the Bids received (except those received late) in the presence of the Bidders or their representatives who choose to attend at time, date and the place specified in Appendix in the manner specified in Clause 20 In the event of the specified date of Bid opening being declared a holiday for the Employer, the Bids will be opened at the appointed time and location on the next working day.

Envelopes marked "**WITHDRAWAL**" shall be opened and read out first. Bids for which an acceptable notice of withdrawal has been submitted pursuant to Clause 22 shall not be opened-

The Online "Technical Bid" shall be opened first. The amount, form and validity of the bid security furnished with each bid will be announced. If the bid security furnished does not conform to the amount and validity period as specified in the Invitation for Bid (ref. Column 5 and paragraph 3), and has not been furnished in the form specified in Clause 16, the remaining technical bid online will not be opened .

- (i) Subject to confirmation of the bid security by the issuing Bank, the bids accompanied with valid bid security will be taken up for evaluation with respect to the Qualification Information and other information furnished in Part I of the bid pursuant to Clause 12.1.
- (ii) After receipt of confirmation of the bid security, the bidder will be asked in writing (usually within 10 days of opening of the Technical Bid) to clarify or modify his technical bid, if necessary, with respect to any rectifiable defects.
- (iii) The bidders will respond in not more than 7 days of issue of the clarification letter/online communication, which will also indicate the date, time and venue of opening of the financial Bid.
- (iv) Immediately (usually within 3 or 4 days) on receipt of these clarifications the Evaluation Committee will finalize the list of responsive bidders whose financial bids are eligible for consideration.

At the time of Online opening of "Financial Bid", the names of the bidders who were found responsive in accordance with Clause 23.4 (iv) will be announced. The bids of only these bidders will be opened. The remaining bids will be rejected online. The e-tendering system shall communicate to the rejected bidders along with reasons for their rejection. The responsive Bidder's names, the Bid prices, the total amount of each bid, will be announced by the Employer at the opening.

In case bids are invited in more than one package, the order for opening of the "Financial Bid" shall be that in which they appear in the "Invitation For Bid".

## **Tender for Construction of CGG –Residential & Academic Building at Baner Yashada Pune**

The Employer shall prepare minutes of the Bid opening, including the information disclosed to those present in accordance with Sub-Clause 23.6. Result of financial bids of all the Bidders shall be made available on e-tendering portal.

In case e-submission of bid could not be opened for some reasons then only Hard copy submitted by those bidders will be opened else all the bids should be opened on line only.

### **Process to be Confidential**

Information relating to the examination, clarification, evaluation and comparison of Bids and recommendations for the award of a contractor shall not be disclosed to Bidders or any other persons not officially concerned with such process until the award to the successful Bidder has been announced. Any effort by a Bidder to influence the Employer's processing of Bids or award decisions may result in the rejection of his Bid.

### **Clarification of Financial Bids**

To assist in the examination, evaluation and comparison of Bids, the Employer may, at his discretion, ask any Bidder for clarification of his bid, including breakdowns of unit rates. The request for clarification and the response shall be in writing or by mail but no change in the price or substance of the Bid shall be sought, offered, or permitted except as required to confirm the correction of arithmetic errors discovered by the Employer in the evaluation of the Bids in accordance with Clause 27

Subject to sub-clause 25.1, no Bidder shall contact the Employer on any matter relating to his bid from the time of the bid opening to the time the contract is awarded.

Any effort by the Bidder to influence the Employer in the Employer's bid evaluation, bid comparison or contract award decisions may result in the rejection of the Bidder's bid.

### **Examination of Bids and determination of Responsiveness**

During the detailed evaluation of "Technical Bids" the Employer will determine whether each Bid (a) meets the eligibility criteria defined in clause 3 and 4. (b) has been properly signed, (c) is accompanied by the required securities and, (d) is substantially responsive to the requirements of the Bidding documents. During the detailed evaluation of the "Financial Bid", the responsiveness of the bids will be further determined with respect to the remaining bid conditions, i.e. priced bill of quantities, technical specifications and drawings.

A substantially responsive "Financial Bid" is one, which conforms to all the terms, conditions and specifications of the Bidding documents, without material deviation or reservation. A material deviation or reservation is one (a) which affects in any substantial way the scope, quality, or performance of the Works, (b) which limits in any substantial way, inconsistent, with the Bidding documents, the Employer's rights or the Bidder's obligations under the Contract, or (c) whose

## **Tender for Construction of CGG –Residential & Academic Building at Baner Yashada Pune**

rectification would affect unfairly the competitive position of other Bidders presenting substantially responsive Bids.

If a “Financial Bid” is not substantially responsive, it will be rejected by the Employer, and may not subsequently be made responsive by correction or withdrawal of the non-conforming deviation or reservation.

### **Correction of Errors**

“Financial Bids” determined to be substantially responsive will be checked by the Employer for any arithmetic errors. Errors will be corrected by the Employer as follows :

- (a) where there is a discrepancy between the rates in figures and in words, the rate in words will govern ; and
- (b) where there is a discrepancy between the unit rate and the line item total resulting from multiplying the unit rate by the quantity, the unit rate as quoted will govern.

The amount stated in the “Financial Bid” will be corrected by the Employer in accordance with the above procedure and the bid amount adjusted with the concurrence of the Bidder in the following manner :

- (a) If the Bid price increases as a result of these corrections, the amount as stated in the bid will be the ‘bid price’ and the increase will be treated as rebate;
- (b) If the bid price decreases as a result of the corrections, the decreased amount will be treated as the ‘bid price’.

Such adjusted bid price shall be considered as binding upon the Bidder. If the Bidder does not accept the corrected amount the Bid will be rejected and the Bid Security may be forfeited in accordance with Sub-Clause 16.6(b).

### **28.0 Deleted**

### **29.0 Evaluation and Comparison of Financial Bids**

The Employer will evaluate and compare only the Bids determined to be substantially responsive in accordance with Sub-Clause 26.2.

In evaluating the Bids, the Employer will determine for each Bid the evaluated Bid Price by adjusting the Bid Price as follows:

- a) Making any correction for errors pursuant to Clause 27; or
- (b) Making an appropriate adjustments for any other acceptable variations, deviations; and
- (c) Making appropriate adjustments to reflect discounts or other price modifications offered in accordance with Sub-Clause 23.6.

The Employer reserves the right to accept or reject any variation or deviation. Variations and

## **Tender for Construction of CGG –Residential & Academic Building at Baner Yashada Pune**

deviations and other factors, which are in excess of the requirements of the Bidding documents or otherwise result in unsolicited benefits for the Employer shall not be taken into account in Bid evaluation.

~~The estimated effect of the price adjustment conditions under Clause 47 of the Conditions of contract, during the period of implementation of the Contract, will not be taken into account in Bid evaluation.~~

If the Bid of the successful Bidder is seriously unbalanced in relation to the Engineers estimate of the cost of work to be performed under the contract, the Employer may require the Bidder to produce detailed price analysis for any or all items of the Bill of Quantities, to demonstrate the internal consistency of those prices with the construction methods and schedule proposed. After evaluation of the price analysis, the Employer may require that the amount of the performance security set forth in Clause 34 be increased at the expense of the successful Bidder to a level sufficient to protect the Employer against financial loss in the event of default of the successful Bidder under the Contract.

A bid which contains several items in the Bill of Quantities which are unrealistically priced low and which cannot be substantiated satisfactorily by the bidder, may be rejected as non-responsive.

### **30.0 Deleted.**

**E.**

**AWARD OF CONTRACT**

**31. Award Criteria**

Subject to Clause 32, the Employer will award the Contract to the Bidder whose Bid has been determined.

- (i) To be substantially responsive to the Bidding documents and who has offered the lowest evaluated Bid price and
- (ii) To be within the available bid capacity adjusted to account for his bid price which is evaluated the lowest in any of the packages opened earlier than the one under consideration.

In no case the contract shall be awarded to any bidder whose available bid capacity is less than the evaluated bid price, even if the said bid is the lowest evaluated bid. The contract will in such cases be awarded to the next lowest bidder at his evaluated bid price.

**32. Employers Right to Accept any Bid and to reject any or all Bids.**

Notwithstanding Clause 31, the Employer reserves the right to accept or reject any bid, and to cancel the Bidding process and reject all Bids, at any time prior to the award of contract, without thereby incurring any liability to the affected Bidder or Bidders or any obligation to inform the affected Bidder or Bidders of the grounds for the Employer's action.

**33. Notification of Award and Signing of Agreement**

The Bidder whose Bid has been accepted will be notified of the award by the Employer prior to expiration of the Bid validity period by email, telex or facsimile confirmed by registered letter. This letter (hereinafter and in the Conditions of Contract called the "Letter of Acceptance") will state the sum that the Employer will pay the Contractor in consideration of the execution, completion and maintenance of the Works by the Contractor as prescribed by the Contract (hereinafter and in the Contract called the "Contract Price")

The notification of award will constitute the formation of the Contract, subject only to the furnishing of a performance security in accordance with the provisions of Clause 34 and prevailing stamp duty (current rate - 0.1% of the agreement cost) applicable at the time of signing of agreement.

The Agreement will incorporate all agreements between the Employer and the successful Bidder.

It will be signed by the Employer and sent to the successful Bidder, within 28 days following the notification of award along with the Letter of Acceptance. Within 21 days of receipt, the successful Bidder will sign the Agreement and deliver it to the Employer.

Upon the furnishing by the successful Bidder of the Performance Security, the Employer will promptly notify the other Bidders that their Bids have been unsuccessful.

## **Tender for Construction of CGG –Residential & Academic Building at Baner Yashada Pune**

### **34. Performance Security:**

Within 10 days of receipt of the letter of Acceptance, the successful bidder/contractor shall deliver to the employer a performance Security in any of the forms given below for an amount equivalent to **2%** of the contract price for a contract period of **18 Months** plus **120 Months** defect liability period total **138 Months** plus additional security for unbalanced bids in accordance with clause 29.5 of ITB and clause 52 of conditions of contract :

- i) Bank Guarantee in the form given in section 8
- ii) National Savings Certificate / Fixed Deposit Receipts of Nationalised Bank/Scheduled Bank duly hypothecated in name of **Registrar, YASHADA, Pune**

If the performance security is provided by the successful Bidder in the form of a Bank Guarantee, it shall be issued either (a) at the Bidder's option, by a Nationalized or Scheduled Indian bank. or (b) by a foreign bank located in India and acceptable to the Employer

Failure of the successful bidder to comply with the requirement of Sub-Clause 34.1 shall constitute sufficient ground for cancellation of award and forfeiture of the Bid Security.

### **35. Advance Payment and Security**

The Employer will provide an Advance Payment on the Contract Price as stipulated in the Conditions of Contract, subject to maximum amount, as stated in the Contract data.

### **36.0 Dispute Review Expert**

36.1. The Employer proposes that [name of proposed Dispute Review Expert as indicated in Appendix] be appointed as Dispute Review Expert under the Contract, at a daily fee as indicated in Appendix plus reimbursable expenses. If the Bidder disagrees with this proposal, the Bidder should so state in the Bid. If in the Letter of Acceptance, the Employer has not agreed on the appointment of the Dispute Review Expert, the Dispute Review Expert shall be appointed by the Council of Indian Roads Congress at the request of either party.

36.2 For works costing above Rs.5 Crore the procedure for arbitration will be as per G.R of Law & Judiciary Department issued vide Sankirn- 2016/C.R. 20/ Ka-19 dt. 13/10/2016 regarding “ Institutional Arbitration Policy”.

### **37.0 Corrupt or Fraudulent Practices**

37.1. The Employer will reject a proposal for award if it determines that the Bidder Recommended for award has engaged in corrupt or fraudulent practices in competing for the Contract in question and will declare the firm ineligible. either indefinitely or for a stated Period of time, to be awarded a contract with Government of Maharashtra / State YASHADA and any other agencies, if it at any time determines that the firm has engaged in Corrupt or fraudulent practices in competing for the contractor, or in execution.

37.2 Furthermore, Bidders shall be aware of the provision stated in Sub-Clause 23.2 and Sub- Clause 59.2 of the Conditions of Contract.

**APPENDIX TO ITB**

		Clause Reference With respect to Section – I.
1.	Name of the Employer is <b>YASHADA, PUNE</b>	[ Cl. 1.1]
2.	Current year 2023-2024. The last <b>Seven</b> years 2022-2023 2021-2022 2020-2021 2019-2020 2018-2019 2017-2018 2016-2017	[Cl. 4.4 A(a)]
3.	The Annual Financial Turn Over Amount is <b>Rs 2440.00 Lakhs during any of last Seven years ( 50% of the Tender estimated cost )</b>	[Cl. 4.4 A(a)]
4.	<p>(a) Achieved a minimum annual financial turnover during last <b>Seven</b> years for <b>Rs. 2440.00 lakhs</b> in any one year. In support of this, attested copy of Annual Audit Report certified by the Chartered Accountant should be produced.</p> <p>(b) Satisfactorily completed ( from start to finish ) during the last <b>Seven</b> years as a prime contractor of at least three similar works value not less than for( <b>Civil Rs. 1641.00 lakhs</b> ) (40%) ( <b>Electrical Rs.122.00 lakhs</b> ) (40%) or two similar works value not less than for ( <b>Civil Rs. 2052.00 lakhs</b> ) (50%) ( <b>Electrical Rs.153.00 lakhs</b> ) (50%) or one similar works value not less than for ( <b>Civil Rs. 3283.00 lakhs</b> ) (80%) ( <b>Electrical Rs.245.00 lakhs</b> ) (80%) is not more than one contract of 2022-2023 price level. Financial turnover and cost of completed works of previous years shall be given weightage of 10% per year based on Rupee value to bring them to 2022-2023 price level.</p>	[Cl. 4.4 A(c)]



**Tender for Construction of CGG –Residential & Academic Building at Baner Yashada Pune**

5. **Quantity of work are** : Executed in any one year (during last **Seven** years) the following minimum quantities of work (Approximately 30% of tendered quantities) [Cl. 4.4 A(c)]

**a. Civil Work**

Sr. No.	Item of work	Unit	30% QTY
1	Concrete M-20 Grade & Above	Cum	<b>2898.45</b>
2	Brickwork+AAC Blockwork+Conc. blockwork	Cum	<b>816.94</b>
3	TMT- Fe - 500 Steel	MT	<b>271.17</b>
4	Plaster	SQM	<b>2910.90</b>
5	Flooring	SQM	<b>4070.43</b>
6	Structural steel	MT	<b>10.35</b>
7	Galvanised PUF Sandwich panel roof	SQM	<b>124.30</b>

[Cl.4.2(h)]

**Electrical Work:**

Sr. no	Item	Quantity
1.	SITC of point wiring	295.00
2.	SITC Of 15 Passenger Lifts Or Above Capacity Passenger Lifts-	2.00
3.	Supplying, erecting & marking SPMCB 6A to 32A, C-series	150
4.	Supplying, erecting & terminating 2 pair telephone copper cable 0.5 mm dia	350
5.	Supplying, installing, testing and commissioning 5 Star split type variable speed Inverter technology room Air conditioning unit 1.5 TR capacity having minimum ISEER value of 5.4	50

Note : The quantity certificate should be signed by not below the rank of Executive Engineer.

- 6 The cost of electric works is Rs. **3,06,26,956/-** [Cl. 4.4 A(d)]
- 7 The cost of water supply/sanitary works is Rs. **2,84,09,580/-** [Cl. 4.4 A(e)]
- 8 **Liquid assets and/or availability of credit facilities is 10% Rs. 4,88,01,221/-** [Cl.4.4(B)(c)]
- 9 Undertaking by the Bidder @ 25% - Rs. **12,20,03,053/-**
- 10 **Price level of financial year 2022-23** [Cl. 4.6]
11. **The Pre-bid meeting will take place at Office of Director General, YASHADA, Pune on 12-02-2024 at 12.00 Hrs.** [Cl. 9.2.1]

**Tender for Construction of CGG –Residential & Academic Building at Baner Yashada Pune**

12. The technical bid will be opened online at the Office of the Registrar, YASHADA, Pune **28-02-2024** (if possible)
13. Address of the Employer : **Registrar, YASHADA, Pune 411007** [Cl. .19.2(a)]
14. **Identification :**  
**Bid For- Construction of CGG –Residential & Academic Building at Baner, Yashada, Pune**  
Bid Reference : No. **Tender Notice No.**  
Do not open **before 28-02-2024 upto 10.00 hrs.** [Cl. .19.2(b)]
15. The bid should be submitted latest by **26-02-2024 upto 18.00** hours. [Cl. 20.1]
16. The Financial bid will be opened after technical scrutiny at place **As Per Notice Inviting Tender** [Cl.23.1]
17. The Demand draft/ Bank Guarantee of Scheduled Bank / Nationalized Bank in favor of **The Registrar Yashada , Pune** payable at **Pune** [Cl.34.1]
18. The name of Dispute Review Expert Will be **Director General Yashada Pune.** [Cl.36.1]

## ANNEXURE – I

**List of Key Plant & Equipment to be deployed on Building & Road Work during the work is in progress.**

**[Reference Cl. 4.4 (B) (a)]**

Sr. No	Name of Machinery	Nos.
1.	Fully Automatic Micro Processor based Programmable Logic Controller with Supervisory Control and Data Acquisition enabled Concrete Batch Mix Plant (Pan Mixer) Minimum capacity 18 to 20 Cum/Hour <b>(Owned )</b>	1
2.	Concrete Pump Unit (Capacity for minimum 15 Meter height and for horizontal 30 to 50 meter) <b>(Owned )</b>	1
3.	Transit Mixer of minimum 6 Cubic meter capacity <b>(Owned )</b>	2
4.	Lift Machine / Mechanical Hoist <b>(Owned )</b>	1
5.	Arco Steel Centering Plates <b>(Owned )</b>	1000 Sqm
6.	Sand Screening and Washing Machine minimum capacity 4-6 <b>(Owned )</b>	1
7.	Water Tanker 5000 Litres Capacity <b>(Owned )</b>	1
8.	Needle Vibrators <b>(Owned )</b>	1
9.	Plate Vibrator/Screed Vibrator <b>(Owned )</b>	1
10.	JCB/Excavator <b>(Owned )</b>	1
11.	Adjustable Jack Props <b>(Owned )</b>	800
12.	Adjustable Slab Span <b>(Owned )</b>	150
13.	Truck / Tripper <b>(Owned )</b>	2
14.	Diesel Generator 52.5 KvA <b>(Owned )</b>	1
15.	Water Pumps <b>(Owned )</b>	2

**The use of Machinery and Equipment will be verified with the respective Purchase invoices**

- a) The Contractor must own the machinery mentioned above.
- b) information mentioned in Question -1 above shall have to be attached along with this statement as well as their proof of ownership of machinery ( i.e. scanned copies of invoices) as well as the valid Certificate issued by the Assistant Chief Engineer (Mech.) of YASHADA to the effect that these machineries are in "Efficient Working Condition" and in conformity with M.O.S.T. Specifications.

**2. The above Certificate shall be subject to following conditions as per instructions issued vide Dy. Secretary (Bldg.2), Public Works Deptt., Mantralaya, Mumbai's letter No. Sankirna-2017/CR.2 (H)/Bldg.2, dt. 4/09/2017.**

1. The life of the new machinery will be considered as 15 years.
2. There will no need of checking by Superintending Engineer (Mechanical ) for first 10 years.

**Tender for Construction of CGG –Residential & Academic Building at Baner Yashada Pune**

3. After 10<sup>th</sup> year, the machinery shall be checked and certified by its fitness by Superintending Engineer (Mechanical) / Assistant Chief Engineer (Mechanical) every year till be 15<sup>th</sup> year.
4. After the 16<sup>th</sup> year, the contractor will get machinery certified every year from Superintending Engineer(Mechanical) / Assistant Chief Engineer (Mechanical) and produce the certificate of fitness. The certificate will be required for machinery where it is necessary and not issued by RTO.

**MEMORANDUM OF UNDERSTANDING (MOU)**

**Between**  
**Party No. -1**  
**And**  
**Party No. - 2**

This Memorandum of Understanding hereinafter..... date .....at  
Place ..... by and between :

**Name of 1<sup>st</sup> Party** \_\_\_\_\_, a company incorporated under the provisions of the Companies Act, 1956, having its registered office at ADDRESS \_\_\_\_\_ referred to as, **The First Party**.

**Name of 2<sup>nd</sup> Party, Address** \_\_\_\_\_, hereinafter referred to as, **The Second Party**.

WHEREAS **Tender Inviting Authority** \_\_\_\_\_ **(Name of Work**  
\_\_\_\_\_  
\_\_\_\_\_

The First Party and the Second Party hereby agree as under :

- 1) Prior to bidding on this tender, the parties on mutual consent shall enter into a joint obligations and responsibilities for the execution of this identified project, including the allocation of the scope of works in the indentified project and the parties respectie obligations on the related bidding costs and expenses. And detailed scope of work and pricing.
- 2) The MOU shall be the part of the tender to be submitted to Tender Inviting Authority.
- 3) The MOU does not agree the parties to enter into collaboration with any other parties for this particular tender.
- 4) In case First Party fails to provide the satisfactory results after sale - service in that situation our company will be totally responsible for providing timely effective service support as per tender conditions / DLP Period. We also undertake that parts will be made available to the user departments as and when required to keep the system functional.
- 5) This MOU shall be governed under Indian Laws. Disputes, if any shall be resolved amicably, otherwise resolved by arbitration in India in accordance with the Indian Arbitration and Concilliation Act 1996. The language of the arbitration shall be English language.

**Tender for Construction of CGG –Residential & Academic Building at Baner Yashada Pune**

This Memorandum of Understanding (MOU), signed in duplicate with each party receiving one original document, shall cease to be valid till the bid validity of the tender from the date of the MOU unless mutually extended in writing by the parties.

For and on behalf of

For and on behalf of

Name of 1<sup>st</sup> Party

Name of 2<sup>nd</sup> Party

Name

Name

Position

Position

Witnesses :

1.

2.

## ANNEXURE – II

### List of Key Personnel to be deployed on Contract Work [Reference Cl. 4.4 (B) (b)]

Sr. No.	Contractor's Technical Staff	Qualification and experience	Number of Tech Staff.
1.	Project Manager.	BE /B.Tech Civil with Minimum 15 Years experience.(working under you for more than 2 years, EPF proof)	1
2.	Project Engineers.	B.E. Civil, with Minimum 10 Years experience. .(working under you for more than 2 years, EPF proof)	2
3.	Site Engineer.	Diploma Civil, with Minimum 3 Years experience. .(working under you for more than 2 years, EPF proof)	6
4.	Electrical Engineer	B.E./ Diploma Electrical with 5 Years experieance.(working under you for more than 2 years, EPF proof)	2
5.	Plant Engineer.	Diploma / ITI, with Minimum 2 Years experience. .(working under you for more than 2 years, EPF proof)	2
6.	Safety Engineer.	Diploma / ITI, with Minimum 2 Years experience. .(working under you for more than 2 years, EPF proof)	1

SECTION – 2  
QUALIFICATION INFORMATION  
**VOLUME-I**



**SECTION – 2**

**QUALIFICATION INFORMATION**

The information to be filled in by the bidder in the following pages will be used for purposes of post qualification as provided for in clause 4 of the Instructions to bidders. This information will not be incorporated in the contract

1. For Individual Bidders

Constitution or legal status of Bidder

(Attach Copy)

Place of registration: -----

Principal place of business: -----

Power of attorney of signatory of bid

(Attach)

Total value of civil Engineering Work

Construction work performed in the last **Seven** years.

2022-2023

2021-2022.....

2020-2021.....

2019-2020.....

2018-2019.....

2017-2018.....

2016-2017.....

(Rupees in Lakh)

Work performed as prime contractor, work performed in the past as a nominated sub-contractor will also be considered provided the Sub-contract involved execution of all main items of work described in the bid document, provided further that all other qualification criteria are satisfied (in the same name) on works of a similar nature over the last Five years.\*\*

Project Name	Name of the Employer *	Description of work	Contract No.	Value of Contract (Rs. Crore)	Date of Issue of work order	Stipulated period of completion	Actual date of completion *	Remarks explaining reasons for delay & work completed

\* Attach certificate(s) from the Engineer(s)-in-charge.

**Tender for Construction of CGG –Residential & Academic Building at Baner Yashada Pune**

*\*\* Immediately preceding the financial year in which bid are received.*

*β Attach certificate(s) from Chartered Accountant.*

# 1.3.2 Quantities of work executed as prime contractor, be considered provided in the bid document, provided further that other qualification criteria are satisfied (in the same name and style) in the last **Seven** years.\*\*

Year	Name of the work	Name of the Employer*	Quantity of work performed				
			CONCRETE M-30	BRICKWORK	PLASTER	STEEL	FLOORING
2016-17							
2017-18							
2018-19							
2019-20							
2020-21							
2021-22							
2022-23							

Information on Bid capacity (works for which bids have been submitted and works which are yet to be completed) as on the date of this bid.

(A) Existing commitments and on-going works :

Descripti on of work	place & State	Contract No.	Name & Address of employer	Value of Contract (Rs. Cr.)	stipulated period of completion	Value of works* remaining to be completed (Rs. Cr.)	Anticipated date of completion.
1	2	3	4	5	6	7	8

*\* Attach certificate(s) from the Engineer(s)-in-charge.*

*@ The item of works for which data is requested should tally with that specified in ITB clause 4.5A(C).*

*\*\* Immediately preceding the financial year in which bid are received.*

Signature of Contractor

No. of Corrections

Executive Engineer

Page 42 of 182

**Tender for Construction of CGG –Residential & Academic Building at Baner Yashada Pune**

*# Deleted. if prequalification has been carried out.*

(B) Works for which bids already submitted:

Description of work	Place & State	Name and Address of Employer	Estimated value of Works ( Rs. Cr. )	Stipulated period of completion	Date when decision is expected	Remark, if any
1	2	3	4	5	6	7

Availability of key items of Contractor’s Plant &Equipment essential for carrying out the Works [Ref. Clause 4.5.B].(a) The Bidder should list all the information requested below. Refer also to Sub-Clause 4.3(d) of the Instructions to Bidders.

Item of Plant &Equipment	Requirement		Availability Proposal			Remark (from whom to be purchased)
	No.	Capacity	Owned /Leased to be procured	Nos./ Capacity	Age / Condition	

Qualification and experience of key personnel required for administration and execution of the contract [Ref. 4.5.(B)]. (b) Attach biographical data. Refer also to Sub-Clause 4.3 (e) of instructions to Bidders and Sub Clause 9.1 of the Conditions of Contract.

Signature of Contractor

No. of Corrections

Executive Engineer

**Tender for Construction of CGG –Residential & Academic Building at Baner Yashada Pune**

Position	Name	Qualification	Year of Experience (General)	Year of Experience in the proposed position.
Project Manager.				
Project Engineers.				
Site Engineers				
Plant Engineer.				
Safety Engineer				

Proposed Sub-Contracts and firms involved [Refer ITB Clause 4.3 (K)]

Sanctions of the works	Value of Sub-Contract	Sub-Contract (Name & Address)	Experience in similar work

\*1.8 Financial reports for the last **Seven** years: balance sheets, profit & loss statements, auditor’s reports (in case of companies /corporation) etc. List them below and attach copies.

Evidence of access to financial resources to meet the qualification requirements: cash in hand.

Lines of credit etc. List them below and attach copies of support documents.

Name, address and telephone, telex, email and fax numbers of the bidder’s bankers who may provide reference if contacted by the Employer.

Information on litigation history in which the bidder is involved.

Other party (ies)	Employer	Cause of Dispute	Amount involved	Remarks showing present status

Statement compliance under the requirements of Sub Clause 3.2of the instructions to Bidders.

(Name of Consultant engaged for project preparation is \*\* -----  
-----

## Tender for Construction of CGG –Residential & Academic Building at Baner Yashada Pune

Proposed work method and schedule. The bidder should attach descriptions, drawings and charts as necessary to comply with the requirements of the bidding Documents. [Refer ITB Clause 4.1 & 4.3(1)]

Programme

Quality Assurance Programme

2 Deleted

3 Additional Requirements

Bidders should provide any additional information required to fulfil the requirements of clause 4 of the Instructions to the Bidders, if applicable.

- (i) Affidavit
- (ii) Undertaking.
- (iii) Declaration of the bidder

(i) Scanned copy of Affidavit in respect of genuineness of documents contained in the Envelope No. 1 in the prescribed proforma provided with Tender Set on Stamp Paper of Rs. 100/- ( Proforma of Affidavit is attached with Tender).

(ii) This affidavit is also to be submitted physically as per schedule given in the tender in original and will be the part and parcel of contract agreement.

(iii) Contractor will be solely responsible and liable for action under Indian Penal Code for uploading or physical submission of any false / fraudulent document / information of Envelope No. 1 and 2.

(iv) Contractor will be solely responsible and also liable for action under Indian Penal Code for submission of any false information, false bills/ invoice / vouchers of purchase of material in supporting proof of purchase, proof of testing / test results and any other required documents submitted by his staff / representative or by himself or subletting company / contractor during contract period or even after completion of work till finalization of bill and completion of defect liability period.

(v) If false information / documents are submitted as mentioned above, the contractor will be blacklisted and if contract is at initial stage then such contract will be terminated and no any compensation will be payable on any account to the contractor.

**(vi) YASHADA Staff / YASHADA Officers / Divisional Accounts Officer will not be responsible for any complications due to submission of false / fraudulent documents by the contractor as mentioned above.**

**SAMPLE FORMAT FOR EVIDENCE OF ACCESS TO OR AVAILABILITY OF CREDIT  
FACILITIES**

**(CLAUSE [Cl.4.4(B)(c)]OF ITB)**

**BANK CERTIFICATE**

This is to certify that M/s. \_\_\_\_\_ is a reputed company with a good financial standing.

If the contract for the work, namely \_\_\_\_\_ is awarded to the above firm, we shall be able to provide overdraft/credit facilities to the extent of Rs \_\_\_\_\_ to meet their working capital requirements for executing the above contract during the contract period.

\_\_\_\_\_  
(Signature)

Name of Bank

Senior Bank Manager

Address of the Bank

**AFFIDAVIT**

I  
.....Age ..... Ad  
dress  
.....(Authorized  
signatory to sign the contract), hereby submit, vide this affidavit in truth, that I  
am the owner of the contracting firm  
...../ authorized signatory and I am  
submitting the documents in Envelope No. 1 or the purpose of scrutiny of the  
contract. I hereby agree to the conditions mentioned below :

1. I am liable for action under Indian Penal Code for submission of any false / fraudulent paper / information submitted in Envelope No. 1.
2. The undersigned also hereby certifies that neither our firm M/s. \_\_\_\_\_ have not abandoned any work on YASHADA nor any contract awarded to us for such works have not been rescinded, during last Three Years prior to the date of this bid.
3. The undersigned hereby authorise(s) and request(s) any bank, person, firm or corporation to furnish pertinent information deemed necessary and requested by the Department to verify this statement or regarding my (our) competence and general reputation.
4. The undersigned understand and agrees that further qualifying information may be requested and agrees to furnish any such information at the request of the Department / Project implementing agency.
5. I am liable for action under Indian Penal Code if during contract period and defect liability period, any false information, false bill of purchases, supporting proof of purchase, proof of testing submitted by my staff, subletting company or by myself, I will be liable for action under Indian Penal Code

\_\_\_\_\_(Signed by Authorised  
Officer of the Firm)

\_\_\_\_\_  
Title of Officer

\_\_\_\_\_  
Name of Firm

\_\_\_\_\_  
DATE

**UNDERTAKING**

I, the undersigned, do hereby undertake that our firm M/s.

\_\_\_\_\_ would invest minimum cash up to 25 % of the value of work during implementation of the Contract.

\_\_\_\_\_  
(Signed by Authorised Officer of the Firm)

\_\_\_\_\_  
Title of Officer

\_\_\_\_\_  
Name of Firm

\_\_\_\_\_  
DATE



**DECLARATION OF THE CONTRACTOR**

I / We hereby declare that I/We have made myself / ourselves thoroughly conversant with the subsoil conditions, the local conditions regarding all materials (such as stone, murum, sand etc.) and labour of which I/We have based my/our rates for this work. The specifications, conditions bore results and lead of materials on this work have been carefully studied and understood by me/us before submitting this tender. I/We undertake to use only the best materials approved by the **Yashada Pune** or his duly authorised assistant, before starting the work and to abide by his decision.

I/ We hereby further declare that my / our tender is unconditional in every manner of whatsoever in nature.

I / We hereby undertake to pay the labourers engaged on the work as per Minimum Wages Act. 1948 applicable to the zone concerned.

**Name and Signature of Contractor(s) / Power of attorney holder  
with complete address.**

SECTION – 3  
CONDITIONS OF CONTRACT  
**VOLUME-I**

**Conditions of Contract Table of Contents**

Sr. No.	Description	Page No.
A.	General	
1.	Definitions	57
2.	Interpretation	57
3.	Language and Law	58
4.	Engineer's Decision	59
5.	Delegation	59
6.	Communications	59
7.	Sub-contracting	59
8.	Other Contractors	59
9.	Personnel	59
10.	Employer's & Contractor's risk	60
11.	Employer's Risks	60
12.	Contractor's Risks	60
13.	Insurance	60
14.	Site Investigation Reports	61
15.	Queries about the Contract Data	61
16.	Contractor to Construct the Works	61
17.	The works to be completed by the Intended Completion Date	62
18.	Approval by the Engineer	62
19.	Safety	62
20.	Discoveries	62
21.	Possession of the Site	62
22.	Access to the Site	62
23.	Instructions	63
24.	Disputes	63
25.	Procedure for Disputes	63
26.	Replacement of Dispute Review Expert	63
B.	Time Control	
27.	Programme	64
28.	Extension of the Intended Completion Date	64
29.	Deleted	65
30.	Delays Ordered by the Engineer	65
31.	Management Meetings	65
32.	Early Warning	65
33.	Identifying Defects	66

**Tender for Construction of CGG –Residential & Academic Building at Baner Yashada Pune**

34.	Tests	66
35.	Correction of Defects	66
36.	Defects	66
D.	Cost Control	
37.	Bill of Quantities	67
38.	Changes in Quantities	67
39.	Variations	67
40.	Payments for Variations	68
41.	Cash Flow forecasts	68
42.	Payment Certificates	68
43.	Payments	68
44.	Compensation Events	68
45.	Tax	69
46.	Currencies	69
47.	Price Adjustment	69
48.	Retention	69
49.	Liquidated Damages	70
50.	Bonus	70
51.	Advance Payment	70
52.	Securities	71
53.	Deleted	71
54.	Cost of Repairs	71
E.	Finishing the Contract	
55.	Completion	72
56.	Taking Over	72
57.	Final Account	72
58.	Operating and Maintenance Manuals	72
59.	Termination	72
60.	Payment upon Termination	74
61.	Property	74
62.	Release from Performance	74
F.	Special Conditions of Contract	76

## CONDITIONS OF CONTRACT

### 1. Definitions

#### **A. GENERAL**

Terms which are defined in the Contract Data are not also defined in the Conditions of Contract but keep their defined meanings. Capital initial are used to identify defined terms.

**Bill of Quantities** means the priced and completed Bill of Quantities forming part of the Bid.

**Compensation Events** are those defined in Clause 44 hereunder.

The **Completion Date** is the date of completion of the Works as certified by the Engineer in accordance with Sub Clause 55.1.

The **Contract** is the contract between the Employer and the Contractor to execute, complete and maintain the works. It consists of the documents listed in Clause 2.3 below.

The **Contract Data** defines the documents and other information which comprise the Contract.

The **Contractor** is a person or corporate body whose Bid to carry out the Works has been accepted by the Employer.

The **Contractor's Bid** is the completed Bidding document submitted by the Contractor to the Employer and includes Technical and Financial bids.

The **Contract Price** is the price stated in the Letter of Acceptance and thereafter as adjusted in accordance with the provisions of the Contract.

**Day** are calendar days; **months** are calendar months.

A **Defect** is any part of the Works not completed in accordance with the Contract.

A **Defects Liability Period** is the period named in the Contract Data and calculated from the Completion Date.

The **Employer** is the party who will employ the Contractor to carry out the Works.

The **Engineer** is the person named in the Contract Data (or any other competent person appointed and notified to the contractor to act in replacement of the Engineer) who is responsible for supervising the Contractor, administering the Contract, certifying payments due to the Contractor, issuing the valuing Variations to the Contract, awarding extensions of time and valuing the Compensation Events.

**Equipment** is the Contractor's machinery and vehicles brought temporarily to the Site to construct the Works.

**The Engineers representative is any person authorized by Engineer to act /perform on his behalf.**

## **Tender for Construction of CGG –Residential & Academic Building at Baner Yashada Pune**

The **Initial Contract Price** is the Contract Price listed in the Employer's Letter of Acceptance.

**GOM means Government of Maharashtra YASHADA.**

The **Intended Completion Date** is the date on which it is intended that the Contractor shall complete the Works. The Intended Completion Date is specified in the Contract Data. The intended Completion Date may be revised only by the Engineer by issuing an extension of time. **Materials** are all supplies, including consumables, used by the contractor for incorporation in the Works.

**Plant** is any integral part of the Works which is to have a mechanical, electrical, electronic or chemical or biological function.

The **Site** is the area defined as such in the Contract Data.

**Site Investigation Reports** are those which were included in the Bidding documents and are factual interpretative reports about the surface and sub-surface conditions at the site.

**Specification** means the Specification of the Works included in the Contract and any modification or addition made or approved by the Engineer.

**Superintending Engineer means Superintending Engineer Public Works Circle Pune**

The **Start Date** is given in the Contract Data. It is the date when the Contractor shall commence execution of the Works. It does not necessarily coincide with any of the Site Possession Dates.

A **Subcontractor** is a person or corporate body who has a Contract with the Contractor to carry out a part of the work in the Contract which includes work on the Site.

**Temporary Works** are works designed, constructed, installed and removed by the Contractor which are needed for construction or installation of the Works.

A **variation** is an instruction given by the Engineer, which varies the Works.

The **Works** are what the Contract requires the Contractor to construct, install and turn over to the Employer, as defined in the Contract Data.

## **2. Interpretation**

In interpreting these Conditions of Contract, singular also means plural, male also means female or neuter, and the other way around. Headings have no significance. Words have their normal meaning under the language of the Contract unless specifically defined. The Engineer will provide instructions clarifying queries about the Conditions of Contract.

If sectional completion is specified in the Contract Data, references in the Conditions of Contract to the Works, the Completion Date, and the Intended Completion Date apply to

any Section of the Works (other than references to the Completion Date and Intended Completion date for the whole of the Works)

The documents forming the Contract shall be interpreted in the following order of priority:

- (1) Agreement
- (2) Letter of Acceptance, notice to proceed with the works.
- (3) Contractor's Bid
- (4) Contract Data
- (5) Conditions of Contract including Special Conditions of Contract
- (6) Specifications
- (7) Drawings
- (8) Bill of Quantities and
- (9) Any other document listed in the Contract Data as forming part of Contract.
- (10) Addendum if any issued by Employer

**3. Language and Law**

The language of the Contract and the law governing the Contract are stated in the Contract Data

**4. Engineer's Decisions**

Except where otherwise specifically stated, the Engineer will decide contractual matters between the Employer and the Contractor in the role representing the Employer.

**5. Delegation**

The Engineer may delegate any of his duties and responsibilities to other people except to the Adjudicator after notifying the Contractor and may cancel any delegation after notifying the Contractor.

**6. Communications**

Communications between parties which are referred to in the conditions are effective only when in writing. A notice shall be effective only when it is delivered (in terms of India Contract Act).

**7. Sub-Contracting**

The Contractor may sub-contract any portion of work, upto a limit specified in Contract Data, will the approval of the Engineer but may not assign the Contract without the approval of the Employer in writing, Sub-contracting does not alter the Contractor's obligations. (50% of the initial Contract Price).

**8. Other Contractors**

The Contractor shall co-operate and share the Site with other contractors, public authorities, utilities and the Employer between the dates given in the Schedule of other Contractors. The Contractor shall as referred to in Contract Data; also provide facilities and services for them as described in the Schedule. The employer may modify the schedule of other contractors and shall notify the contractor of any such modification.

**9 Personnel**

Signature of Contractor

No. of Corrections

Executive Engineer

Page 55 of 182

The Contractor shall employ the key personnel named in the Schedule of Key Personnel as referred to in the Contract Data to carry out the functions stated in the Schedule or other personnel approved by the Engineer. The Engineer will approve any proposed replacement of key personnel only if their qualifications, abilities and relevant experience are substantially equal to or better than those of the personnel listed in the Schedule.

If the Engineer asks the Contractor to remove a person who is a member of the Contractor's staff or his work force stating the reasons the Contractor shall ensure that the person leaves the Site within seven days and has no further connection with the work in the Contract.

**10. Employer's and Contractor's Risks**

The Employer carries the risks which this Contract states are Employer's risks, and the Contractor carries the risks, which this Contract states are Contractor's risks.

**11. Employer's Risks**

The Employer is responsible for the excepted risks which are (a) in so far as they directly affect the execution of the Works in India, the risks of war, hostilities, invasion, act of foreign enemies, rebellion, revolution, insurrection or military or usurped power, civil war, riot commotion or disorder (unless restricted to the Contractor's employees), and contamination from any nuclear fuel or nuclear waste or radioactive toxic explosive, or(b) a cause due solely to the design of the Works, other than the Contractor's design.

**12. Contractor's Risks**

All risks of loss of or damage to physical property and of personal injury and death which arise during and in consequence of the performance of the Contract other than the excepted risks are the responsibility of the Contractor.

**13.00 Insurance**

13.01 The Contractor shall take out Insurance Policy / Policies (viz . Contractor's All Risks Insurance Policy, Erection All Risks Insurance Policy etc. as directed by the Directorate of Insurance) so as to vide adequate insurance cover for execution of the awarded contract work for total contract value and complete contract period **COMPULSORILY** from the **"Directorate of Insurance, Maharashtra State, Mumbai" only. Its postal address for correspondence is " 264, MHADA , First Floor, Opposite Kalanagar, Bandra (East), Mumbai 400 051. "( Telephone No. 022 –26590403 / 26590690 and Fax No. is 022-26592461 /26590403).** Similarly all workmen's appointed to complete the contract work are required to insure under workmen's compensation Insurance Policy. Insurance Policy/ Policies taken out from any other company will not be accepted. If any contractor has not taken out the Insurance Policy from the Directorate of Insurance, Maharashtra State Mumbai or have effected insurance with any Insurance Company, the same will not be accepted and one percent (1%) of the tender amount or such amount of premium calculated by the Government Insurance Fund will be recovered directly from the amount



## Tender for Construction of CGG –Residential & Academic Building at Baner Yashada Pune

payable to the Contractor for the executed contract work and paid to the Directorate of Insurance Fund, Maharashtra State, Mumbai. The Director of Insurance reserves the right to distribute the risks of insurance among the other insurers.

.13.2 The contractor shall provide Contractor's All Risk Insurance (CAR) , in the joint names of the Employer and the contract Insurance cover from the Start Date to the end of the Defects Liability Period in the amounts as deductible stated in the Contract Data fro the following events which are due to the Contractor risk.

- (a) Los of or damage of the Works, Plant and Materials;
- (b) Loss of or damage of Equipment ;
- (c) Loss or damage of property (except the Works, Plant, Materials and Equipments in connection with Contract; and
- (d) Personal Injury or death of any personnel employed by the contract is during execution and maintenance defect liability period, employee of YASHADA, any person using the facility created by the contract during the construction and defect liability period.

13.3 Policies and certificates for insurance shall be delivered by the Contractor to the Engineer for the Engineer's approval before the Start Date. All such insurance shall provide is compensation to be payable in the types of proportions of currencies required to rectify the loss of damage incurred.

13.4 If the Contractor does not provide any of the policies and certificated required, the employee may affect the insurance which the Contractor should have provided and recoverpremiums the Employer has paid from payments otherwise due to the Contractor of it's payment is due, the payment of the premiums shall be a debt due shall be recoverablefrom the bills and deposits of the contractor of any work in Maharashtra and if no dues in work then as arrears of land revenue.

Alterations to the terms of Insurance shall not be made without the approval of the Engineer.

13.5. Both parties shall comply with any conditions of the Insurance Policies.

### 14.0 Site Investigation reports

The contractor, in preparing the Bid, shall rely on any Site Investigation Reports referred to in the Contract Data, supplemented by any information available to the Bidder.

### 15.0 Queries about the Contract Data

The Engineer will clarify queries on the Contract Data.

### 16.0 Contractor to Construct the Works

The Contractor shall construct and install the Works in accordance with the Specification

**Tender for Construction of CGG –Residential & Academic Building at Baner Yashada Pune**  
and Drawings.

**17.0 The Works to be completed by the Intended Completion Date**

The Contractor may commence execution of the Works on the Start Date and shall carry out the Works in accordance with the programme submitted by the contractor, as updated with the approval of the Engineer, and complete them by the Intended Completion Date.

**18.0 Approval by the Engineer**

18.1 The Contractor shall submit Specifications and Drawings showing the proposed Temporary Works to the Engineer, who is to approve them if they comply with the Specifications and Drawings.

18.2 The Contractor shall be responsible for design of Temporary Works.

18.3 The Engineer's approval shall not alter the Contractor's responsibility for design of the Temporary Works.

18.4 The Contractor shall obtain approval of third parties to the design of the Temporary Works where required.

18.5 All Drawings prepared by the Contractor for the execution of the temporary or permanent Works, are subject to prior approval by the Engineer before their use.

**19. Safety**

The Contractor shall be responsible for the safety of all activities on the Site.

**20. Discoveries**

Anything of historical or other interest or of significant value unexpectedly discovered on the Site is the property of the Employer. The Contractor is to notify the Engineer of such discoveries and carry out the Engineer's instructions for dealing with them.

**21. Possession of the Site**

The Employer shall give possession of all parts of the Site to the Contractor. If possession of a part is not given by the date stated in the Contract Data the Employer is deemed to have delayed the start of the relevant activities. This will be compensation Event and will be dealt in form of Extension of Time to Time extend for execution of work only.

**22. Access to the Site**

The Contractor shall allow the Engineer and any person authorized by the Engineer access to the Site, to any place where work in connection with the Contract is being carried out or is intended to be carried out and to any place where materials or plant are being

manufactured/fabricated/assembled for the works.

**23.0 Instructions**

The contractor shall carry out all instructions of the Engineer pertaining to works which comply with the applicable laws where the Site is located.

The Contractor shall permit the Employer to inspect the Contractor's accounts and records relating to the performance of the Contractor and to have them audited by auditors appointed by the Employer, if so required by the Employer.

**24.0 Disputes**

24.1. If the Contractor believes that a decision taken by the Engineer was either outside the authority given to the Engineer by the Contract or that the decision was wrongly taken, the decision shall be referred to the Dispute Review Expert within 14 days of the notification of the Engineer's decision.

**25.0 Procedure for Disputes**

25.1. The Employer proposes that [name of proposed Dispute Review Expert as indicated in Appendix] be appointed as Dispute Review Expert under Contract at a daily fee as indicated in Appendix plus reimbursable expenses. If the Bidder disagrees with this proposal, the Bidder should so state in the Bid. If in the Letter of Acceptance, the Employer has not agreed on the appointment of the Dispute Review Expert, the Dispute Review Expert shall be appointed by the Council of Indian Roads Congress at the request of either party.

25.2 For Works costing above Rs.5 Crore the procedure for arbitration will be as per G.R. of Law & Judiciary Department issued vide Sankirn.2016/C.R.20/Ka-19 date 13.10.2016 regarding "Institutional Arbitration Policy "

**26.0 Replacement of Dispute Review Expert**

Should the Dispute Review Expert resign or die, or should the Employer and the Contractor agree that the Dispute Review Expert is not fulfilling his functions in accordance with the provisions of the Contract, a new Dispute Review Expert will be jointly appointed by the Employer and the Contractor. In case of disagreement between the Employer and the Contractor, within 30 days, the Dispute Review Expert shall be designated by the Appointing Authority designated in the Contract Data at the request of either party, within 14 days of receipt of such request.

## **B. TIME CONTROL**

### **27.0 Programme**

Within the time stated in the Contract Data the Contractor shall submit to the Engineer for approval a Programme showing the general methods, arrangements, order and timing for all the activities in the Works along with monthly cash flow forecast.

An update of the Programme shall be a Programme showing the actual progress achieved on each activity and the effect of the progress achieved on the timing of the remaining work including any changes to the sequence of the activities.

The contractor shall submit to the Engineer, for approval, an updated Programme at intervals no longer than the period stated in the Contract Data. If the Contractor does not submit an updated Programme within this period, the Engineer may withhold the amount stated in the Contract Data from the next payment certificate and continue to withhold this amount until the next payment after the date on which the overdue Programme has been submitted.

The Engineer's approval of the Programme shall not alter the Contractor's obligations. The Contractor may revise the Programme and submit it to the Engineer again at any time. A revised Programme is to show the effect of Variations and Compensation Events.

### **28.0 Extension of the Intended Completion Date**

The Engineer shall extend the Intended Completion Date if a Compensation Event occurs or a Variation is issued which makes it impossible for Completion to be achieved by the Intended Completion Date without the Contractor taking steps to accelerate the remaining work and which would cause the Contractor to incur additional cost.

The Engineer shall decide whether and by how much to extend the Intended Completion Date within 35 days of the Contractor asking the Engineer for a decision upon the effect of a Compensation Event or Variation and submitting full supporting information. If the Contractor has failed to give early warning of a delay or has failed to co-operate in dealing with a delay, the delay by this failure shall not be considered in assessing the new Intended Completion Date.

The Engineer shall within 14 days of receiving full justification from the contractor for extension of Intended Completion Date refer to the Employer his decision. The Employer shall in not more than 21 days communicate to the Engineer the acceptance or otherwise of the Engineer's decision. If the Employer fails to give his acceptance, the Engineer shall not grant the extension and the contractor may refer the matter to the Dispute Review

**Extension of contract period due to unavoidable reasons:**

In case of non-availability of land or any other strong reason, the time limit extension shall be granted by the authority competent to accept the tender. In case the tender accepted at Government level, the Chief Engineer shall be final authority to grant extension. The reasons for granting the extension shall be kept on record.

**29.0 Deleted**

**30.0 Delays Ordered by the Engineer**

The Engineer may instruct the Contractor to delay the start or progress of any activity within the Works.

**31. Management Meetings**

Either the Engineer or the Contractor may require the other to attend a management meeting. The business of a management meeting shall be to review the plans for remaining work and to deal with matters raised in accordance with the early warning procedure.

The Engineer shall record the business of management meetings and is to provide copies of his record to those attending the meeting and to the Employer. The responsibility of the parties for actions to be taken is to be decided by the Engineer either at the management meeting or after the management meeting and stated in writing to all who attended the meeting.

**32. Early Warning**

The Contractor is to warn the Engineer at the earliest opportunity of specific likely future events or circumstances that may adversely affect the quality of the work, increase the Contract Price or delay the execution of works. The Engineer may require the Contractor to provide an estimate of the expected effect of the future event or circumstance on the Contract Price and Completion Date. The estimate is to be provided by the Contractor as soon as reasonably possible.

The Contractor shall co-operate with the Engineer in making and considering proposals for how the effect of such an event or circumstance can be avoided or reduced by anyone involved in the work and in carrying out any resulting instruction of the Engineer.

## **C. QUALITY CONTROL**

### **33.0 Identifying Defects**

The Engineer shall check the Contractor's work and notify the Contractor of any Defects that are found. Such checking neither shall not affect the Contractor's responsibilities. The Engineer may instruct the Contractor to search for a Defect and to uncover and test any work that the Engineer considers may have a Defect.

### **34.0 Tests**

If the Engineer instructs the Contractor to carry out a test not specified in the Specification to check whether any work has a Defect and the test shows that it does, the Contractor shall pay for the test and any samples. If there is no Defect the test shall be a Compensation Event.

### **35.0 Correction of Defects**

The Engineer shall give notice to the Contractor of any Defects before the end of the Defects Liability Period, which begins at Completion and is defined in the Contract Data. The Defects Liability Period shall be extended for as long as Defects remain to be corrected.

Every time notice of a Defect is given, the Contractor shall correct the notified Defect within the length of time specified by the Engineer's notice.

### **36.0 Uncorrected Defects**

If the Contractor has not corrected a Defect within the time specified in the Engineer's notice, the Engineer will assess the cost of having the Defect corrected, and the Contractor will pay this amount.

**D. COST CONTROL**

**37.0 Bill of Quantities**

37.1 The Bill of Quantities shall contain items for the construction, installation, testing and commissioning work to be done by the Contractor.

37.2 The Bill of Quantities is used to calculate the Contract Price. The Contractor is paid for the quantity of the work done at the rate in the Bill of Quantities for each item.

**38.0 Claim of quantities entered in the tender or estimates as per Govt.Resolution dt.**

**27/09/2018 & 22/10/2018.**

38.1 Quantities in respect of several items shown in the tender are approximate and no revision in the tendered rate shall be permitted in respect of any of the items so long as, subject to any special provision contained in the specifications prescribing a different percentage of permissible variation in the quantity of the item does not exceed the tender quantity by more than 25 percent and so long as the value of the excess quantity beyond this limit at the rate of the item specified in the tender, is not more than Rs. 5,000/-

38.2 The Contractor shall if ordered in writing by the Engineer so to do, also carry out any quantities in excess of the limit mentioned above in Sub-clause (i) hereof on the same conditions as and in accordance with the specifications in the tender and at the rates (i) derived from the rates entered in current Schedule of Rates and in the absence of such rates (ii) at the rates prevailing in the market. The said rates being increased or decreased as the case may be by the percentage which the total tendered amount bears to the estimated cost of the works as put to tender based upon the schedule of rates applicable to the year in which the tenders were accepted. For this purpose of operation of this Clause, this cost shall be worked out from the prevailing District Schedule of Rates at the time of acceptance of tender.

38.3 Claims arising out of reduction in the tendered quantity of any item beyond 25 percent will be governed when the amount of such reduction beyond 25 percent at the rate of the item specified in the tender is more than Rs. 5,000/- ( the Clause is not applicable to extra items).

38.4 This Clause is not applicable to extra items.

38.5 There is no change in the rate if the excess is more than 25 percent of the tendered quantity. But the value of the excess work at the tendered rates not exceed Rs. 5,000/-

38.6 The quantities to be paid at the tendered rates shall include :

**a)** Tendered quantity plus

**b)** 25% excess of tendered quantity or the excess quantity of the value of Rs. 5,000/- at the tendered rate whichever is more.

**Note :** Excess quantity if required to be executed only after the permission of the Competent Authority

**39.0 Deleted**

**40.0 Deleted**

**41.0 Cash Flow Forecasts**

When the Programme is updated, the contractor is to provide the Engineer with an updated cash flow forecast.

**42.0 Payment Certificates**

The Contractor shall submit to the Engineer monthly statements of the estimate value of the work completed less the cumulative amount certified previously.

The Engineer shall check the Contractor's monthly statement within 14 days and certify the amount to be paid to the Contractor after taking into account any credit or debit for the month in question in respect of materials for the works in the relevant amounts and under conditions set forth in sub-clause 51(3) of the Contract Data (Secured Advance)

The value of work executed shall be determined by the Engineer.

The value of work executed shall comprise the value of the quantities of the items in the Bill of Quantities completed.

The value of work executed shall include the valuation of Variations and Compensation Events.

The Engineer may exclude any item certified in a previous certificate or reduce the proportion of any item previously certified in any certificate in the light of later information.

**43.0 Payments**

Payments shall be adjusted for deductions for other recoveries in terms of the contract and taxes at source, as applicable under the law. The bill shall be paid after due verification and upon availability of budget. The amount certified by Engineer shall be paid as per availability of funds and no interest shall be payable in case of any delayed payment.

Items of the Works for which no rate or price has been entered in will not be paid for by the Employer and shall be deemed covered by other rates and prices in the Contract.

**44.0 Compensation Events**

Compensation shall be applicable and only extension may be considered on merits if not on part of Contractor



## **Tender for Construction of CGG –Residential & Academic Building at Baner Yashada Pune**

The Contractor shall not be entitled to compensation to the extent that the Employer's interests are adversely affected by the Contractor not having given early warning or not having cooperated with the Engineer .

### **45. Tax**

The rates quoted by the Contractor shall be deemed to be inclusive of all taxes other than Goods & Service Tax 2017 that the contractor will have to pay for performance of this contract. The rates quoted by the contractor shall be exclusive of Goods & Service Tax 2017 which shall be paid extra by the employer at prevailing rates. The Employer will perform such duties in regard to the deduction of such taxes at source as per applicable law. GST at 12% will be paid extra on work estimated cost.

### **46. Currencies**

All payments shall be made in Indian Rupees.

### **47. Price Adjustment**

Contract Price shall be adjusted for increase or decrease in rates and prices of Bitumen, Steel and Cement in accordance with the following principles and procedures and as per formula given in the Contract Data.

(a) The price adjustment shall apply for the work done from the start date given in the Contract Data upto end of the initial intended completion date or extensions granted by the Engineer and shall not apply to the work carried out beyond the stipulated time for reasons attributable to the Contractor.

(b) The price adjustment shall be determined during each month from the formula given in the contract data.

### **48. Retention**

The Employer shall retain from each payment due to the Contractor the proportion stated in the Contract Data until Completion of the whole of the Works.

On Completion of the whole of the Works half the total amount retained is repaid to the Contractor and half when the Defects Liability Period has passed and the Engineer has certified that all Defects notified by the Engineer to the Contractor before the end of this period have been corrected.

On completion of the whole works, the contractor may substitute retention money with an "on demand" Bank guarantee.

**49. Liquidated Damages**

The Contractor shall pay liquidated damages to the Employer at the rate per day stated in the Contract Data for each day that the Completion Date is later than the Intended Completion Date (for the whole of the works or the milestone as stated in the contract data). The total amount of liquidated damages shall not exceed the amount defined in the Contract Data. The Employer may deduct liquidated damages from payments due to the Contractor. Payment of liquidated damages does not affect the Contractor's liabilities.

If the intended completion date is extended after liquidated damages have been paid, the Engineer shall correct any overpayment of liquidated damages by the Contractor by adjusting the next payment certificate.

If the contractor fails to comply with the time for completion as stipulated in the tender, then the contractor shall pay to the employer the relevant sum stated in the Contract Data as liquidated damages for such default and not as penalty for everyday or part of day which shall elapse between relevant time for completion and the date stated in the taking over certificate of the whole of the works on the relevant section, subject to the limit stated in the contract data.

The employer may, without prejudice to any other method of recovery deduct the amount of such damages from any monies / sum due or to become due to the contractor. The payment or deduction of such damages shall not relieve the contractor from his obligation to complete the works on from any other of his obligations and liabilities under the contract.

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

**50. Deleted.**

**51. Secured Advance**

The Engineer shall make advance payment in respect of materials intended for but not yet incorporated in the Works in accordance with conditions stipulated in the Contract Data.

**52. Securities**

## **Tender for Construction of CGG –Residential & Academic Building at Baner Yashada Pune**

The Performance Security (including additional security for unbalanced bids) shall be provided to the Employer no later than the date specified in the Letter of Acceptance and shall be issued in an amount and form and by a bank or surety acceptable to the Employer and denominated in Indian Rupees. The Performance Security shall be valid until a date 28 days from the date of expiry of Defects Liability Period and the additional security for unbalanced bids shall be valid until a date 28 days from the date expiry of Defects liability Period.

**53. Deleted**

**54. Cost of Repairs**

Loss or damage to the Works or Materials to be incorporated in the Works between the Start Date and the end of the Defects Correction periods shall be remedied by the contractor at the Contractor's cost if the loss or damage arises from the contractor's acts or omissions.

## E. FINISHING THE CONTRACT

### 55.0 Completion

The Contractor shall request the Engineer to issue a Certificate of Completion of the Works and the Engineer will do so upon deciding that the Work is completed.

### 56.0 Taking Over

The Employer shall take over the Site and the Works within seven days of the Engineer issuing a certificate of Completion.

### 57.0 Final Account

57.1. The Contractor shall supply to the Engineer a detailed account of the total amount that the Contractor considers payable under the Contract before the end of the Defects Liability Period. The Engineer shall issue a Defect Liability Certificate and certify any final payment that is due to the Contractor within 56 days of receiving the Contractor's account if it is correct and complete. If it is not, the Engineer shall issue within 56 days a schedule that states the scope of the corrections or additions that are necessary. If the Final Account is still unsatisfactory after it has been resubmitted, the Engineer shall decide on the amount payable to the Contractor and issue a payment certificate, within 56 days of receiving the Contractor's revised account.

### 58.0 Operating and Maintenance Manuals-

If "as built" Drawings and/or operating and maintenance manuals are required, the Contractor shall supply them by the dates stated in the Contract Data.

If the Contractor does not supply the Drawings and/or manuals by the dates stated in the Contract Data, or they do not receive the Engineer's approval, the Engineer shall withhold the amount stated in the Contract Data from payments due to the Contractor.

### 59.0 Termination

The Employer or the Contractor may terminate the Contract if the either party causes a fundamental breach of the Contract.

Fundamental breaches of Contract include, but shall not be limited to the following:

Signature of Contractor

No. of Corrections

Executive Engineer

Page 68 of 182

## Tender for Construction of CGG –Residential & Academic Building at Baner Yashada Pune

- (a) the Contractor stops work for 15 days when no stoppage of work is shown on the current Programme and the stoppage has not been authorized by the Engineer;
- (b) ~~the Engineer instructs the Contractor to delay the progress of the Works and the instruction is not withdrawn within 28 days;~~
- (c) the Employer or the Contractor is made bankrupt or goes into liquidation other than for a reconstruction or amalgamation;
- (d) ~~a payment certified by the Engineer is not paid by the Employer to the Contractor within 56 days of the date of the Engineer's certificate;~~
- (e) the Engineer gives Notice that failure to correct a particular Defect is a fundamental breach of Contract and the Contractor fails to correct it within a reasonable period of time determined by the Engineer;
- (f) the Contractor does not maintain a security which is required;
- (g) the Contractor has delayed the completion of works by the number of days for which the maximum amount of liquidated damages can be paid as defined in the Contract data; and
- (h) if the Contractor, in the judgment of the Employer has engaged in corrupt or fraudulent practices in competing for or in executing the Contract. For the purpose of this paragraph: "corrupt practice" means the offering, giving, receiving or soliciting of any thing of value to influence the action of a public official in the procurement process or in contract execution. "Fraudulent practice" means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of the Borrower, and includes collusive practice among Bidders (prior to or after bid submission) designed to establish bid prices at artificial non-competitive levels and to deprive the Borrower of the benefits of free and open competition."

When either party to the Contract gives notice of a breach of contract to the Engineer for a cause other than those listed under Sub Clause 59.2 above, the Engineer shall decide whether the breach is fundamental or not.

Notwithstanding the above, the Employer may terminate the Contract for convenience.

If the Contract is terminated the Contractor shall stop work immediately, make the Site safe and secure and leave the Site, Soon as reasonably possible.

**60.0 Payment upon Termination**

If the-Contract is terminated because of a fundamental breach of Contract by the Contractor, the Engineer shall issue a certificate for the value of the work done less advance payments received up to the date of the issue of the certificate, less other recoveries due in terms of the contract, less taxes due to be deducted at source as per applicable law and less the percentage to apply to the work not completed as indicated in the Contract Data. Additional Liquidated Damages shall not apply. If the total amount due to the Employer exceeds any payment due to the Contractor the difference shall be a debt payable to the Employer.

If the Contract is terminated at the Employer's convenience or because of a fundamental breach of Contract by the Employer, the Engineer shall issue a certificate for the value of the work done, the cost of balance material brought by the contractor and available at site, the reasonable cost of removal of Equipment, repatriation of the Contractor's personnel employed solely on the Works, and the Contractor's costs of protecting and securing the Works and less advance payments received up to the date of the certificate, less other recoveries due in terms of the contract and less taxes due to be deducted at source as per applicable law.

**61.0 Property**

All materials on the Site, Plant, Equipment, Temporary Works and Works are deemed to be the property of the Employer, if the Contract is terminated because of a Contractor's default.

**62.0 Release from Performance**

If the Contract is frustrated by the outbreak of war or by any other event entirely outside the control of either the Employer or the Contractor the Engineer shall certify that the Contract has been frustrated. The Contractor shall make the Site safe and stop work as quickly as possible after receiving this certificate and shall be paid for all work carried out before receiving it and for any work carried out

**Tender for Construction of CGG –Residential & Academic Building at Baner Yashada Pune**

afterwards to which commitment was made.

## ***F. SPECIAL CONDITIONS OF CONTRACT***

### **1. LABOUR:**

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

The Contractor shall, if required by the Engineer, deliver to the Engineer a return in detail, in such form and at such intervals as the Engineer may prescribe, showing the staff and the numbers of the several classes of labour from time to time employed by the Contractor on the Site and such other information as the Engineer may require.

### **2. COMPLIANCE WITH LABOUR REGULATIONS:**

During continuance of the contract, the Contractor and his sub-contractors shall abide at all times by all existing labour enactments and rules made there under, regulations, notifications and bye laws of the State or Central Government or local authority and any other labour law (including rules), regulations, bye laws that may be passed or notification that may be issued under any labour law in future either by the State or the Central Government or the local authority. Salient features of some of the major labour laws that are applicable to construction industry are given below. The Contractor shall keep the Employer indemnified in case any action is taken against the Employer by the competent authority on account of contravention of any of the provisions of any Act or rules made there under, regulations or notifications including amendments. If the Employer is caused to pay or reimburse, such amounts as may be necessary to cause or observe, or for non-observance of the provisions stipulated in the notifications/bye laws/Acts/Rules/regulations including amendments, if any, on the part of the Contractor, the Engineer/Employer shall have the right to deduct any money due to the Contractor including his amount of performance security. The Employer/Engineer shall also have right to recover from the Contractor any sum required or estimated to be required for making good the loss or damage suffered by the Employer.

The employees of the Contractor and the Sub-Contractor in no case shall be treated as the employees of the Employer at any point of time.



**3. SALIENT FEATURES OF SOME MAJOR LABOUR LAWS APPLICABLE TO ESTABLISHMENTS ENGAGED IN BUILDING AND OTHER CONSTRUCTIONWORK.**

- (a) **Workmen Compensation Act 1923** :- The Act provides for compensation in case of injury by accident arising out of and during the course of employment.
- (b) **Payment of Gratuity Act 1972** :- Gratuity is payable to an employee under the Act on satisfaction of certain conditions on separation if an employee has completed 5 years service or more on death, the rate of 15 days wages for every completed year of service. The Act is applicable to all establishments employing 10 or more employees.
- (c) **Employees P.P. and Miscellaneous Provision Act 1952**:The Act Provides for monthly contributions by the employer plus workers @ 10%or 8.33%. The benefits payable under the Act are:
- (i) Pension or family pension on retirement or death, as the case may be.
  - (ii) Deposit linked insurance on the death in harness of the worker.
  - (iii) Payment of P.P. accumulation on retirement/death etc.
- (d) **Maternity Benefit Act 1951**:- The Act provides for leave and some other benefits to women employees in case of confinement or miscarriage etc.
- (e) **Contract Labour (Regulation & Abolition) Act 1970**:- The Act provides for certain welfare measures to be provided by the Contractor to contract labour and in case the Contractor fails to provide, the same are required to be provided, by the Principal Employer by Law. The Principal Employer is required to take Certificate of Registration and the Contractor is required to take licence from the designated Officer. The Act is applicable to the establishments or Contractor of Principal Employer, if they employ 20 or more contract labour.
- (f) **Minimum Wages Act 1948** :- The Employer is supposed to pay not less than the Minimum Wages fixed by appropriate Government as per provisions of the Act, if the employment is a scheduled employment. Construction of Buildings, Roads, Runways are scheduled employments.
- (g) **Payment of Wages Act 1936**:- Itlays down as to by what date the wages are to be paid, when it will be paid and what deductions can be made from the wages of the workers.
- (h) **Equal Remuneration Act 1979** :- The Act provides for payment of equal wages for work of equal nature to Male and Female workers and for not making discrimination against Female employees in the matters of transfers, training and promotions etc.

- (i) **Payment of Bonus Act 1965** :- The Act is applicable to all establishments employing 20 or more employees. The Act provides for payments of annual bonus subject to a minimum of 8.33% of wages and maximum of 20% of wages to employees drawing Rs.3500/-per month or less. The bonus to be paid to employees getting Rs.2500/- per month or above upto Rs.3500/-per month shall be worked out by taking wages as Rs.2500/ -per month only. The Act does not apply to certain establishments. The newly set-up establishments are exempted for five years in certain circumstances. Some of the State Governments have reduced the employment size from 20 to 10 for the purpose of applicability of this Act.
- (j) **Industrial Disputes Act 1947** :- The Act lays down the machinery and procedure for resolution of Industrial disputes, in what situations a strike or lock-out becomes illegal and what are the requirements for laying off or retrenching the employees or closing down the establishment.
- (k) **Industrial Employment (Standing Orders) Act 1946** :-It is applicable to all establishments employing 100 or more workmen (employment size reduced by some of the States and Central Government to 50). The Act provides for laying down rules governing the conditions of employment by the Employer on matters provided in the Act and get the same certified by the designated Authority.
- (l) **Trade Unions Act 1926** :- The Act lays down the procedure for registration of trade unions of workmen and employers. The Trade Unions registered under the Act have been given certain immunities from civil and criminal liabilities.
- (m) **Child Labour (Prohibition & Regulation) Act 1986** :- The Act prohibits employment of children below 14 years of age in certain occupations and processes and provides for regulation of employment of children in all other occupations and processes. Employment of Child Labour is prohibited in Building and Construction Industry.
- (n) **Inter-State Migrant workmen's (Regulation of Employment & Conditions of Service) Act 1979**:- The Act is applicable to an establishment which employs 5 or more inter-state migrant workmen through an intermediary (who has recruited workmen in one state for employment in the establishment situated in another state). The Inter-State migrant workmen, in an establishment to which this Act becomes applicable, are required to be provided certain facilities such as housing, medical aid, travelling expenses from home upto the establishment and back, etc.
- (o) **The Building and Other Construction workers (Regulation of Employment and Conditions of Service) Act 1996 and the Cess Act of 1996** :- All the establishments who carry on any building or other construction work and employs 10 or more workers are covered under this Act. All such establishments

## Tender for Construction of CGG –Residential & Academic Building at Baner Yashada Pune

are required to pay cess at the rate not exceeding 2% of the cost of construction as may be modified by the Government. The Employer of the establishment is required to provide safety measures at the Building or construction work and other welfare measures, such as Canteens, First-Aid facilities, Ambulance, Housing accommodations for workers near the work place etc. The Employer to whom the Act applies has to obtain a registration certificate from the Registering Officer appointed by the Government.

- (p) **Factories Act 1948:-** The Act lays down the procedure for approval of plans before setting up a factory, health and safety provisions, welfare provisions, working hours, annual earned leave and rendering information regarding accidents or dangerous occurrences to designated authorities. It is applicable to premises employing 10 persons or more with aid of power or 20 or more persons without the aid of power engaged in manufacturing process.

#### 4 ARBITRATION

The Employer proposes that [name of proposed Dispute Review Expert as indicated in Appendix] be appointed as Dispute Review Expert under the Contract, at a daily fee as indicated in Appendix plus reimbursable expenses. If the Bidder disagrees with this proposal, the Bidder should so state in the Bid. If in the Letter of Acceptance, the Employer has not agreed on the appointment of the Dispute Review Expert, the Dispute Review Expert shall be appointed by the Council of Indian Roads Congress at the request of either party.

- 5 For works costing above **Rs.5 Crore** the procedure for arbitration will be as **per G.R of Law & Judiciary Department issued vide Sankirn- 2016/C.R. 20/ Ka-19 dt. 13/10/2016 regarding “ Institutional Arbitration Policy”**.

#### 6. Goods and Services Tax (GST)

As per Section 51 of the CGST and MGST Act, TDS will be deducted from Running Account Bills as per the notified rates and from the notified dates by the Government. Bidders are required to submit Registration Number as supplier under GST.

#### 7. Payment Through electronic medium

The contractor will have to provide his Bank Account details and Income Tax PAN for effecting electronic payment in the required Format.

#### 8. Unique Identification Number ( AADHAR) linked Payment by Contractor

Vide GR No. Govt. Of Maharashtra , YASHADA. Mantralaya Nagpur No. Tender 2016/CN20/ shikana /Bldg -2 dated 09/12/2016 Contractor shall submit a

## Tender for Construction of CGG –Residential & Academic Building at Baner Yashada Pune

certificate to the effect that all the payments to the labour / staff are made in bank accounts linked to Unique Identification Number ( AADHAR ). The certification shall be submitted by the contractor within 60 days from the commencement of the contract. If the time period of contract is less than 60 days then such certificate shall be submitted within 15 days from the date of commencement of contract.

9. Original Invoice for Asphalt issued by the Manufactures will be retained with the Bills and will not be returned to the contractors.

### 10. Project Specific Special Conditions of Contract :

1.0 The proposed construction of Center of Good Governance – Residential & Academic Building at Baner, Yashada, Pune, external Development, Total Electrical work, Landscaping work etc. is to be done on land of YASHADA, Baner Tal- Pune Dist-Pune. The contractor shall visit site & assess the prevailing working conditions.

2.0 All the workers proposed to be deployed at site must have good character & contractor shall ensure the same.

3.0 The project site is located along the road from Baner , near Rajbhavan at Pune City. Contractor is expected to study the same before bidding. This will not be entertained as cause of delay for execution of the work. Contractor shall deploy his machinery, resources & safety measures accordingly.

4.0 Contractor has to arrange at his own cost all the arrangement for labour camp, their movements from site to labour camp etc.

5.0 Contractor shall deposit along with final bill, the bank guarantee amounting 5% of the total Contract amount for the DLP 120 months period. If the defects are not rectified by Contractor in DLP Period, the bank guarantee will be encashed and Employee will carry out the rectification of defects.

6.0 Above mentioned Bank Guarantee amounting 5% of the total Contract Amount will be Released year wise after successful completion of all defects and annual maintenance after Obtaining completion certificate from the Executive engineer as below.....

1. On Completion of first year 0.50% amount of total contract amount.
2. On Completion of Second year 0.75% amount of total contract amount.
3. On Completion of Third year 1.00% amount of total contract amount.
4. On Completion of Fourth year 1.25% amount of total contract amount.
5. On Completion of Fifth year 1.50% amount of total contract amount.

7.0 For those items with warranty given by the manufacturer, the warranty received by the Contractor being purchaser of those items shall be transferred back to back in the name of the Client so as to be able to take benefit of warranty.

- a) Ten years external paint guarantee bond shall be submitted by the Contractor from manufacturing company.

**Tender for Construction of CGG –Residential & Academic Building at Baner Yashada Pune**

- b) Ten years guarantee bond for sanitary fittings shall be submitted by the Contractor from manufacturing company.
- c) Five years fully comprehensive free AMC for following items.
  - 1) Lifts.
  - 2) Firefighting and fire alarm systems.
  - 3) C.C.T.V.
  - 4) Computer Networking systems/Intercom and Telephone systems
  - 5) STP & Water pumping system.
  - 6) Tree plantation & Landscaped areas.
  - 7) Transformer / D.G. Set / H.T. and L.T. Equipment.
  - 8) Street Light.

**SECTION – 4**  
**CONTRACT DATA**  
**VOLUME-I**

**CONTRACT DATA**

Items marked "N/A" do not apply in this Contract			Clause Reference with respect to Section - 3
1.	The Employer is Name : <b>YASHADA, Pune.</b>		[Cl.1.1]
2.	The Engineer is <b>Head of Estate And Executive Engineer YASHADA, Pune</b>		[Cl.1.1]
3	The Dispute Review Expert appointed jointly by the Employer and Contractor is Name : <b>Registrar YASHADA, Pune</b> Address : <b>YASHADA, Pune - 411007</b>		
4.	The Defects Liability Period from the date of Completion is <b>138 Months</b>		[Cl.1.1 & 35]
5.	The Start Date shall be <b>7 days</b> from the date of issue of the work order.		[Cl.1.1]
6.	The Intended Completion Date for the whole of the Works is <b>18 months</b> including monsoon period after start of work with the following milestones:		[Cl.1.1, 17 & 28]
Milestone dates:			[Cl.2.2, & 49.1]
	Physical Works to be completed		Period from the start date
i)	Milestone -1 i.e. 20%		3 Months
ii)	Milestone- 2 i.e. 40%		6 Months
iii)	Milestone-3 i.e. 50%		9 Months
iv)	Milestone-4 i.e. 60%		12 Months
v)	Milestone-5 i.e. 80%		15 Months
vi)	Milestone-6 i.e. 100%		18 Months
7.	<b>Site Location - This work site is situated at AT, PUNE, DIST. PUNE.</b>		[Cl.1.1]
8.	The name and identification number of the Contract is : <b>Tender Notice No. for 2023-24.</b>		[Cl.1.1]

## 9.The works consist of

**Name of Work :-** Construction of Center for Good Governance[CGG]-Residential and Academic Building at Baner YASHADA, Pune

### General Description

**Introduction :-** Construction of Center for Good Governance[CGG]-Residential and Academic Building at Baner YASHADA, Pune. This work has received administrative approval from the Government of Maharashtra..

**Administrative Approval Order :-** यशदा -2022/प्र.क्र.29/22/12-अ, मंत्रालय, मुंबई - 400 032.Dated: 28 March, 2023

**Technical Sanction :-** Chief Engineer, Public Works Region, Pune

**Project Management Consultant :-**  
COEP Technological University, Pune.

### MAIN BUILDING :- Residential G+6, Academic G+2

- 1) As per terrain and geotechnical investigation excavation in hard murum ,soft rock is to be done.
- 2) Antitermite treatment shall be done at place of plot and periphery of plot.
- 3) For purpose of lower basement M-30 grade concrete for raft and retaining wall is to be done.
- 4) Fixing perforated pipe with geofiber below R.C.C basement slab for drainage purpose.
- 5) Construction of R.C.C basement slab. And to do soling and murum filling in basement.
- 6) To do work according to R.C.C design M-30 footing , column , beam , slab ,chajja , staircase , pardi.
- 7) External brickwork and internal brickwork is to be done in autoclaved aerated concrete blocks.
- 8) For internal wall 10-13 mm gypsum plaster and for ceiling POP plaster is to be done.
- 9) Sand faced plaster for external walls of building is to be done.
- 10) Granite, Kota is to be used in flooring of building.Flooring for Staircase of building (tread & riser)should be in Kota.
- 11) Antiskid flooring shall be done in W.C and Bathroom and dado in ceramic tiles.
- 12) Doors inside the building should be single and double leaf solid core flush door.
- 13) Building windows shall be in 3 track aluminium sliding window without box and ventilators in WC and bathrooms.
- 14) Internal paint shall be done in OBD Paint and external RCC Form Finish And Wall Plaster Stonecrete.
- 15) Brickbat waterproofing for terrace is to be done.
- 16) Roof for Hall shall be in structural steel truss and G.I PUF panel should be fixed on it.

### COMPOUND WALL:-

- 1) Dismantling of existing UCR masonry and using that stones for soling purpose.
- 2) Excavation for column of compound wall.
- 3) PCC for column footing in M-10.
- 4) Footing shall be done in M-30 Grade concrete.
- 5) Compound wall column shall be in M-30 Grade concrete.
- 6) Compound wall Beam shall be in M-30 Grade concrete.
- 7) Construction of brickwork in between two columns at a height of 1.5 m is to be done.
- 8) Fixing of mild steel grill above brickwork of height 0.6 m in between two columns.
- 9) Compound wall is to be plastered in sand faced plaster.
- 10) Colour for compound shall be weather shield paint.

**INTERNAL ROADS:-**

- 1) Excavation for 6m and 4.5m wide road shall be done at 0.3m depth.
- 2) Filling shall be done for 6m and 4.5m road at a depth of 0.5m.
- 3) Internal 6m and 4.5m wide road 15cm gr-I layer shall be done.
- 4) Internal 6m and 4.5m wide road 7.5cm gr-II layer shall be done.
- 5) Internal 6m and 4.5m wide road 7.5cm MPM layer shall be done.
- 6) Internal 6m and 4.5m wide road 20mm OG Carpet layer shall be done.

**GUTTER:-**

- 1) Excavation for gutter at both sides of road at a depth of 0.7m in soil.
- 2) Excavation for gutter at both sides of road at a depth of 0.38m in hard murum.
- 3) Soling for gutter at both sides of road at a depth of 0.23m.
- 4) P.C.C of M-10 Grade for gutter at both sides of road at a depth of 0.1m.
- 5) Fixing of M-15 Grade bed blocks at both sides of gutter at depth of 0.1m.
- 6) Brickwork should be done in fly ash brick at both sides of gutter of dimension as below, width =0.23 and height=0.5m.
- 7) Sand Faced plaster shall be done to fly ash brickwork done for gutter.
- 8) Gutter shall be closed by Precast Grating Cover.

**UNDER GROUND WATER TANK:-**

- 1) Excavation of UGWT in soil , soft murum , hard murum , soft rock and hard rock.
- 2) Antitermite treatment shall be done at place of UGWT and near UGWT.
- 3) Rubble soling for UGWT shall be done.
- 4) PCC shall be done in M-10 grade concrete.
- 5) Raft shall be of M-30 grade concrete for UGWT.
- 6) Pardi for UGWT shall be of M-30 grade concrete.
- 7) For pump house M-30 grade of column is to be constructed.
- 8) For pump house M-30 grade of beam is to be constructed.
- 9) For pump house M-30 grade of slab is to be constructed.
- 10) For pump house fly ash brickwork is to be done.
- 11) Sand faced plaster is to be done for external wall of pump house.
- 12) Colour shall be done to plastered surface of pump house.

**ENTRANCE GATE:-**

- 1) Excavation of entrance gate in soil, soft murrum , hard murrum , soft rock and hard rock.
- 2) Antitermite treatment shall be done at place of entrance gate.
- 3) Rubble soling for entrance gate shall be done.
- 4) PCC shall be done in M-10 grade concrete for footing of entrance gate.
- 5) Footing shall be in M-30 Grade of entrance gate.
- 6) Column shall be in M-30 Grade of entrance gate.
- 7) Beam shall be in M-30 Grade of entrance gate.
- 8) Slab shall be in M-30 Grade of entrance gate.
- 9) For entrance gate fly ash brickwork is to be done.

Signature of Contractor

No. of Corrections

Executive Engineer

Page 80 of 182



**Tender for Construction of CGG –Residential & Academic Building at Baner Yashada Pune**

- 10) Sand faced plaster is to be done for entrance gate wall , columns etc  
 11) Apex Ultima colour shall be done to plastered surface of entrance gate.

The material Required for this work is available within reasonable lead for this work.

10.	The following documents also form part of the Contract:..... (1) Agreement (2) Letter of Acceptance, notice to proceed with the works. (3) Contractor's Bid (4) Contract Data (5) Conditions of Contract including Special Conditions of Contract (6) Specifications (7) Drawings (8) Bill of Quantities and (9) Any other document listed in the Contract Data as forming part of Contract. (10) Addendum if any issued by employer.	[ Cl. 2.3(9) ]
11.	The law, which applies to the Contract, is <b>the law of Union of India.</b>	[ Cl. 3.1 ]
12.	The language of the Contract documents is <b>English</b>	[ Cl. 3.1 ]
13.	Limit of subcontracting – <b>50 % of the Initial Contract Price</b>	[ Cl. 7.1 ]
14.	The Schedule of Other Contractors – <b>NIL-</b>	[ Cl. 8 ]
15.	The Schedule of Key personnel - As per Annex-II to section I	[Cl. 9]
16.	The minimum insurance cover for physical property, injury and death is Rs.5 lakhs per occurrence with the number of occurrences limited to four. After each occurrence, Contractor will pay additional premium necessary to make insurance valid for four occurrences always.	[Cl. 13]
17.	Site investigation report – To be assessed by the contractor	[Cl. 14]
18.	The site possession Dates shall be within seven days from issue of notice to proceed with the work.	[Cl. 21]
19.	Fees and types of reimbursable expenses to be paid to the Dispute Review expert. (To be inserted later) -Nil-	[Cl. 25]
20.	Appointing Authority for the Dispute Review Expert is Employer.	[Cl. 26]
21.	The period for submission of the programme for approval of Engineer shall be 21 days from the issue of letter of Acceptance	[Cl. 27.1]

Signature of Contractor

No. of Corrections

Executive Engineer

Page 81 of 182

**Tender for Construction of CGG –Residential & Academic Building at Baner Yashada Pune**

22.	The period between programme updates shall be <b>30 days</b> .	[Cl. 27.3]
23.	The amount to be withheld for late submission of an update programme shall be <b>Rs.1.00 Lakh</b>	[Cl. 27.3]

**Tender for Construction of CGG –Residential & Academic Building at Baner Yashada Pune**

24.	The following events shall also be Compensation Events:		[Cl. 44]
	Substantially adverse ground conditions encountered during the course of execution of work not provided for in the bidding document –		
	(i)	Removal of underground utilities detected subsequently	
	(ii)	Significant change in classification of soil requiring additional mobilisation by the contractor e.g. ordinary soil to rock excavation	
	(iii)	Removal of unsuitable material like marsh, debris dumps etc. not caused by the contractor	
	(iv)	Artesian conditions.	
	(v)	Seepage, erosion, landslide	
	(vi)	River training requiring protection of permanent work	
	(vii)	Presence of historical, archaeological or religious structures, monuments interfering with the works	
	(viii)	Restriction of access to ground imposed by civil, judicial, or military authority.	
25.	The currency of the Contract is Indian Rupees		[Cl. 46]

**25-A.**

**Accompaniment to Government Resolution  
YASHADANo. CAT/06/04/148, Dated 16/05/2005.**

**Price Variation Clause**

**(I) STAR Rates:**

<b>(1) Cement</b>	<b>:</b>	<b>Rs. 6,000/-</b>	<b>Per M.T.</b>
<b>(2) T.M.T. Fe 500 Steel</b>	<b>:</b>	<b>Rs. 61,000/-</b>	<b>Per M.T.</b>
<b>(3) Structural Steel</b>	<b>:</b>	<b>Rs. 62,575/-</b>	<b>Per M.T.</b>
<b>(4) Bitumen</b>		<b>Rs. 49,250/-</b>	<b>Per M.T.</b>

Signature of Contractor

No. of Corrections

Executive Engineer

Page 83 of 182

**Tender for Construction of CGG –Residential & Academic Building at Baner Yashada Pune**

26.	The Proportion of payments retained (retention money) shall be 6 % from each bill subject to a maximum of 5 % of final contract price.		[Cl. 48]
27	Amount of liquidated damages for delay in completion of works	(I) For Whole of work <del>(1/2000)<sup>th</sup> of the initial contract price rounded off to the nearest thousand per day per day</del> To be decided by the Employer/Engineer from time to time to the extent of 1/2000 (subject to 10% contract price.)	[Cl. 49]
		(II) For sectional completion To be decided by the Employer/Engineer from time to time to the extent of 1/2000 (subject to 10% contract price.)	
28	Nature of advance	Amount (Rs.) Conditions to be fulfilled	[Cl.51 and 52]

**Tender for Construction of CGG –Residential & Academic Building at Baner Yashada Pune**

i	*EQUIP-MENT	- Deleted-		
ii	* Secured advance for non-perishable materials brought to site	75% of Invoice Value or 75% of value assessed by the engineer.	a) The materials are in accordance with the specification for works.	[Cl. 51]
			b) Such materials have been delivered to site, and are properly stored and protected against damage or deterioration to the satisfaction of the Engineer. The Contractor shall store the bulk material in measurable stacks;	
			c) The Contractor's records of the requirements, orders, receipt and use of materials are kept in a form approved by the Engineer and such records shall be available for inspection by the Engineer.	
			d) The contractor has submitted with his monthly statement the estimated value of the materials on site together with such documents as may be required by the Engineer for the purpose of valuation of the materials and providing evidence of ownership and payment thereof.	
			e) Ownership of such materials shall be deemed to vest in the Employer for which the Contractor has submitted an Indemnity Bond in an acceptable format, and	
			f) The quantities of materials are not excessive and shall be used within a reasonable time as determined by the Engineer.	
29.	Repayment of Secured advance			[Cl. 51.4]
	The advance shall be repaid from each monthly payments to the extent materials [for which advance was previously paid pursuant to Clause 51.4 of G. C. C. ] have been incorporated into the works.			

**Tender for Construction of CGG –Residential & Academic Building at Baner Yashada Pune**

30.	The Securities shall be for the following minimum amounts equivalent as a percentage of the Contract Price:	[Cl. 52]
	Performance Security for <b>2%</b> of contract price plus Rs ..... (to be decided after evaluation of the bid) as additional security in terms of ITB Clause 34.	
	The Standard form of Performance Security acceptable to the Employer shall be an unconditional Bank Guarantee of the type as presented in Section 8 of the Bidding Documents.	
31.	The Schedule of Operating and Maintenance Manuals -- not Applicable	[Cl. 58]
32.	The date by which “as-built’ drawings (in scale as directed) in 2 sets are required is within 28 days of issue of certificate of completion of whole or section of the work, as the case may be.	[Cl. 58]
33.	The amount to be withheld for failing to supply “as-built” drawings by the date required is	[Cl. 58]
34.	The following events shall also be fundamental breach of contract : “The Contractor has contravened Sub-Clause 7.1 and Clause 9 of GCC.”	[Cl. 59.2]
35.	The Percentage to apply to the value of the work not completed representing the Employer’s additional cost for completing the Works shall be 20 percent.	[3, Cl. 60]

Accompaniment to Government Resolution  
YASHADANo. CAT/06/04/148, Dated 16/05/2005.

**Price Variation Clause**

If during the operative period of the Contract as defined in condition (i) below, there shall be any variation, in the Consumer Price Index (New Series) for Industrial Workers for **Pune** Centre as per the Labour Gazette published by the Commissioner of Labour, Government of Maharashtra and / or in the wholesale Price Index for all commodities prepared by the Office of Economic Adviser, Ministry of Industry, Government of India, or in the price of petrol / oil and lubricants and major construction materials like bitumen, cement, steel, various types of metal pipes etc., then subject to the other conditions mentioned below, price adjustment on account of

(1) Labour Component (2) Material Component (3) Petrol, Oil and Lubricants Component (4) Bitumen Component (5) HYSD & Mild Steel Component (6) Cement Component (7) C.I. and D.I. Pipes Component calculated as per the formula hereinafter appearing, shall be made. Apart from these, no other adjustments shall be made to the contract price for any reasons whatsoever. Component percentage as given below is as of the total cost of work put to tender. **Total of Labour, Material and POLcomponents shall be 100 and other components shall be as per actual.**

(1)	Labour Component	:	K <sub>1</sub>	<b>33.00 %</b>
(2)	Material Component	:	K <sub>2</sub>	<b>59.00 %</b>
(3)	POL Component	:	K <sub>3</sub>	<b>08.00 %</b> <b>100.00 %</b>
(4)	T.M.T.Fe 500 Steel	:	Actual	
(5)	Cement	:	Actual	
(6)	Structural steel	:	Actual	
(7)	Asphalt (60/70 grade)	:	Actual	

**Note :** If Cement, Steel, Bitumen, C.I. & D.I. Pipes are supplied on Schedule 'A' then respective component shall not be considered. Also if particular component is not relevant same shall be deleted.

**1. Formulae for Labour Component :**

$$V_1 = 0.85 \times P \times \left( \frac{K_1}{100} \times \frac{L_1 - L_0}{L_0} \right) \quad \text{Where,}$$

**V<sub>1</sub>**= Amount of Price Variation in rupees to be allowed for Labour Component.

**P** = Cost of work done during the quarter under Consideration minus the cost of Cement, HYSD and Mild Steel, bitumen, C.I. and D.I. Pipes calculated at the basic star rates as applicable for the tender, consumed during the quarter under consideration. *(These star rates shall be specified here)*

**Tender for Construction of CGG –Residential & Academic Building at Baner Yashada Pune**

(1) Cement	:	Rs. 6,000.00 Per M.T.
(2) TMT FE 500 Steel	:	Rs. 61,000.00 Per M.T.
(3) Structural Steel	:	Rs. 62,575.00 Per M.T.
(4) Bitumen	:	Rs. 49,250.00 Per M.T.

**K<sub>1</sub>** = Percentage of Labour Component as indicated above.

**L<sub>0</sub>**= Basic consumer price index for **Pune** centre shall be average consumer price index for the quarter preceding the month in which the last date prescribed for receipt of tender, falls.

**L<sub>1</sub>**= **Average consumer** price index for **Pune** centre for the quarter under consideration.

**2. Formulae for Materials Component :**

$$V_2 = 0.85 P \left( \frac{K_2 \times M_1 - M_0}{100 M_0} \right) \quad \text{Where,}$$

**V<sub>2</sub>**= Amount of Price Variation in rupees to be allowed for Materials Component.

**P** = Same as worked out for labour component.

**K<sub>2</sub>** = Percentage of Material Component as indicated above.

**M<sub>0</sub>**= Basic wholesale price index shall be average wholesale price index for the quarter preceding the month in which the last date prescribed for receipt of tender, falls.

**M<sub>1</sub>**= Average wholesale price index during the quarter under consideration.

**3. Formula for Petrol, Oil and Lubricant Component :**

$$V_3 = 0.85 P \left( \frac{K_3 \times P_1 - P_0}{100 P_0} \right) \quad \text{Where,}$$

**V<sub>3</sub>**= Amount of Price Variation in rupees to be allowed for POL Component.

**P** = Same as worked out for labour component.

**K<sub>3</sub>** = Percentage of Petrol, Oil and Lubricant Component.

**P<sub>0</sub>**= Basic wholesale price HSD at **Mumbai** during the quarter preceding the month in which the last date prescribed for receipt of tender, falls.

**P<sub>1</sub>**= Average price of HSD at **Mumbai** during the quarter under consideration.

**4. Formulae for Bitumen Component :**

$$V_4 = QB (B_1 - B_0)$$

**Where,**

Signature of Contractor

No. of Corrections

Executive Engineer

Page 88 of 182



## Tender for Construction of CGG –Residential & Academic Building at Baner Yashada Pune

**V<sub>4</sub>**= Amount of Price Variation in rupees to be allowed for **Bitumen** Component.

**QB** = Quantity of Bitumen (Grade...) in metric tonnes used in the permanent works and approved enabling works during the quarter under consideration.

**B<sub>1</sub>** = Current, average ex-refinery price per metric tonne of Bitumen (Grade...) under consideration including taxes (octroi, excise sales tax) during the quarter under consideration.

**B<sub>0</sub>**= Basic rate of Bitumen in rupees per metric tonne as considered for working out value of P or average ex-refinery price in rupees per metric ton including taxes (octroi, excise sales tax) of Bitumen for the grade of bitumen under consideration prevailing quarter preceding the month in which the last date prescribed for receipt of tender, falls, whichever is higher.

### 5. Formulae for H.Y.S.D. and Mild Steel Component :

$$V_5 = \frac{S_0 (SI_1 - SI_0)}{SI_0} \times T \quad \text{Where,}$$

**V<sub>5</sub>**= Amount of Price Variation in rupees to be allowed for **H.Y.S.D. / Mild Steel** Component.

**S<sub>0</sub>** = Basic rate of H.Y.S.D. / Mild Steel in rupees per metric tonne as considered for working out value of P.

**SI<sub>1</sub>** = Average Steel Index as per RBI Bulletin during the quarter under consideration.

**SI<sub>0</sub>**= Average of Steel Index as per RBI Bulletin for the quarter preceding the month in which the last date prescribed for receipt of tender, falls.

**T** = Tonnage of steel used in the permanent works for the quarter under consideration.

### 6. Formulae for Cement Component :

$$V_6 = \frac{C_0 (CI_1 - CI_0)}{CI_0} \times T \quad \text{Where,}$$

**V<sub>6</sub>**= Amount of Price Escalation in rupees to be allowed for **Cement** Component.

**C<sub>0</sub>** = Basic rate of cement in rupees per metric tonne as considered for working out value of P.

**CI<sub>1</sub>** = Average Cement Index published in the RBI bulletin for the quarter under consideration.

**CI<sub>0</sub>**= Average of Cement Index published in the RBI bulletin for the quarter preceding the month in which the last date prescribed for receipt of tender, falls.

**T** = Tonnage of cement used in the permanent works for the quarter under consideration.

7. **Formulae for C.I./D.I. Pipe Component :**

$$V_7 = Q_d (D_1 - D_0) \quad \text{Where,}$$

$V_7$ = Amount of Price Escalation in rupees to be allowed for C.I./D.I. pipe Component.

$D_0$ = Pig Iron basic price in rupees per tonne considered for working out value of P.

$D_1$  = Average Pig Iron price in rupees per tonne during the quarter under consideration (Published by HSCO)

$Q_d$ = Tonnage of C.I./D.I. pipes used in the works during the quarter under consideration.

(II) **THE FOLLOWING CONDITIONS SHALL PREVAIL :**

- (i) The operative period of the contract shall mean the period commencing from the date of the work order issued to the Contractor and ending on the date on which the time allowed for the completion of the works specified in the Contract for work expires, taking into consideration the extension of time, if any, for completion of the work granted by the Engineer under the relevant clause of the Conditions of Contract in cases other than those where such extension is necessitated on account of default of the Contractor. The decision of the Engineer as regards the operative period of the Contract shall be final and binding on the Contractor. Where any compensation for **liquidated** damages is levied on the Contractor on account of delay in completion or inadequate progress under the relevant Contract provisions, the price adjustment amount for the balance of work from the date of levy of such compensation shall be worked out by pegging the indices **L<sub>1</sub>, M<sub>1</sub>, C<sub>1</sub>, P<sub>1</sub>, B<sub>1</sub>, S<sub>1</sub> and Cl<sub>1</sub>** to the levels corresponding to the date from which such compensation is levied.
- ii) This price variation clause shall be applicable to all contracts in B<sub>1</sub> / B<sub>2</sub> and C from but shall not apply to piece works. The price variation shall be determined during each quarter as per formula given above in this clause.
- iii) The price variation under this Clause **shall not be payable for the extra items** required to be executed during the completion of the work and also on the excess quantities of items payable under the provisions of Clause 38/37 of the contract form **B<sub>-1</sub>/B<sub>2</sub>** respectively. Since the rates payable for the extra items or the extra quantities under Clause 38/37 are to be fixed as per the current D.S.R. or as mutually agreed to yearly revision till completion of such work. In other words, when the completion / execution of extra items as well as extra quantities under Clause 38/37 of the contract from **B<sub>1</sub>/B<sub>2</sub>** extends beyond the operative date of the D.S.R. then rates payable for the same beyond that date shall be revised with reference to the current D.S.R. prevalent at that time on year to year basis or revised in accordance with mutual agreement thereon, as provided for in the Contract, whichever is less.
- iv) This clause is **operative both ways**, i.e. if the price variation as calculated above is on the **plus side**, payment on account of the price variation shall be allowed to the contractor and if it is on the **negative side**, the Government shall be entitled to recover the same from the Contractor and the amount shall be deductible from any amounts due and payable under the contract.
- v) To the extent that full compensation for any rise or fall in costs to the Contractor is **not**

**Tender for Construction of CGG –Residential & Academic Building at Baner Yashada Pune**

**entirely covered by the provision of this or other clauses** in the contract, the unit rate and prices included in the contract shall be deemed to include amounts to cover the contingency of such other actual rise or fall in costs.

Additional Specifications for use of VSI Crushed Sand / Artificial Sand / Fine Aggregates.

.....

1. VSI Crushed sand / Artificially manufactured sand / fine aggregates hereinafter referred to as "Crushed Sand" shall be as defined under Clause 3.1.2 of Indian Standard 383-2016.
2. The properties of "Crushed Sand" shall confirm to the provisions of Indian Standard 383:2016.
3. The "Crushed Sand" shall be free of dust and other Deleterious material.
4. The "Crushed Sand" shall be manufactured using "Automatic Vertical Shaft Impactor "type Crusher only.
5. The quantity of Microfines (Particles below 75 microns) in "Crushed Sand" shall not be more than seven percent.
6. The Contractor shall intimate the Engineer In-Charge regarding the source of supply of "crushed sand". The source of supply of "crushed sand" shall be got approved by the Executive Engineer (Engineer-In-charge) prior to the start of work.
7. Each Load of crushed sand whenever brought on site shall be tested for "Fineness modulus". Fineness modulus shall be within permissible limits, If it doesn't fall within acceptable limits, it shall be rejected.
8. The Test of Compressive strength of concrete / Mortar using "Crushed sand" shall be carried out in presence of Department's Engineer as given below...
  - a) 100 percent Cube testing in presence of Junior /Asst./Sectional Engineer.
  - b) 25 percent Cube testing in the presence of sub divisional Engineer
  - c) 5 percent Cube testing in the presence of Executive Engineer. (Engineer-In-charge)
9. The flakiness index and elongation index tests shall be within permissible limits.
10. The Concrete mix design for each grade of concrete using "Crushed sand" shall be carried out only in Government Quality Control laboratory and the same Mix

**Tender for Construction of CGG –Residential & Academic Building at Baner Yashada Pune**

Design shall be adopted.

11. As far as possible freshly produced "Crushed sand" shall be used. Stored "Crushed sand" shall not be used.
12. For Plastering purpose, if the use of crushed sand is proposed, it shall be used with addition of super plasticizers at the rate of 100 millilitres per bag of cement without any extra cost to Government.
13. The following tests shall be carried out for the use of "Crushed sand".
  - a) Sieve analysis
  - b) Specific gravity
  - c) Water absorption
  - d) Bulk density
  - e) Alkali aggregate reaction
  - f) Soundness
  - g) Deleterious Material
  - h) Organic impurities
  - i) Micro fines Content
  - j) Test for silt and clay.
  - k) Fineness Modulus tests.
14. Necessary Bond regarding the use of "Crushed sand" shall be submitted by the Contractor clearly stating that, if any defects are observed during execution and in defect liability period, the same shall be rectified at his own risk and cost.
15. Grading zone I and II mentioned under Clause 6.3 table 9 of fine aggregates in IS 383:2016 shall only be used for concreting.
16. Reversible drum type / Batch mix plant (pan type) concrete mixer shall be used for concrete.
15. Use of Concrete from Ready Mix Plant (RMC) shall be strictly Prohibited.
16. "Crushed sand" shall not be used for pre stressed concrete works.

**INTEGRITY PACT**

Between  
Yashwantrao Chavan Academy Of Development Administration  
,Pune - 411007 hereinafter referred to as  
"YASHADA"  
And

.....  
(Insert the name of sole bidder / Lead Partner of Joint Venture)

Having its Registered Office at,

( Insert Full Address)

.....  
And

.....  
.....  
(Insert the name of Partner (s) of Joint Venture as applicable)

Having its Registered Office at,

( Insert Full Address)

.....  
Hereinafter referred to as  
"The Bidder/Contractor"

Preamble

YASHADA intends to award, under laid-down organizational procedures,contract(s) for .

-  
(insert the name of package)

(Signature)  
(For & on behalf of YASHADA)

(Signature)  
(For and on half of Bidder / Partner(s)  
of Joint Venture / Contractor)₂

## Tender for Construction of CGG –Residential & Academic Building at Baner Yashada Pune

Number -

(Insert Specification Number of Package)

YASHADA values full compliance with all relevant laws and regulations, and the principles of economical use of resources and of fairness and transparency in its relations with its Bidder(s) / Contractor(s).

In order to achieve these goals, YASHADA and the above named Bidder / Contractor enter into this agreement called 'Integrity Pact' which will form a part of the bid.

It is hereby agreed by and between the parties as under.

### Section-I :- Commitments of YASHADA

(1) YASHADA commits itself to take all measures necessary to prevent corruption and to observe the following principles:-

(a) No employee of YASHADA, personally or through family members, will in connection with the tender for, or the execution of a contract, demand, take a promise for or accept, for him/herself or third person, any material or other benefit which he/she is not legally entitled to.

(b) YASHADA will, during the tender process treat all Bidder(s) with equity and fairness. YASHADA will in particular, before and during the tender process, provide to all Bidder(s) the same information and will not provide to any Bidder(s) confidential/ additional information through which the Bidder(s) could obtain an advantage in relation to the tender process or the contract execution.

(c) YASHADA will exclude from evaluation of Bids its such employee(s) who has any personnel interest in the Companies / Agencies participating in the Bidding / Tendering process.

(2) If Registrar YASHADA obtains information on the conduct of any of YASHADA which is a criminal offence under the relevant Anti-Corruption Laws of India, or if there be a substantive suspicion in this regard, he will inform its Chief Vigilance Officer and in addition can initiate disciplinary actions under its Rules.

### Section-II :- Commitments of the Bidder(s)/ Contractor(s)

(1) The Bidder(s)/ Contractor(s) commit himself to take all measures necessary to prevent

**Tender for Construction of CGG –Residential & Academic Building at Baner Yashada Pune**

corruption. He commits himself to observe the following principles during his participation in the tender process and during the contract execution.

(Signature)  
(For & On behalf of YASHADA)

(Signature)  
(For & On behalf of Bidder / Partner(s) of  
Joint Venture / Contractor)

- (a) The Bidder(s)/ Contractor(s) will not, directly or through any other person or firm, offer, promise or give to any of YASHADA or to any of YASHADA'S employees involved in the tender process or the execution of the contract or to any third person any material or other benefit which he/she is not legally entitled to, in order to obtain in exchange any advantage during the tender process or during the execution of the contract.
  - (b) The Bidder(s)/ Contractor(s) will not enter into any illegal agreement or understanding, whether formal or informal with other Bidders / Contractors. This applies in particular to prices, specifications, certifications, subsidiary contracts, submission or non-submission or bids or any other actions to restrict competitiveness or to introduce cartelization in the bidding process.
  - (c) The Bidder(s)/ Contractor(s) will not commit any criminal offence under the relevant Anti-Corruption Laws of India; Further the Bidder(s)/ Contractor(s) will not for illegitimate purposes or for purposes of restrictive completion or personal gain, or pass on to others, any information or document provided by YASHADA as part of the business relationship, regarding plans, technical proposals and business details, including information contained or transmitted electronically.
  - (d) The Bidder/ Contractor of foreign origin shall disclose the name and address of the Agents/ Representatives in India, if any, involved directly or indirectly in the Bidding, Similarly, the Bidder / Contractor of Indian Nationality shall furnish the name and address of the foreign principles, if any involved directly or indirectly in the Bidding.
  - (e) The Bidder/ Contractor will, when presenting his bid, disclose any and all payments he has made, is committed to or intends to make to agents, brokers or any other intermediaries in connection with the award of the contract and / or with the execution of the contract.
  - (f) The Bidder/ Contractor will not misrepresent facts or furnish false / forged documents / information in order to influence the bidding process or the execution of the contract to the detriment of YASHADA.
- (2) The Bidder / Contractor will not instigate third persons to commit offences outlined above or be an accessory to such offences.

Section- III :- Disqualification from tender process and exclusion from future contracts.



## Tender for Construction of CGG –Residential & Academic Building at Baner Yashada Pune

- (1) If the Bidder before contract award, has committed a serious transgression through a violation of Section II or in any other form such as to put his reliability or credibility as Bidder into question, YASHADA may disqualify the Bidder from the tender process or terminate the contract, if already signed, for such reason.

(Signature)  
(For & On behalf of YASHADA)

(Signature)  
(For & On behalf of Bidder / Partner(s) of  
Joint Venture / Contractor)

- (2) If the Bidder/ Contractor has committed a serious transgression through a violation of Section-II such as to put his reliability or credibility into question, YASHADA may after following due procedures also exclude the Bidder/ Contractor from future contract award process. The imposition and duration of the exclusion will be determined by the severity of the transgression. The severity will be determined by the consideration the full case, in particular the number of transgressions, the position of the transgressors within the company hierarchy of the Bidder/ Contractor and the amount of the damage. The exclusion will be imposed for a minimum of 12 months and maximum of 3 years.
- (3) In the Bidder / Contractor can prove that he has restored / recouped the damage caused by him and has installed a suitable corruption prevention system, YASHADA may revoke the exclusion prematurely.

### Section-IV :- Liability for violation of Integrity Pact

- (1) In YASHADA has disqualified the Bidder from the tender process prior to the award under Section III, YASHADA may forfeit the Bid Guarantee under the Bid.
- (2) If YASHADA has terminated the contract under Section III, YASHADA may forfeit the Contract Performance Guarantee of this contract besides resorting to other remedies under the contract.

### Section- V :- Previous Transgression

- (1) The Bidder shall declare in his Bid that no previous transgressions occurred in the last 3 years with any other Public Sector undertaking or Government Department that could justify his exclusion from the tender process.
- (2) If the Bidder makes incorrect statement on this subject, he can be disqualified from the tender process or the contract, if already awarded, can be terminated for such reason.

**Tender for Construction of CGG –Residential & Academic Building at Baner Yashada Pune**

Section -VI :- Equal treatments of all Bidders/ Contractors

- (1) YASHADA will enter into agreements with identical conditions as this one with all Bidders.
- (2) YASHADA will disqualify from the tender process any bidder who does not sign this Pact or violate its provisions.

(Signature)  
(For & On behalf of YASHADA)

(Signature)  
(For & On behalf of Bidder / Partner(s) of  
Joint Venture / Contractor)

Section- VII :-Punitive Action against violating Bidders / Contractors

If YASHADA obtains knowledge of conduct of a Bidder or a Contractor or his Subcontractor or of an employee or a representative or an associate of a Bidder/ Contractor or his Subcontractor which constitutes corruption, or if YASHADA has substantive suspicion in this regard, YASHADA will inform the Chief Vigilance Officer. (CVO)

(\* Section VIII :- Independent External Monitor / Monitors

- (1) YASHADA has appointed a panel of independent External Monitors (IEMs) for this Pact with the approval of Central Vigilance Commissions (CVC). Government of India, out of which one of the IEMs has been indicated in the NIT / IFB.
- (2) The IEM is to review independently and objectively, whether and to what extent the parties comply with the obligations under this agreement. He has right of access to all project documentation. The IEM may examine any complaint received by him and submit a report to Registrar YASHADA at the earliest. He may also submit a report directly to the CVO and the CVC, in case of suspicion of serious irregularities attracting the provisions of the PC act. However, for ensuring the desired transparency and objectivity in dealing with the complaints arising out of any tendering process, the matter shall be referred to the full panel of IEMs who would examine the records, conduct the investigations and submit report to Registrar YASHADA giving joint findings.
- (3) The IEM is not subject to instructions by the representatives of the parties and performs

**Tender for Construction of CGG –Residential & Academic Building at Baner Yashada Pune**

his functions neutrally and independently. He reports to the Registrar YASHADA, Pune.

- (4) The Bidder(s) / Contractors accepts that the IEM has the right to access without restriction to all documentation of YASHADA related to this contract including that provided by the Contractor / Bidder. The Bidder / Contractor will also grant the IEM, upon his request and demonstration of a valid interest, unrestricted and unconditional access to his documentation. The same is applicable to subcontractors. The IEM is under contractual obligations to treat the information and documents of the Bidder(s)/Contractor(s)/ Subcontractor(s) with confidentiality.
- (5) YASHADA will provide to the IEM information as sought by him which could have an impact on the contractual relations between YASHADA and the Bidder / Contractor related to this contract.

(Signature)  
(For & On behalf of YASHADA)

(Signature)  
(For & On behalf of Bidder / Partner(s) of  
Joint Venture / Contractor)

- (6) As soon as the IEM notices, or believes to notice a violation of this agreement , he will so inform the Registrar YASHADA and request the Registrar YASHADA, discontinue or take corrective action ,or to take other relevant action. The IEM can in this regard submit non-binding recommendations. Beyond this the IEM has no right to demand from the parties that they act in a specific manner, refrain from action or tolerate action. However the IEM shall give an opportunity to YASHADA and the Bidder / Contractor, as deemed it, to present its case before making its recommendations to YASHADA.
- (7) The IEM will submit a written report to the Registrar YASHADA 8 to 10 weeks from the date of reference or intimation to him by YASHADA and should the occasion arise, submit proposals for correcting problematic situations.
- (8) IF the IEM has reported to the Registrar YASHADA substantiated suspicion of an offence under relevant, Anti- Corruption Laws of India, and the Registra YASHADA, Pune not, with in the reasonable time take visible action to processed against such offence or reported it to the CVO the Monitor may also transit this information directly to the CVC Government of India.
- (9) The word 'IEM' would include both singular and plural.
- (\*) This section shall be applicable for only those packages wherein the IEMs have been

**Tender for Construction of CGG –Residential & Academic Building at Baner Yashada Pune**

identified in Section-I : Invitation for Bid and /or Clause ITB 9.3 in Section-III : Bid Data Sheets of Conditions of Contract, Volume-I of the Bidding Documents.

**Section -IX :-Pact Duration**

This Pact begins when both parties have legally signed it. It expires for the Contractor after the closure of the contract and for all other Bidder's six months after the contract has been awarded.

**Section- X :- Other Provisions.**

- (1) This agreement is subject to Indian Law. Place of performance and jurisdiction is the establishment of YASHADA. The Arbitration clause provided in the main tender document / contract shall not be applicable for any issue / dispute arising under Integrity Pact.
- (2) Changes and supplements as well as termination notices need to be made in writing.
- (3) If the Contractor is a partnership firm or a consortium or joint venture, this agreement must be signed by all partners, consortiums members and joint venture partners.

(Signature)  
(For & On behalf of YASHADA)

(Signature)  
(For & On behalf of Bidder / Partner(s) of  
Joint Venture / Contractor)

- (4) Nothing in this agreement shall affect the rights of the parties available under the General Conditions of Contract (GCC) and Special Conditions of Contract (SCC).
- (5) Views expressed or suggestions / submissions made by the parties and the recommendations of the CVO / IEM # in respect of the violation of this agreement, shall not be relied on or introduced as evidence in the arbitral or judicial proceedings (arising out of the arbitral proceedings) by the parties in connection with the disputes / differences arising out of the subject contract.

# CVO shall be applicable for packages wherein IEM are not identified in Section IFB/BDS of Conditions of Contract, Volume-I , IEM shall be applicable for packages wherein IEM are identified in Section IFB / BDS of Conditions of Contract, Volume-I.

- (6) Should one or several provisions of this agreement turn out to be invalid, the remainder of this agreement remains valid In this case, the parties will strive to come to an agreement to their original intentions.

(Signature)

(Signature)

**Tender for Construction of CGG –Residential & Academic Building at Baner Yashada Pune**

(For & On behalf of YASHADA)

(For & On behalf of Bidder / Partner(s) of  
Joint Venture / Contractor)

(Office Seal)

(Office Seal)

Name :-

Name :-

Designation :- Executive Engineer

Designation:- Proprietor

Witness 1

Witness 1

(Name & Address)

(Name & Address)

.....

.....

.....

.....

Witness 2

Witness 2

(Name & Address)

(Name & Address)

.....

.....

# **VOLUME-II**

## **Section 5**

SECTION – 5  
TECHNICAL SPECIFICATIONS  
**VOLUME-II**

## **TECHNICAL SPECIFICATIONS**

### 1.1 PREAMBLE

The Technical Specifications contained herein shall be read in conjunction with the other Bidding Documents as specified in Volume –I, III & IV.

#### **SITE INFORMATION**

The information give hereunder and provided elsewhere in these documents is given in good faith by the Employer but the Contractor shall satisfy himself regarding all aspects of site conditions and no claim will be entertained on the plea that the informationsupplied by the Employer is erroneous or insufficient.

The area in which the Works are located is plain terrain

#### **General Climatic Conditions**

The temperature in this region is a under: During summer months, average maximum temperature is above 40°C.

The average annual rainfall in the area is of the order of 500mm

#### **Seismic Zone (Zone III) Exposure condition.**

The Works are located in Seismic Zone II as defined in IRC: 6-2000.

### 2 GENERAL REQUIREMENTS

The Technical Specifications in accordance with which the entire work described hereinafter shall be constructed and completed by the Contractor shall comprise of the following,

#### **PART- 1- General Technical Specifications**

The General Technical Specifications shall be the “SPECIFICATIONS FOR ROAD AND BRIDGE WORKS” FIFTH REVISION APRIL 2013, issued by the Ministry of Surface Transport (Road Wing), Government of India and published by the Indian Roads Congress.

Maharashtra State YASHADASpecifications Book.

#### **PART – II- Supplementary Technical Specifications.**



## Tender for Construction of CGG –Residential & Academic Building at Baner Yashada Pune

The Supplementary Technical Specifications shall comprise of various Amendments / Modifications / Additions to the “SPECIFICATION FOR ROAD AND BRIDGE WORKS” referred to in PART–1 above and Additional Specifications for particular item of Works not already covered in PART-1.

A particular clause or a part thereof in “SPECIFICATION FOR ROAD AND BRIDGE WORKS (FIFTH REVISION, APRIL 2013)” referred in PART-I above, where Amended / Modified / Added upon and incorporated in PART-II, referred to above , such Amended / Modified / Added upon, and incorporated in PART-II, referred to above, such Amendment / Modification / Addition supersedes the relevant Clause or part of the Clause.

The Additional Specifications shall comprises of specifications for particular item of Works not already covered in PART-I.

When an Amended / Modified / Added Clause supersedes a Clause or part thereof in the said Specifications, then any reference to the superseded Clause shall be deemed to refer to the Amended / Modified /Added Clause or part thereof.

In so far as Amended / Modified / Added Clause may come in conflict or be inconsistent with any of the provisions of the said Specifications under reference, the Amended / Modified /Added Clauses shall always prevail.

The following Clauses in the “SPECIFICATIONS FOR ROAD AND BRIDGE WORKS (FIFTH REVISION APRIL 2013)” are applicable /Modified for project.

112, 201, 301, 309,401, 404, 408,501, 502, 503,504, 507, 801, 803, 900, 1000, 3000

In the absence of any definite provision on any particular issue in the aforesaid Specifications, reference may be made to the latest codes and specifications of IRC and BIS in that order. Where even these are silent, the construction and completion of the works shall confirm to sound engineering practice as approved by the Engineer and in case of any dispute arising out of the interpretation of the above, the decision of the Engineer shall be final binding on the contractor.

<b>Section</b>	<b>Respective / Clauses</b>
100- General	101 -121- General
112-	112- Arrangement for traffic during construction
200- Site Clearance	201- Clearing and grubbing Contractor shall remove and dispose of all materials such as trees, bushes, shrubs, stumps roots not exceeding 150 mm thick from side

berms as directed by Engineer.

**Sub base course**

Bituminous Macadam Work shall be carried out as directed by Engineer In Charge

408- Shoulder

**500- Base & Surface courses**

501- General requirement for bituminous pavement layers.

(Bituminous)

502- Primer coat over Granular Base.

503- Tack Coat : Tack coat shall be as specified in the item of work.

504- Bituminous macadam

507- Bituminous concrete.

Cement / Lime shall be used as filler Job mix design for bituminous concrete is mandatory and variation in binder content beyond permissible variation of +/- 0.30% by weight of total mix will be assessed and paid accordingly for lower side only. Adjustment in payment will not be allowed for binder content on higher side.

900- Quality Control for Road Works

10 % of the density tests shall be done on edges. "Stone crushing cum screening plant (cone type) should be deployed for getting proper size and grading of aggregates. Combined flakiness and elongation index shall no be allowed more than the specific limit as mentioned in specifications of respective items "

Complete clause from 901 to 903 is applicable

1000- Material for structure

All material required for various items shall be confirm to Section 1000

3000- Maintenance of road

The following should be added in this clause.

The following clauses shall apply for routine maintenance during defect liability period.

3001- General

3002- Restoration of rain cuts

**Tender for Construction of CGG –Residential & Academic Building at Baner Yashada Pune**

3003- Maintenance of earthen shoulders

3004- Bituminous work in connection with  
maintenance and repairs

All the defects observed during the defect liability period shall be rectified by the Contractor at his own cost within specified time period as per instruction Engineer-In-Charge.

The following Clauses in the “SPECIFICATION FOR ROAD AND BRIDGE WORKS (MAHARASHTRA STATE P.W.D. SPECIFICATION BOOK”) are Applicable

/Modified for the Project

Rd 42 Supply of Bitumen VG-30 Grade& VG-10

Rd 47.3. Tack coat Application

Rd 49.3.1 (e) Tack coat

In the absence of any definite provision on any particular issue in the aforesaid Specification reference may be made to the latest codes and specifications of IRC and BIS in that order. Where even these are silent, the construction and completion of the Works shall conform to sound engineering practice as approved by the Engineer and in case of any dispute arising out of the interpretation of the above, the decision of the Engineer shall be final binding on the Contractor.

## A. SUPPLEMENTARY SPECIFICATION

### 1. Working Method & Progress Schedule

#### Working Method

- a) The Contractor shall submit within the time stipulated by the Engineer-in-charge in writing the details of actual methods that would be adopted by the Contractor for the execution, of any items as required by Engineer-in –charge at each of the location, supported by necessary detailed drawings and sketches including those of the plant and machinery that would be used, their locations, arrangement for conveying and handling materials etc. and obtain prior approval of the Engineer-in-charge well in advance of starting such items of work.
- b) The Engineer-in-charge reserves the right to suggest modifications or make corrections in the method proposed by the Contactor, whether accepted previously or not at any stage of the Work to obtain the desire accuracy, quality, safety and progress of Work which shall be binding on the Contractor. The Contractor shall take cognizance of such suggestions / objections and suitably modify his method of construction. No claim on account of such change in method of execution will be entertained by the Government so long as specification of the item remains unaltered.

#### Progress Schedule

- a) The Contractor shall furnish and got approved within twenty one days of the order to start the Work, a programme of Work in quadruplicate indicating the date of actual start, the monthly progress expected to be achieved and the anticipated completion date of each major item of work to be done by him, also indicating date of procurement of materials and setting up of plant and machinery. The programme is to be such as to be practicable o achievement towards the completion of the whole Work in the time limit and of the particular items, if any, on the due dates specified in the Contract. Planning and programme of Work shall be done by the mutual discussion between the Engineer-in-Charge and Contracts representative in charge of work.
- b) The progress of work shall be reviewed at every mile stone and revised programme shall be drawn up, if necessary. No revised programme shall be operative without the approval of Engineer-in-Charge in writing.
- c) The Engineer-in-Charge is further empowered to ask for more detailed schedule or schedules say weekly for any item or item in case of urgency of Work as will be directed

by him and the Contractor shall supply the same when asked for.

- d) Acceptance of the programme or the revised programme, by the Engineer-in-charge shall not relieve the Contractor of his responsibility to complete the whole of the Work by the prescribed time or the extended time if any.
- a) The Contractor shall furnish sufficient plant, equipment and labour as may be necessary to maintain the progress schedule. The working and shift hours restricted to one shift a day for operations to be done under the Government supervision shall be such as may be approved by the Engineer- in-Charge They shall not be varied without prior approval of the Engineer-in-Charge.
- b) Night work which requires supervision shall not be permitted except when specifically allowed by Engineer-in-Charge each time, if required by Contractor. The Contractor shall provide necessary lighting arrangement and other measures etc for right Works as directed by Engineers-in Charge without extra cost.

The Contactor shall submit reports on progress of Work in forms and statements etc. at periodical intervals in the form of progress charts forms, statements and /or reports as may be approved by the Engineer-in Charge.

The Contractor shall maintain programme chart, details regarding machinery, equipment, labour, materials and periodical returns thereof in programme to be got approved from the Engineer-in-charge.

**Priorities of Works to be executed**

Priorities for items to be executed shall be determined periodically as deemed fit by the Engineer-in-Charge keeping in view the final time limit allowed for the Work and all the time Schedule fixed for intermediate stages of Works as directed by the Engineer-in-Charge

**2 Setting out for Building Work**

The Engineer-in-charge shall furnish the Contractor with only the four corners of the work site and a level bench mark and the Contractor shall set out the works and shall provide an efficient staff for the purpose and shall be solely responsible for the accuracy of such setting out.

The Contractor shall provide, fix and be responsible for the maintenance of all stacks, templates, level marks, profiles and other similar things and shall take all necessary precautions to prevent their removal or disturbance and shall be responsible for the consequence of such removal or disturbance should the same take place and for their efficient and timely reinstatement. The Contractor shall also be responsible for the maintenance of all existing survey marks, boundary marks, distance marks and centre line marks, either existing or supplied and fixed by the Contractor. The work shall be set out to the satisfaction of the Engineer-in-charge. The approval thereof or joining with the Contractor by the Engineer-in-charge in setting out the work, shall not relieve the Contractor of any of his responsibilities.

10.1 Before beginning of the work, the Contractor shall at his own cost provide all necessary reference and level posts, pegs, bamboos, flags, ranging rods, strings and other material for proper lay out of the work in accordance with the scheme for bearing marks acceptable to the Engineer-in-charge. The centre, longitudinal or face lines and cross lines shall be marked by means of small masonry pillars. Each pillar shall have distinct mark at the centre to enable the theodolite to be set over it. No work shall be started until all these points are checked and approved by the Engineer-in-charge in writing but such approval shall not relieve the Contractor of any of his responsibilities. The Contractor shall also provide all labour, material and other facilities, as necessary, for the proper checking of layout and inspection of the points of works under construction.

Pillars bearing geodetic marks located at the sites of units of works under construction should be protected and fenced by the Contractor.

On completion of works, the Contractor must submit the geodetic documents according to which the work was carried out.

The Contractor shall be responsible for

- A)** Accurate setting out of the Work in relation to original points lines, and levels of references given by the Engineer-in-charge in writing
- B)** The correctness of position, levels dimensions and alignments of all parts of the Work
- C)** The provision of all necessary instruments, appliance and labour in connection with forgoing responsibilities.

If at any time during execution of Works any error appears in the position levels, dimensions or alignment of any part of the Work the Contractor on being required so to do by the Engineer-in-Charge shall at his own cost, rectify such error to the satisfaction of the Engineer-in-Charge whatever the case may be as regards the error.

The checking of any setting out or of any line or level by the Engineer-in-charge shall not in any way relive the Contractor of his responsibility for the accuracy. Thereof and the Contractor shall carefully protect and preserve all benchmarks pegs and other materials used in setting out the Works. The Contractor shall give a notice not less than 48 hours in advance of his intention to set out or layout for any part of the Works to the Engineer-in-charge so that checking can be made in time.

**Layout of Work**

- i)** Layout of the work will be done by Contractor in consultation with the Engineer-in-charge of the Department or his representative Some permanent marks should however be established to indicate the demarcation of the structure or any component thereof made to this permanent marks in measurements books and drawing, signed by the Contractor and

departmental officer.

## **2.2 Road Work**

The Contractor shall establish working bench marks in the area soon after taking possession of the site. The reference bench mark for the area shall be as directed by the Engineer-in-charge. The working bench marks shall be at the rate of four per Kilometer and also at or near all drainage structure. Over bridges. The working bench marks shall be got approved from Engineer-in-charge. Checks must be made on these bench marks once every month and adjustment if any got approved from Engineer-in-charge and recorded. An up to if date record of all bench marks including approved adjustment, if any shall be maintained by the Contractor and also a copy the supplied to the Engineer-in- charge for this record.

The lines and levels of formulation, side slopes, drainage, carriageways and shoulders shall be carefully set and frequently checked. Care shall be taken to ensue that correct gradients and cross sections are everywhere obtained.

In order to facilitate the setting out the Works, the center line of the carriage way of highway must be accurately established by the Contractor and approved by the Engineer-in-charge. It must then be accurately referred in a manner satisfied to the Engineer-in-charge at every 50m. Intervals in plan and rolling terrain and 20m intervals in hilly terrain and at the curve points as directed by the Engineer-in-charge with marker pegs and change boards set in or near the fence line and a schedule of reference dimension shall be prepared and supplied by the Contractor to the Engineer-in-charge. These markers shall be maintained until the Works reach finished formation level and are accepted by the Engineer-in-charge.

The Works of setting out shall be deemed to be part of general Works, preparatory to the execution of work and no separate payment shall be made for same.

The drawings enclosed with the bidding documents are for general guidance only.

All necessary Registers formatted as per instructions of Engineer-in-charge required for documentation of Works shall be supplied by the Contractor in duplicate before commencement of Work. Record shall be maintained by the Contractor and shall be got verified from time to time by the Engineer-in-charge or his representative.

### **Responsibilities of Level and alignment**

The Contractor shall be entirely and exclusively responsibilities for the horizontal and vertical alignment the levels and corrections of every part of work and shall rectify

effectively any errors or imperfection there in such rectification shall be carried out by the Contractor at his own cost when instructions are issued to that effect by the Engineer-in-charge

**Leveling Instrument**

If measurement of item of the work are based on Volumetric measurements, calculated from levels taken before and after construction of the item a sufficient number of leveling instruments staves tapes etc. will have to be kept availability by the Contractor at the site of work for this purpose. Lack of such leveling instruments staves tapes etc. in required number may cause delay in measurement of the work. The Contractor will have therefore to keep sufficient number of these instruments in working condition readily available at the Work site.

**2.4 Ancillary Works**

The Contractor shall submit to Engineer-in-charge in writing the details of all ancillary Works including layout and specifications to be followed for its constructions. Ancillary Works shall not be taken up in hand unless approved by Engineer-in-charge. The Engineer-in-charge reserves the right to suggest modifications or make complete changes in the layout and specifications proposed by the contract at any stage to ensure the safety on the work site. The Contractor shall carry out all such modification to the ancillary Works at his own expenses as ordered by the Engineer-in-charge.

All above conditions are incidental or Works & no extra payment will be made for this.



## **DRAWINGS**

### **CONTRACT DRAWINGS:-**

The Contract Drawings provided for tendering purpose with the tender documents shall be used as a reference only. Contractor should visualize the nature and type of work contemplated and to ensure that the rates and prices quoted by him in the bill of quantities take due consideration of the complexities of work involved during actual execution / construction as experienced contractors in the field.

The tendered rates / prices for the work shall be deemed to include the cost of preparation, supply and delivery of all necessary drawings, prints, tracings and negatives which the contractor is required to provide in accordance with the contract.

### **DOCUMENTATION:**

If so ordered by the Engineer-in-charge, the contractor will prepare drawings of the work as constructed and will supply original and three copies to the Engineer who will verify and certify these drawings.

Final as constructed drawings shall then be prepared by the contractor and applied in triplicate along with a micro-film of the same to Engineer for record and reference purpose at the contractors cost.

## **ADDITIONAL TECHNICAL CONDITIONS**

The work shall be carried out in the best workmanship like manner and in strict accordance with P.W.D. hand book Volume I & II 1960. Edition supplemented by specification attached and as per Standard Specifications Book of Government of Maharashtra of 1979 and as per specific order of the Executive Engineer or his representative from time to time.

The orders issued by the Government in P.W. Department and the Superintending Engineer, from time to time regarding construction procedure shall be binding on the contractor in addition to the specification contained in P.W.D. hand book Volume I & II and book of standard specification of P.W. Department and the specifications enumerated above.

The contractor shall submit day to day account of the materials issued to him and its use and also monthly progress and programme of work.

- a) The concrete mix design shall be got approved from Engineer in charge and the mix design shall give preliminary strength of 1.33 times working strength.
- b) The maximum size of aggregate permissible would be as per A-7 page-8 of Standard Specifications Book 1979 Edition.

The items provided with watering for curing include continuous watering operations throughout the day including lunch hours and also during holidays. For this purpose contractor shall have to construct tank of 5000 liters capacity near each building and provide necessary Booster Pumps etc. to ensure adequate curing and wetting. Hold fasts coming in contact with R.C.C. columns shall be of sizes 30 cm x 4 cm to be fitted with two rows, nails fixed properly in concrete.

For all sand covering items, use of washed mixer sand (with sand washing machine) is obligatory. No separate claim in this regard will be entertained.

Material testing requirement frequency and type of testing is enclosed separately. Material to be used shall be tested accordingly and cost shall be borne by contractor.

For R.C.C. centering plywood and M.S. sheet of approved quality shall be used and adjustable props and fasteners shall be used.

The execution of any work from external side of the building 'H' frame steel scaffolding shall be used. No separate payment for claims in this regard shall be entertained.

The scaffolding shall not be supported on existing external walls of the building by making holes in it and also the scaffolds shall not rest on any part of the building.

Quality Assurance Manual: Contractor shall prepare the quality assurance manual booklet in consultation with the Executive Engineer. Quality assurance manual shall be comprehensive document covering every aspect of the work. Superintending Engineer shall approve this document. The quality manual document shall be used only after

approval from Superintending Engineer. Provision of the quality manual is binding on the contractor. Quality manual shall be treated as a legal document as per with this contract document. It shall be used till the work is completed in full respect.

## **2. SPECIAL CONDITIONS FOR QUALITY CONTROL TESTS AND FREQUENCY**

Overall quality of the work depends on the quality of ingredient material being used in the work and exercising adequate control over it. It is therefore prime responsibility of the Contractor to get the ingredient material and product tested strictly as per the frequencies stipulated in the Annexure.

The Quality Control test shall be carried out at various stages of work wise selection of material to be procured for work, acceptance of procured material before its use on the work, in view of its strength, durability, serviceability etc. and as directed by Engineer-in-charge for any other reason of public interest.

The entire charges towards testing such as sampling, carrying samples to Lab testing of samples etc. will have to be borne by the Contractors.

The right of acceptance/rejection of material/work done specified above is reserved by Engineer-in-charge in view of non confirmation to frequency of testing.

In case of failure to observe the frequency of testing by the contractor the Engineer-in-charge will be at liberty to recover testing charges fixed by the dep't. At penal rate. The penal rate will be two times the prevailing testing charges.

### **SAMPLES AND TESTING MATERIALS**

- (A) All material to be used on civil construction work shall be got approved in advance from the Engineer-in charge and for furniture work wood, plywood, laminates, veneer etc. from Architect and Engineer in charge and shall pass the test and / or analysis required by him which will be :
- (i) As specified in the specification for the items concerned and / or
  - (ii) ISI Specifications (whichever and wherever applicable) or
  - (iii) Such recognized specifications acceptable to Engineer-in-charge as equivalent there to or in absence or such authorized specification.
  - (iv) Such requirement test and / or. analysis as may be specified by the Engineer -in-charge in order of precedence given above.
- (B) The contractor shall at his risk and cost make all arrangements and / or shall provide for all such facilities as the Engineer-in-charge may require for collecting, preparing required number of samples for tests or for analysis at such time and to such place or places as may be directed by the Engineer and bear all charges and cost of testing. Such. samples shall also be deposited with the Engineer-in-charge.

## Tender for Construction of CGG –Residential & Academic Building at Baner Yashada Pune

- (C) The contractor shall if and when required, submit at his cost the samples of materials to be tested or analysed and if, so directed shall not make use of or incorporate in the work any materials represented by the samples until the required tests or analysis have been made and the materials, finally accepted by the Engineer-in-charge.
- (D) The contractor shall not be eligible for any claim or compensation either arising out of any delay in the work or due to any corrective measures required to be taken on account of and as a result of testing of the materials.
- (E) The contractor or his authorized representative will be allowed to remain present in the departmental laboratory while testing samples furnished by him. However the results of all the tests carried out in the departmental laboratory in the presence or absence of the contractor or his authorized representative will be binding on the contractor.
- (F) The contractor shall at his own cost set up laboratory to carry out the routine tests of materials which are to be used on the work the tests will have to be carried out either in his field laboratory or in an approved laboratory. In case tests are carried out in field laboratory, at least 50% tests should be carried out in nearest control laboratory of the Department.
- (G) In case of material procured by the contractor, testing as required by the codes and specifications shall be arranged by him at his own cost. Testing shall be done in the presence of authorized representative of the Engineer-in-charge at the nearest laboratory. If additional testing other than as required b) specification is ordered, the testing charges, shall be borne by the Department, if the test results are satisfactory and by the contractor if the same are not satisfactory.
- (H) In case of materials supplied by the Government, if the contractor demands, certain testing, the charges thereof shall be paid by contractor if the testing results are satisfactory and by the Department if the same are not satisfactory.

Frequency Chart for Testing of Materials

ANNEXURE- 'A'

Sr. No.	Material	Test	Frequency of Testing	Remarks
1.	Sand	i. Fineness Modulus ii. Silt Content	At the beginning and if there is change in source for silt content	Every batch of sand
2.	Metal	i) Crushing value ii) Impact value iii) Abrasion value iv) Water Absorption v) Flakiness Index vi) Stripping value vii) Gradation	One test per 200 Cu.M. or part thereof.  One test per 100 Cu.m. or part thereof.	YASHADA Hand Book I.S.2386 Part-II
3.	Cement Concrete	i) Compressive Strength	Upto 5 Cu.M            1 set 6-15 Cu.M.            - 2 sets 16-30                    - 3 sets 31-50                    - 4 sets 51 & above            - 4 sets + One additional set for each additional 50 Cu.M. or part thereof.	M.O.S.T. Specification 1716
4.	Cement	i) Compo Strength ii) Initial setting time iii) Final setting time iv) Specific Gravity v) Soundness vi) Fineness	One test for each consignment of 50 M.T. (1000 bags) or part thereof.	I.S.269 12269
5.	Steel	i) Weight per Meter ii) Ultimate Tensile stress iii) Yield stress iv) Elongation	One test for every 5.0 M.T. or part thereof for each diameter.	I.S.432
6.	Water Bound Macadam	i) Aggregate Impact value ii) Gradation iii) Flakiness index & Elongation Index iv) Atterberg limits of binding material	1 test per 200 Cum.  1 test per 100 Cum. 1 test per 200 Cum.  One test per 25 M3 of binding material	

**Tender for Construction of CGG –Residential & Academic Building at Baner Yashada Pune**

		v) Atterberg limits of portion of aggregates passing 425 Micron.	One test per 100 Cum.	
<b>Sr. No.</b>	<b>Material</b>	<b>Test</b>	<b>Frequency of Testing</b>	<b>Remarks</b>
7.	Prime coat / tack coat / Fog spray	i) Quality of Binder ii) Binder Temperature iii) Rate of spread of binder	No. of samples per lot and tests as per IS-73, IS-217 and IS-8887 as applicable. At regular close intervals. One test per 500 M2 and not less than two tests per day	M.O.S.T. Specification Table900-4.
8.	Seal Coat / Surface Dressing	i) Quality of Binder	No. of samples per lot and tests as per IS-73, IS-217 and IS-8887 as applicable.	M.O.S.T. Specification Table900-4.
9.	Open graded premix surfacing	i) Quality of Binder ii) Impact value / Los Angles Abrasion value iii) Flakiness & Elongation Index	No. of samples per lot and tests as per IS-73, IS-217 and IS-8887 as applicable. 1 test per 50 Cum. 1 test per 50 Cum.	M.O.S.T. Specification Table900-4.
		iv) Stripping value of aggr. (Immersion tray test) v) Water Absorption vi) Water Sensitivity of mix vii) Gradation viii) Soundness  xi) Temp. of binder x) Binder Content  xi) Rate of spread of mixed materials.	Initially 1 set of 3 representative samples for each source of supply. Subsequently by change in the quality of aggregates. 1 test per 200 Cu.M Initially one determination by each method for each source of supply, then as warranted by change in the quality of aggregate At regular close intervals 2 test per 50 M3 and not less than 2 tests per day. 1 test per 500 Sqm.	

Signature of Contractor

No. of Corrections

Executive Engineer

Page 118 of 182

**Tender for Construction of CGG –Residential & Academic Building at Baner Yashada Pune**

Sr. No.	Material	Test	Frequency of Testing	Remarks
10.	Granular Sub-base	i) Gradation ii) CBR	As required 1 test per 500 Cum. As required 1 test per Km.	
12.	Bituminous Macadam/ Semidense Bituminous concrete/ Bituminous Concrete.	i) Quality of Binder ii) Impact value / Abrasion value iii) Flakiness & Elongation Index iv) Stripping value v) Water Absorption vi) Water Sensitivity of mix vii) % of fractural faces viii) Sand Equivalent test ix) Plasticity Index x) Mix Grading	No. of samples per lot and tests as per IS-73, IS-217 and IS-8887 as applicable. 1 test per 50 Cum. 1 test per 50 Cum. Initially 1 set of 3 representative samples for each source of supply. Subsequently by change in the quality of aggregates. 1 test per 25 Cu.M As required. As required. One set of test on individual constituents	M.O.S.T. Specification Table900-4.
		xi) Binder Content xii) Stability of Mix xii) Swell Test of Mix xiii) Control of Temp. of binder in boiler, aggr. In dryer and mix at the time of laying & rolling. xiv) Control of binder content & grading of mix xv) Rate of spread of mixed material xvi) Density of compacted layer.	individual constituents & mix aggregates from dryer mix subject to a minimum of two tests per plant per day. For each400 Tonnes of mix products. As required for Bituminous concrete. At regular close intervals. 1 test for each 400 Tonnes of mix subject to minimum of two tests per day per plant. Regular control through checks on the weight of mixed material and layer thickness. 1 test per 250 Sqm. Area.	

13.	Water Bound Macadam	<ul style="list-style-type: none"> <li>i) Aggregate Impact value</li> <li>ii) Gradation</li> <li>iii) Flakiness index &amp; Elongation Index</li> <li>iv) Atterberg limits of binding material</li> <li>v) Atterberg limits of portion of aggregates passing 425 Micron.</li> </ul>	<p>1 test per 200 Cum. 1 test per 100 Cum. 1 test per 200 Cum.</p> <p>One test per 25 M<sup>3</sup> of binding material One test per 100 Cum.</p>	M.O.S.T. Specificati on Table 900-3.
14.	Prime coat / tack coat / Fog spray	<ul style="list-style-type: none"> <li>i) Quality of Binder</li> <li>ii) Binder Temperature</li> <li>iii) Rate of spread of binder</li> </ul>	<p>No. of samples per lot and tests as per IS-73, IS-217 and IS-8887 as applicable.</p> <p>At regular close intervals. One test per 500 M<sup>2</sup> and not less than two tests per day.</p>	M.O.S.T. Specificati on Table 900-4.
15.	Seal Coat / Surface Dressing	<ul style="list-style-type: none"> <li>i) Quality of Binder</li> </ul>	Same as mentioned under Sr.No.6	M.O.S.T. Specificati on Table 900-4.
16.	Open graded premix surfacing / Close graded premix surfacing	<ul style="list-style-type: none"> <li>i) Quality of Binder</li> <li>ii) Impact value / Los Angles Abrasion value</li> <li>iii) Flakiness &amp; Elongation Index</li> <li>iv) Stripping value of aggregate. (Immersion tray test)</li> <li>v) Water Absorption</li> <li>vi) Water Sensitivity of mix</li> </ul>	<p>Same as mentioned under Sr.No.6. 1 test per 50 Cum.</p> <p>1 test per 50 Cum.</p> <p>Initially 1 set of 3 representative samples for each source of supply. Subsequently by change in the quality of aggregates.</p>	M.O.S.T. Specificati on Table 900-46.



Tender for Construction of CGG –Residential & Academic Building at Baner Yashada Pune

		<p>vii) Gradation</p> <p>viii) Soundness</p>	<p>1 test per 25 Cu.M.</p> <p>Initially one determination by each method for each source of supply, then as warranted by change in the quality of aggregate.</p>	
		<p>ix) Temp. of binder</p> <p>x) Binder Content</p> <p>xi) Rate of spread of mixed materials.</p> <p>xii) Percentage of fractural faces.</p>	<p>At regular close intervals.</p> <p>1 test per 500 M<sup>3</sup> and not less than 2 tests per day.</p> <p>Regular control through checks of layer thickness.</p> <p>When gravel is used one test per 50 Cum.</p>	
17.	Thermoplastic Paint	<p>i) Glass bead contents and grading analysis.</p> <p>ii) Reflectance and Yellowness index</p> <p>iii) Flowability</p> <p>iv) Softening Point</p> <p>v) Draying Time.</p>	<p>One Test for 3 Km. Work.</p> <p>One Test for 3 Km. Work.</p> <p>One Test for 3 Km. Work.</p> <p>One Test for 3 Km. Work.</p> <p>One Test for 3 Km. Work.</p>	
18.	Granular Sub-base	<p>i) Gradation</p> <p>ii) Atterberg limits</p> <p>iii) Moisture content prior to compaction</p> <p>iv) Density of compacted layer</p> <p>v) C.B.R.</p>	<p>One test per 200 Cum.</p> <p>One test per 200 M<sup>3</sup></p> <p>One test per 250 M<sup>3</sup></p> <p>As required.</p>	M.O.S.T. Specificati on Table 900-3.

**Tender for Construction of CGG –Residential & Academic Building at Baner Yashada Pune**

19.	Bituminous Macadam & Semi-dense Bituminous Concrete.	<ul style="list-style-type: none"> <li>i) Quality of binder</li> <li>ii) Impact / Abrasion value</li> <li>iii) Flakiness / Elongation Index</li> <li>iv) Stripping value</li> <li>v) Water sensitivity of Mix</li> <li>vi) Water Absorption</li> <li>vii) Soundness</li> <li>viii) % of fractural faces</li> <li>ix) Gradation</li> </ul>	<p>Same as per Sr.No. 7 Same as per Sr.No. 9 Same as per Sr.No. 9</p> <p>Same as per Sr.No. 9 Same as per Sr.No. 9 Same as per Sr.No. 9 Same as per Sr.No. 9 Same as per Sr.No. 0 2 tests per day per plant both on individual constituents &amp; mixed aggregates from dryer</p>	M.O.S.T. Specificati on Table 900-4.
		<ul style="list-style-type: none"> <li>x) Binder content &amp; aggregate. Grading</li> <li>xi) Control of Temp of binder &amp; aggregates for mixing &amp; of the mix at the time of laying &amp; rolling.</li> <li>xii) Rate of spread of mixed material</li> <li>xiii) Density of compacted layer.</li> </ul>	<p>Periodic subject to minimum of 2 tests per day per plant. At regular close intervals.</p> <p>Regular control through checks of layer thickness. One test per 250 Sq.M. layer.</p>	
20.	Interlocking Concrete Paving Block	<ul style="list-style-type: none"> <li>i) Compressive Strength</li> <li>ii) Water absorption</li> <li>iii) Flexural Test</li> <li>iv) Resistance to wear</li> </ul>	<p>A set of 8 blocks for every 10000 blocks. -----do----- -----do----- -----do-----</p>	

**CEMENT CONCRETE :**

a) The contractor shall carry out all preliminary tests to work out grading and proportioning of aggregates in order to obtain and maintain uniform quality of work. The contractor shall supply all materials, labour and testing cost for preparing and testing samples as required by the Engineer. Unless otherwise specified in the detailed itemwise specifications, 3 cubes 150 mm. x 150 mm. x 150mm.will be tested for every 15 cubic metre of concrete or per day whichever is higher.

The contractor shall make field arrangements for slump test, density and bulkage testing and also prepare concrete cubes 150 mm. x 150 mm. x 150 mm. for testing compressive strength, at his cost. The cubes shall be got tested at approved laboratory and the test results shall not fall below those prescribed in P.W.D. Hand Book (Table CV P.412) or as laid down in the specifications. The cost of such cubes and tests shall be entirely borne by the contractor.

## Tender for Construction of CGG –Residential & Academic Building at Baner Yashada Pune

- b) All concrete shall be machine mixed, unless otherwise directed by the Engineer - in – charge, for controlled or high grade concrete, the grading of aggregate shall be got approved from the Engineer. The correct proportions and the total amount of water for the mix will be determined by means of preliminary tests and shall be got approved by the Engineer - in – charge, however, such approval does not relieve the contractor from his responsibility regarding the minimum works strength requirements. Work test shall be taken in accordance with relevant codes and specifications. The proportioning of aggregate shall be done by weight, if so ordered by the Engineer.
- c) All mixing shall be done by mechanical means in approved mixers. The Engineer may at his discretion, allow in writing hand mixing of concrete for minor items where in small quantities are involved but in that case the Contractor shall increase the cement content of the mixture by 10 % without any extra cost.
- d) The form work used shall be made invariably of steel / with lining of steel or with plywood lining, wooden shutters may be allowed at the discretion of the Engineer e.g. lintels , small slabs and beams, coping etc.
- e) The concrete shall be mechanically vibrated for proper compaction by the method approved by the Engineer.
- f) The concrete shall be cured only by a sweet potable water for full 21 days after the time of its placement or as may be directed by Engineer-in-charge.
- g) The cement to be used in the various Items must be of ordinary Portland Cement grade for the concrete work.
- h) Contractor must have shuttering and formwork of Marine Ply , Acrospan., Aluminum Formwork, The Maximum eight repetitions will be allowed for all types of wooden shuttering material. Contractor shall use adjustable metal props for supporting all R.C.C. elements. The form work design shall be approved by the Engineer In Charge / Officer appointed by Engineer-in- Charge before erection

### 4. REINFORCED CONCRETE WORK :

- a) The work included in this contract shall be carried out in addition to this specifications detailed herein, in accordance with specifications and regulations as laid down in the following standard specifications. Standard specifications published by Government of Maharashtra 1985 Edition:
- I.S. 8112 :- 1989 - Specification for 43 grade ordinary Portland cement.
- I.S. 383 :- 1976 - Specification for coarse and fine aggregate from natural courses for concrete.
- I.S. 1786 - 1985 - Specifications for cold twisted bars.
- I.S. 432 - 1982 - Specifications for mild steel and medium steel bars.
- I.S. 456 - 2000 - Code of practice for plain and reinforced concrete,
- Note – 1- 43 grade ordinary Portland cement (Confirming I.S. 8112) shall be used for all RCC and other items where cement is used.
- 2 Steel for reinforcement shall be procured only from reputed companies.
- I.S. 4926-2003 Specifications for Ready Mix Concrete.

If the Standard specifications quoted above fall short for the items quoted in these schedules of this contract, reference shall be made to the latest British Standard Specifications. If any of the items of contract do not fall in reference quoted above, the decision and specifications of the

Engineer shall be final. Steel to be used shall be invariably from the integrated plant steel more specifically TATA, SAIL, JINDAL and the cement to be used shall be of ACC, ULTRATEK or equivalent Pozzolana Portland Cement. Any imported material regarding steel, cement will not be allowed.

**5. ADDITIONAL GENERAL SPECIFICATION FOR ORDINARY AND HIGH GRADE CONCRETE.**

1. If the concrete strength falls below that specified for the items and if the use can be permitted under clauses 303.3.7 of the I.R.C. Bridge Code Section - III given below, the unit may be accepted at the discretion of the Superintending Engineer concerned as a substandard work at a suitable reduced rate. Reduced rate will be determined by the Executive Engineer concerned according to circumstances of the case and the concerned Superintending Engineer's approval to the reduced rate as mentioned above, is necessary.

“Standard Specification and code of Practice for Road Bridges “Section III Cement concrete 303.3.7 standard of acceptance.”

i) Full payment should be made when 75 % of the test cube results are equal and above specified strength. Cases failing outside the above limits should be examined and decided by the Engineer - in - charge on merits on each case.

ii) The test specimen should be taken by representative of the contractor in presence of a responsible officer of the rank of not lower than an Assistant Engineer / Deputy Engineer.

iii) The test specimen should be formed carefully and no claim shall be entertained later on, on the ground that the casting of the test specimen were faulty and that the results of the test specimen did not give correct indication of the actual quality of concrete.

iv) The minimum quantity of cement per one Cubic metre of M -15 grade and above concrete should be as per Standard Specification Book Specification B 7 - 4 on page 39 ( 1979 Edition ).

v) Payment : (a) The payment of such concrete work will not be made till the strengths are ascertained.

(b) The payment of reinforcement of such affected items will not be made till the strength of the concrete are ascertained.

vi) The centering to be used for execution of any concrete items shall be strictly in accordance with specifications for form work and steel Centering given on page 148 to 151 of this documents. No concreting shall be executed without prior approval to the centering from the Engineer-in-Charge.

**1. Specifications of Machinery For Concreting Work :**

- (I) Fully Automatic Micro processor based PLC with SCADA Enabled Concrete Batch Mix Plant (Pan Mixer) of minimum 18 to 20 cum/hr capacity of any standard company.

**It Shall have minimum following FEATURES (Technical Specification )**

- Fully Automatic Micro processor based PLC with SCADA system
- Protected Enclosure for Dusty Atmosphere.
- Facility to use 4 Aggregates. 1 cement and 1 water as standard
- Highly accurate batching material in Air Concept Adjustable batch size.
- Fly ash / Admixture report for each batch.
- Online Water Correction Discrete / Continuous mode.
- Easy calibration of Weighers.
- Stainless steel corrosion resistant Load cells.
- Electronic weighing of all components including water, admixtures etc.
- Automatic Buzzer sound after every production end.
- Interface with computer for Data Backup and print out.

- (II) **Sand Screening cum Washing Unit** electrically or diesel operated 4/6 Cubic Metre per hour capacity.

**(iii) Transportation- Transit Mixer / Pumps**

Transit mixers and / or concrete pumps of desired number and capacity with SACADA

**(i) All cement Works, Masonry / Plaster etc.**

**Curing system**

Contractor shall install pressure control water curing system using necessary pumps, UPVC pipe network, water/ flow meter linked with SCADA, etc complete

**(v) CTM**

The contractor shall install Compression Testing Machine (CTM) for the testing cement mortar, concrete at the site, linked with "SCADA"

**GIS MAP**

***Displaying locations of Hot mix Plants, Tippers used for hot mix material transportation, Roller/ compactor and Sprayer on GIS map.***

***Communicate the Data which is beyond the set parameters by SMS and e-mail to the representative of Engineer In charge for all 41.1 to 41.4 above***

**THE OFFER OF THE CONTRACTOR SHALL INCLUDE:**

(1) The cost of procuring, establishing, running, operating & maintaining SCADA including all Censors, Vehicle Tracking System (VTS) and any other instrumentation, automation required to acquire the desired data, mentioned at **41.1 to 41.5** above.

2) Web connectivity to all locations where data is being acquired, transmitted, processed, stored and retrieved with minimum speed of 1 MPBS and 100 % availability. The contractor shall provide the web application in such a manner that it shall first update the above data in real time on YASHADA's works monitoring e-governance web application automatically. The contractor shall put his request to Engineer in charge to get access to the YASHADA e-governance web application.

(3) Web-based application including Computer Software, Hardware etc. to transmit, process, store and retrieve the data in the forms and formats as prescribed by the Engineer In charge.

(4) Arrangement for security of data, Disaster recovery arrangements shall be as per I.T. Industry practice, during the construction period and upto defect liability period.(DLP). Handing over the data on the Web Server after DLP in Electronic form as instructed by Engineer In charge.

(5) Calibration of all SCADA related attachments /accessories as per the specification:- Web based application to monitor the schedule of Calibration of all SCADA related attachment/accessories. The invalidity of calibration shall lead to non-acceptance of work or measurement and the Contractor shall not be paid for such non-accepted work or measurements

(6) Submission of printed and authenticated reports to the Engineer Incharge as and when required.

(7) Point (1) to (6) above shall be arranged and maintained during contract period and defect liability period.

(8) Cost includes rectification, fine tuning, corrections, additions & alterations to the system to the satisfaction of Engineer Incharge.

(9) All data generated as per this special condition of contract shall be the property of YASHADA.

The Contractor shall make all necessary arrangement required under **Clause 41.1 to 41.5** above (Supervising control and data acquisition for Bituminous / WBM / concrete works / all cement works / masonry / plaster / Testing Equipments items) well in advance before starting of the related items of work. All necessary arrangements so made shall be offered for inspection to Engineer In charge one month prior to the start of the related items of work. Changes if any, after his inspection suggested by the Engineer In charge

shall be carried out at no extra cost and within the period of Three days. A fresh request for inspection, of Engineer In charge after such rectifications shall be requested by the Contractor and final approval to the SCADA arrangements as specified in Clause-19 shall be obtained.

### **1.2.5 Web Connectivity-**

The contractor shall provide web connectivity through satellite communication supporting mobile devices to the above monitoring system(mobile VSAT). The web connectivity shall have minimum two MBPS internet speed and 99% availability. Software should be intelligent; in case of connectivity failure it should maintain the pending files and send them as soon as it is connected. The contractor shall make sure that the entire software and hardware solution is virus free.

The offer of contractor shall be inclusive of all. He shall not be paid separately.

#### **Works**

The hot mix work should be carried out from the approved plan and approved machinery only.

Sources of metal to be used for work should be the same through out. Should there be any change, the Contractor will have to obtain approval to the revised job mix formula atleast 15 days prior to the date of its intended use.

Weather restriction to carryout hot mix work shall be as per MORT&H specification

No hot mix Works shall be carried out during Night time unless otherwise permitted by Engineer- in-charge.

The newly land surface shall not be opened to traffic for at least 24 hours after laying and completion of compaction without the expressed approval of Engineer- in-charge in writing.

The necessary grade and camber for the road length under improvement should be strictly observed during execution.

The traffic management during execution of hot mix Works shall be as per MORT&H specification (fourth revision) clause No. 800.

Bituminous materials shall be transported in clean insulated vehicles and unless otherwise agreed by Engineer- in-charge shall be covered while in transit or waiting tipping.

Contractor should note that once the hot mix work is started he will not be allowed to operate his plant for any work other than the Works of YASHADA without the specific permission in writing from Engineer- in-charge.

In case for any reasons, the Works get damaged the Contractor has to carry out the rectification at his risk and cost for full width of carriageway.

The work activity program me considering the start date and completion period shall be

prepared and submitted for approval of Engineer- in-charge. 15 days prior to start of work. No hot mix work shall be undertaken unless such program me is approved by Engineer- in-charge.

The Contractor shall be required to give a trail run of the equipment such as pavers, vibratory roller, sprayer etc. for establishing their capability to achieve the laid down specification and tolerances to the satisfaction to the Engineer- in-charge before commencement of work. All equipment and personnel shall be removed from Worksite without permission of Engineer- in-charge.

Plant mixed bituminous materials for pavement courses shall be weighted on accurate scales approved by the Engineer- in-charge in the presence of representative of Engineer- in-charge. As and when asked for. The weight slips shall be produced for official record. The activity is obligatory to work.

It is obligatory on the part of Contractor to carry out the field tests as required by the Engineer- in-charge. He should have required equipments and trained personnel to carry out such testing and will be the responsibility of Contractor to maintain record of such testing and to furnish such record to the Engineer- in-charge within 3 days from the date of testing.

The non-working machinery if any shall not be kept at the site of work. After a days work is over, the working machinery shall be parked in such a manner as not to cause any hindrance or pose danger to the traffic plying on the section of road. The working machinery parked on site should have traffic safety devices

**Roughness Index**

The Contractor shall be responsible to measure the roughness of road surface for which he may use the Roughness Index, Testing machine at his own cost Use of “Towed fifth wheel Bump integrator” shall be made to measure the roughness of the road surface. The calibration of the machine shall be done from time to time as and when warranted, from reputed institution like C.R.R.I., New Delhi and their certificate shall be produced to that effect. The values of roughness so measured shall not exceed the values given below for various types of road surfaces under standard conditions of carrying out the test and as specified below.

- |    |                     |   |                |
|----|---------------------|---|----------------|
| 1) | Bituminous Concrete | : | 2000 mm / Km.  |
| 2) | S.D.B.C.            | : | 2200 mm. / Km. |
| 3) | Premix Carpet       | : | 2500 mm. / Km. |
| 4) | B.M.                | : | 2500 mm. / Km. |

The Roughness Index test shall be carried out before start of the work and after completion of surface course as directed by Engineer- in-charge.



## Tender for Construction of CGG –Residential & Academic Building at Baner Yashada Pune

The result of roughness index test shall be made available to the Engineer- in-charge within 15 days from the test so taken and Engineer in charge shall submit the soft copy of result of roughness index test to the **Registrar YASHADA, Pune** by email on [mangesh.joshi@yashada.org](mailto:mangesh.joshi@yashada.org) shall be commence by the agency only after taking the roughness index test in presence of Engineer-in-charge.

As an outcome of roughness test, where the surface irregularity of wearing surfaces rails outside the tolerances mentioned above, the Contractor shall be liable to rectify the deficiencies in a manner as directed and to the satisfaction of the Engineer- in-charge .

If the Contractor fails to carry out roughness index test the same will be done departmentally and double the cost so incurred will be recovered from him

**General**

Considering the stakes and technical intricacies involved in constructions. It is needless to emphasize that an unfailing control on quality of the work has to be exercised so as to ensure that the structures constructed are stable and sound. Quality of final products depends upon adopting the proper procedure of construction in addition to proper selection of materials. For ensuring the requisites of construction, the materials of work shall be subject to Quality Control tests for ascertaining the quality of material for its approval for construction.

All material to be used all methods adopted and all Works performed shall be strictly in accordance with the requirements of these specifications. The Contractor shall set up a field laboratory at locations approved by the Engineer- in-charge and equip the same with adequate equipments and personnel in order to carry out all required tests and Quality Control work as per specification and /or as directed by the Engineer- in-charge. The interest layout of the laboratory shall be as directed by the Engineer- in-charge. The list of equipment and the facilities to be provided shall be got approved from the Engineer- in-charge in advance and shall be as per MORT&H specification (Fifth Revision) clause No.121.3

The Contractor shall carry out quality control tests on the materials and work to the frequency stipulated in relevant clause of MORT&H specification. In the absence of clear indication about method and or frequency of tests for any item, the instructions of the Engineer- in-charge shall be followed.

For satisfying himself about the quality of the materials and work, quality control tests will also be conducted by the Engineer- in-charge (by himself by his quality control units or by any other agency as deemed fit by the Engineer- in-charge) generally to the frequency set. Additional tests may also conduct where, in the opinion of the Engineer- in-charge, needs for such tests exist.

The Contractor shall provide necessary co-operation and assistance in obtaining the samples for tests and carrying out the field tests as required by the Engineer- in-charge from time to time. This shall include provision of labour, attendants, assistance in packing and dispatching and any other assistance considered necessary in connection with the tests by Engineer- in-charge.

The Contractor shall carry out modifications in the procedure of work, if found necessary, as directed by the Engineer- in-charge during inspection. Works failing short of quality shall either be rectified or redone by the Contractor at his own cost, shall also remove defective work or material from the site of Works.

The cost of laboratory building, including services, essential supplies like water, electricity sanitary services and their maintenance and cost of all equipment, tools,

materials, labour and incidents to perform tests and other operation soft quality control according to the specifications requirements be deemed to be incidental to the work and no extra payment shall be made for the same.

For testing of samples of soils / soils mixes, granular materials and mixes bituminous materials and mixes, cement and concrete cubes, aggregate mixes etc., samples in the required quantity and form shall be supplied to the Government laboratory or any other laboratory as directed by the Engineer- in-charge by the Contractor at his own cost.

For cement bitumen, mild steel, and similar other materials where essential test are to be carried out at the manufacturers plants or at laboratories other than the site laboratory the cost of samples, sampling testing and furnishing of tests certificates shall be borne by the Contractor . He shall also furnish the test certificate to the Engineer- in-charge in reasonable time as directed by the Engineer- in-charge.

All materials which the Engineer- in-charge/representative has determined as not conforming to the requirements of the contract shall be rejected whether in place or not, they shall be removed immediately from the site as directed. Materials, which have been subsequently corrected, shall not be used in the work unless approval is accorded in writing by the Engineer- in-charge. Upon failure of the Contractor to comply with any order of the Engineer/his representative, given under this clause, the Engineer- in- charge/his representative shall have authority to cause the removal of rejected material and to deduct the removal cost thereof from any payments due to the Contractor.

For ensuring the requisite quality of construction, the materials and Works shall be subjected to quality control tests, as described in MOSRT&H specifications (Fourth Revision) section No.900 and 1000 as mentioned in the relevant clauses for all items. The testing frequencies set forth in relevant clauses for all items are the desirable minimum and the Engineer- in-charge shall have the full authority to vary out additional tests as frequently as he may deem necessary, to satisfy himself that the materials and Works comply with the appropriate specifications.

Test procedures for the various quality control tests are indicated in the respective I.S code. Where no specific testing procedure is mentioned, the tests shall be carried out as per the prevalent accepted engineering practice to the directions of the Engineer- in- charge.

#### **Samples & Method of sampling**

All materials to be used on work such as cement, aggregate steel, bitumen, wood, tiles etc. shall be got approved in advance from the Engineer- in-charge and shall pass the tests and analysis required by him.

The tests shall be

- (a) as per specifications of the items concerned and or,
- (b) as specified by the Indian Road Congress standard specification and code of practice for road and bridges or,
- (c) I.S. specification whichever and wherever applicable
- (d) As per specification of Ministry of Road Transport and Highways latest edition 900, 1000, 1700 & 1900 Quality control for road work.
- (e) Such recognized specification acceptable to the Engineer- in-charge as equivalent thereto or in the absence of such authorized specification.
- (f) Such requirement/tests and or analysis in the order of precedence given above.

The Contractor shall at his cost make all arrangements and/or shall provide for all such facilities as the Engineer- in-charge may require for collecting, preparing and forward required number of samples for testing or for analysis of the materials or product for which laboratory testing is required to the nearest approved Government laboratory as directed by Engineer- in-charge. The Contractor shall bear all charges and cost of tests or analysis of such samples, shall also be deposited with the laboratories as per their prevailing schedule or rates.

The Contractor shall, if and when required, submit at his cost the samples of materials to be tested or analyzed and if so directed, shall not make use or incorporate in the Works any materials to be represented by the sample until the required test or analysis have been made and after the test results of the material finally accepted by the Engineer- in-charge.

The method of sampling and testing of materials shall be as required by the Handbook of Quality control for construction of Roads and Runways” (IRC: SP:11), relevant I.S. codes and the relevant MOSRT&H Specifications. Where they are contradicting, the provision in these specifications shall be followed. Where they are silent, sound engineering practices shall be adopted. The sampling and testing procedure to be used shall be as approved by the Engineer- in-charge and his decision shall be final and binding on the Contractor.

#### **Testing of Materials**

The Contractor shall make field arrangements for testing of all materials as per MORT & H specifications or as directed by Engineer- in-charge in the field laboratory.

The Contractor shall not be eligible for any claim or compensation either arising out of any delay in the work or due to any corrective measures required to be taken on account of and as a result of testing of testing of material.

## **Tender for Construction of CGG –Residential & Academic Building at Baner Yashada Pune**

The quality control tests shall be carried out at various stages of work, viz. selection of material to be procured for work, acceptance of procured material before its use on the work, acceptance of procured material before its use on the work, after completion of work in view of its strength, durability, serviceability, etc, and as directed by Engineer- in-charge for any other reasons of public interest.

The Contractor shall carry out at least 30 % testing from the Regional/District Laboratory of the department. The necessary testing charges for these 30% tests shall be borne by the Contractor shall carry out remaining 70% tests at his own cost in the laboratory established by him for the work. This is subject to the condition that the field laboratory established by the Contractor at site or plant is certified to have set up as mentioned in the clauses hereunder by the Engineer- in-charge. The testing charges shall be as per the prevailing schedule of rates of Vigilance & Quality control Circle.

### **Laboratory Setup**

#### **Field Laboratory**

The Contractor for the purpose of testing of material shall arrange to provide and maintain fully furnished and adequately equipped field laboratory of adequate floor area, as shown in drawing. The field laboratory shall preferably be located adjacent to the site of work. In case of road Works the field laboratory shall either be established at plant site or as directed by the Engineer- in-charge. The field laboratory shall be provided with amenities like water, electric supply etc., to be arranged by Contractor.

- (a) The floor space requirement shall include office space for engineer & Contractor's representative storage of samples, installation of equipment, laboratory table, cup boards, working platform of size 1 m x 10 m working space for carrying out various tests. Curing tank, wash basin, toilet etc. and the minimum furniture such as office tables & chairs for material engineers, stools, working tables, store accessories.
- (b) The cost of construction of laboratory & site office at work site or plant site as the case may be, and cost of supply of furniture, electrical equipments fittings during the currency of contractor is incidental to work and no separate payment will e made for the same to the Contractor.
- (c) The laboratory established by the Contractor shall be manned by a qualified material Engineer/ Civil Engineer assisted by experienced technicians, and the set-up shall be got approved from the Engineer-in-charge.
- (d) The Contractor should prepare printed perform for recording readings results of each type of tests. Such formats shall be got approved from the Engineer-in-charge. The Contractor should keep a daily record of all the tests carried out by

him. Two copies of the test results will be returned to the Contractor by Engineer-in-charge for keeping the record of test results in acceptable manner at site of work.

- (e) All Quality Control registers / records shall be maintained by the Contractor and checked by the Engineer-in-charge or his representatives regularly. The list of register required to be maintained shall be got approved from Engineer-in-charge in advance.

**Additional General Condition & Specification**

**25 (i) Establishment of field lab**

As per minutes of meeting issued by Public Works Department, Mantralay Mumbai vide Letter No. Meeting-2020/pr.a.kra.100/Ra.Ma.2, Dated. 10/11/2020, for the works costing more than 1.00 Cr. (Estimated cost put to tender i.e. Work Portion + Testing + Royalty Charges) it is mandatory to install the field Laboratory at site of Work.

The Contractor shall establish the field lab with all the necessary equipment within 15 days from issue of work order and submit dated geo tag photographs of the lab. Failing which a fine of Rs. 1000/- per day will be imposed till the lab is established. No running account or final bill will be paid to the contractor unless the Executive Engineer has confirmed the establishment of field lab.

**Set up of equipments**

The Contractor shall set up the laboratory equipments for tests to be carried out as per specifications of item or as directed by Engineer-in-charge. Tentative list of equipment shall be as per MORT&H specification (fourth revision) clause no. 121.3

The Contractor shall use calibrated equipment to the latest date in the laboratory so established. The Contractor will have to carry out the calibration of the equipments from the approved agency as and when directed by the Engineer-in-charge at his own cost incases where the calibration validity stands expired.

**Frequency of Test**

Overall quality of the work depends on the quality of ingredient material being used in the work and exercising adequate control over it. It is therefore prime responsibility of the Contractor to get the ingredient material and product tested strictly as per the frequencies stipulated hereunder.

The testing frequency specified hereunder are minimum and Engineer-in-charge shall have full rights to carry out additional tests as may be necessary to satisfy himself that the material and Works comply with requirement of the specifications.

The frequency of the testing shall be conforming to the MORT&H specification under

## **Tender for Construction of CGG –Residential & Academic Building at Baner Yashada Pune**

Chapter 900,1000,1700, &1900

The right of acceptance / rejection of the material / work done is reserved by Engineer-in-charge in view of non conformation of frequency of testing.

The cost involved on account of testing of materials as per the frequency MORT&H specification clause is to be included in the respective tender items. The cost of testing charges as per prevailing schedule of rates VQCC laboratory shall be borne by the Contractor

If the Contractor fails to carryout testing as per the specified frequency, the cost of the testing charges at penal rate equal to ten times the prevailing schedule of rate of VQCC laboratory will be recovered from him to the extent of shortfall. The recovery on account of shortfall in testing with reference to specified frequency will be done from his

immediate bills due for payment and will be credited to Government account.

Various tests (and their frequencies) to be conducted to assure quality control on the work shall be as relevant clauses o MORT&H specification (fourth revision) and as directed by Engineer-in-charge.

### **10.0 Training of Personnel**

The contractor shall arrange training camp, Workshops, seminars etc. for his personnel deployed/ being deployed on site and plant and the departmental staff as identified by the Engineer-in-charge, well in advance of likely start of the work, for monitoring quality of work to the optimum level. The Contractor in consultation with Engineer-in-charge shall decide for training program me schedule and the faculty for the training course as soon as the work order is issued to him.

### **QUALITY ASSURANCE**

#### **Quality Assurance**

It is a process which exercises various checks at different stages for a work right from its inception till its acceptance, to put it in service to ensure that the work has been properly designed and constructed as per approved designs, drawings and specifications.

In order that the properties of the completed structure be consistent with the requirements and the assumptions made during planning and the design, adequate Quality Assurance measures should be taken at the site of work.

The construction should result in satisfactory strength, serviceability and long term durability so as to lower the overall life cycle cost.

Quality Assurance Manual: It provides a base document outliving policies, procedure, responsibility, compliance acceptance criteria and documentation. It shall generally cover the following aspects

- a). Identification of all persons of Contractor and as well as department side involved

## Tender for Construction of CGG –Residential & Academic Building at Baner Yashada Pune

in Quality Assurance and their interrelationship.

- b). Internal Quality Assurance system of the Contractor and the Engineer-in-charge.
- c). Levels of cross checking, verification including system of inspection and audit.
- d). Organization of personnel, responsibilities and lines of reporting.
- e). Criteria for acceptance / rejection including identification of authorities for making such decisions.
- f). Inspection at the end of Defect Liability Period.
- g). Item to be included in maintenance manual
- h). All formats for documentations.

Quality Assurance Manual shall be prepared and accepted by the Contractor and the Engineer-in-charge before start of the work.

Quality Assurance manual consisting of quality plans, test plans, checklist for inspection, quality Audit and third party inspection shall be prepared and furnished by the Contractor in pursuant to clause no. 59 of condition of contract and shall confirm to the provision stipulate in “ Guideline on Quality system for Roads” – IRC :SP:57-2000.

### 12.0 Additional works for Right of Way Integrity

“In addition to the foregoing the engineer may deem it necessary to instruct the perfo works from time to time during the progress of the Contract go preserve the integrity Way”.

#### Deductible amount for Non provision of amenities

- |      |                                |               |
|------|--------------------------------|---------------|
| i)   | Field Laboratory at Plant site | Rs.0.25 lakhs |
| ii)  | office at Plant site           | Rs.0.25 lakhs |
| iii) | Furniture                      | Rs.0.25 lakhs |

Whether the Government land for establishing field laboratory and site office will be made available ? No.

In case field laboratory and site office along with equipment furniture and amenities is established at Govt. land by the Contractor whether it will be the property of Government. No.

Whether the roughness index test is intended to be carried out by the Contractor?  
Yes. (before and after of each layer of bitumen)

The laying temperature of the Mix required at the site should be the criteria for distance of the plant .To ensure this temperature , automatic temperature measurement shall be provided .

## 14. SPECIAL CONDITIONS

(1 ) MORTH Specification for Road and Bridges Work (Fifth revision 2013) :

Signature of Contractor

No. of Corrections

Executive Engineer

Page 136 of 182



## **Tender for Construction of CGG –Residential & Academic Building at Baner Yashada Pune**

MORTH Specification for Road and Bridge Work ( Fifth revision- April 2013) shall form part of the contract documents and the contractors shall be legally bound to the various provisions made therein unless and otherwise specifically relaxed or waived wholly or partly by any special clauses in the contract documents.

### **(2) Special Condition for B.T. work :**

In respect of Black Top Work, 15% (Fifteen percent) payment of Black Top in a particular km will be retained till completion of side berms / C.D. Works etc. in that km. After completion of other items satisfactorily, the withheld payment will be released finally.

Laying temperature of the mix required at the site should be the criteria for distance of the plant. To ensure this temperature, automatic temperature measurement with video camera or any other suitable technology shall be provided.

The aggregate required for the item of Hot Mix shall be screened in "mechanical Vibratory Screening Unit" so as to comply with the grading requirement as specified in MORT&H specification and then only shall be fed to the Hot Mix Plant for heating and mixing. The Mechanical Vibratory screening unit shall consist of main input hopper to receive raw metal, conveyor belt to transport it to the "Mechanical Vibratory Screening Unit." The Mechanical Vibratory screening unit shall have required number of trays, sieves/decks as directed by Engineer In charge. The output of Mechanical Vibratory Screening unit shall be conveyed to the "storage unit /feeder". The metal so supplied from the "Mechanical Vibratory Screening unit" at site shall not exempt the contractor from carrying out tests as specified in the specifications.

However if the mechanical Vibratory Screening unit is installed at quarry site, the contractor shall provide Vehicle Tracking System for all vehicles used for the particular work. The contractor shall provide web application that will show all vehicles of the contractor on a GIS map along with the hot mix plant .The contractor shall also provide software that will update the entire mapping on the YASHADA e-governance works management system. The system of complete management of VTS for monitoring by the YASHADA staff shall have to be provided by Contractor at his own cost.

Procurement of aggregate For Grade –I /Grade-II / Grade –III / WBM and for BUSG work The metal shall be supplied at site only after screening it on "mechanical vibratory screening unit". The special "mechanical vibratory screening unit" arrangement shall consist of main input hopper to receive raw metal, conveyor belt to transport it to the "mechanical vibratory screening unit". The "mechanical vibratory screening unit" shall have required number of trays, sieves/decks as directed by the Engineering in charge. The output of "mechanical vibratory screening unit" shall be conveyed to "storage Unit" where metal of different sizes, shall be stored separately. Metal so supplied shall undergo all the tests as per the specifications. As a input to the main input hopper, contractor may use hand broken metal or

## **Tender for Construction of CGG –Residential & Academic Building at Baner Yashada Pune**

output of primary crusher of size not less than 24"x18" The metal so supplied from the "mechanical Vibratory screening unit" at site shall not exempt the contractor from carrying out tests as specified in the specifications

### **Supervision on Work by Field Officers.**

The Executive Engineer shall remain present and personally supervise the first 200 m length accordingly in presence of Deputy Engineer, Junior Engineer and Contractor/Contractor's representative.

The Deputy Engineer shall remain present and personally supervise at least 25 % of the area of primer coat / tack coat / seal coat executed .

The Junior Engineer shall remain present and personally supervise cent percent length executed.

The Executive Engineer shall show the check measurement of primer coat / tack coat accordingly in the measurement book for the executed 200 m demo length. This check measurement shall be part of percentage check measurement required by Executive Engineer as per the Maharashtra Public Works Manual, Appendix-24.

The work order book shall be kept to maintain evidence of supervision on work by field officers as mention at Sr.no 2.5.1 to 2.5.4 The measurement of primer coat / tack coat / liquid seal coat of the work shall be recorded by Deputy Engineer only.

The Engineer in charge shall allow the commencement of work after inspection of Hot mix plant, sensor paver and other key equipment, testing of material and approval of quarries job mix design of bituminous macadam and BC/SDBC, establishing temporary bench mark on permanent pillar and leveling.

### **Special conditions for Road safety item such as Thermoplastic retro reflective painting, cat eyes, sign boards, W Beam crash barrier.**

- i) The work of road marking with Hot applied thermoplastic compound shall be carried out as per specification in Schedule C with approved road marking machine and paint of approved manufactures.
- ii) The payment of these item shall be made only after furnishing the approved Manufacture's Test certificates.
- iii) The work of thermoplastic retro reflective painting, cat eyes, sign boards, W beam crash barrier shall have to be got executed by approved/ specialized agency empanelled / approved by MORT&H.

The contractor shall not sublet the item of road marking without the approval of the Employer i.e. Chief Engineer, National Highway in writing. Sub contracting does not alter the contractors obligations.

- iv) Subletting proposals shall be comprise sublet agreements on Rs.100/- stamp paper mentioning experience of the sub contractor experience certificates & details

### **Additional General Conditions and Specifications.**

#### **Shuttering Requirement**

1. Contractor must have shuttering and formwork of Marine Ply / Steel plates, Acrospan., Aluminum Formwork, The Maximum eight repetitions will be allowed for all types of wooden shuttering material. Contractor shall use adjustable metal props for supporting all R.C.C. elements. The form work design shall be approved by the Engineer In Charge / Officer appointed by Engineer-in- Charge before erection.
2. The contractor shall setup a material testing Laboratory at site with all necessary equipment.
3. For all concrete works Fully Automatic Micro processor based PLC with SCADA Enabled **Fully Automatic Micro processor based PLC with SCADA enabled concrete Batch Mix Plant (Pan Mixer)** of minimum 18 to 20 Cubic Metre per hour capacity of any standard company with appropriate number r and pumps with diesel or electric operated with minimum size of 150 litres automatic water measuring system and integral weigher Hydraulic /Pneumatic type. The Engineer may at his discretion, allow in writing hand mixing of concrete for minor items where small quantities are involved but in that case the Contractor shall increase the cement content of the mixture by 10% without any extra cost.
4. The cement to be used in the various Items must be of O.P.C.grade and for the concrete work Fly Ash can be used at maximum 17% of total cementious content.
5. The natural sand to be used in various items shall be as per IS 383- 1970 .
6. All the cementations work should be properly cured as per the requirement of the item.
7. The placement of the concrete and the shuttering shall be as per relevant I.S Codes.
8. The contactor should submit the system of quality control at the AAC Block / Fly ash Brick manufacturing unit.
9. The planning Engineer at site must be well acquainted with MS Project software.
10. All the required equipment / connectivity/software/hardware should be supplied by the Contractor to his personnel at site. The system of software should be compatible with the, then YASHADA Software and interface. Contractor shall

**Tender for Construction of CGG –Residential & Academic Building at Baner Yashada Pune**

construct the Site office for the Government Staff having minimum area of

200.00 Square Metre. With out claiming for any extra cost. The Office should be equipped with latest communication systems like video conferencing etc.

11. The contactor shall coordinate with, local authority. And shall appoint one liasoning officer for the routine interactions with various departments, among the team member.

**2. Staff safety.**

1. While executing the work, necessary precautions regarding safety of labour, supervisory staff, public and traffic users shall be taken by the agency according to rules and regulations specified by the Government of India / Government of Maharashtra and as directed by District Court, Pune..
2. Suitable scaffolds shall be provided for workmen for all works that cannot safely be done from the ground, or from solid construction except such short period works as can be done safely from ladders. When ladder is used an extra mazdoor shall be engaged to hold the ladder and if the ladder is used for carrying materials as well, suitable footholds and handholds shall be provided on the ladder and the ladder shall be given an inclination not steeper than 1 to 4 ( 1 horizontal and 4 vertical).
3. Scaffolding or staging more than 3.25 m. above the ground or floors, swing or suspended from an overhead support or erected with stationary support, shall have a guard rail properly attached, bolted, braced and otherwise assured atleast 1 m. high above the floor or platform of such scaffolding or staging and extending along the entire length of the outside and ends thereof with only such openings as may be necessary for the delivery of materials. Such scaffolding or staging shall be so fastened as to prevent it from swaying from the building or structure.
4. Working platform, gangways and stairways shall be so constructed that they do not sag unduly or is more than 3.25 m. above ground level or floor level, it shall be closely boarded , have adequate width and be suitably fenced as described in 2 above.
5. Every opening in floor of the building or in a working platform shall be provide with suitable protection to prevent fall of persons or materials by providing suitable fencing or railing with minimum height of 1 metre.
6. Safe means of access shall be provided to all working platform and other working places. Every ladder shall be securely fixed. No portable single ladder shall be over 9 m. in length , width between side rails in a rung ladder shall in no case be less than 30 cm. for ladders upto and including 3 m. in length. For longer ladders with width shall be increased atleast 6 mm. for each additional 30 cm. of length. Uniform step spacing shall not exceed 30 cm.

7. Adequate precautions shall be taken to prevent danger from electrical

**Tender for Construction of CGG –Residential & Academic Building at Baner Yashada Pune**

equipments. No materials on any of the site shall be stacked or placed as to

cause danger or inconvenience to any person or the public. The Contractor shall provide all necessary fencing and lights to protect public from accidents and shall be bound to bear expenses of defense of every suit, action or other proceedings at law that may be brought by any person for injury sustained owing to neglect of the above precaution and to pay any damages and costs which may be awarded in any such suit, action or proceeding to any such person or which may with the consent of the Contractor, to be paid to compromise any claim by any such person.

8. For the construction work of upper floors safety nets should be provided on the floor beneath it.
9. All the Staff ,labour at site sould be protected with the appropriate safety measures.
10. Contractor should use New centering material for all the concreting work with the maximum repetition shall not exceed 8 Numbers.At the same time the Centering material shall be got approved from the Engineer -In-Charge PMC/ Officer appointed by Engineer-in-Charge.in advance.
11. Steel to be used shall be invariably from the **integrated plant steel** more specifically TATA,SAIL,JINDAL etc. and the cement to be used shall be of ACC,ULTRATEK or equivalent.Any imported material regarding steel,cement will not be allowed.
12. For steel cutting,bending,shuttering and allied works specific location shall be earmarked at site.All the transportation vehicle shall be equipped with vehicle tracker.Proper care to be taken to avoid the corrosion of the steel at store / yard by applying cement slurry without claiming for any extra cost.
13. Contractor shall provide a mock up room at site.
14. While excavation care should be taken by the contractor regarding noise level at night. No excavation activity shall extend beyond 10 PM at night. Contractor should follow the traffic rules regarding the conveyance of material at night.
15. It is on the part of contractor to take necessary permission from the Traffic Police regarding the conveyance of material.
16. While conveyance of the material contractor shall observe that there should not be any inconvenience to the traffic and no material should drop on road.
17. Contractor shall provide web based integrated project management software like Think Project,/Prologue or similar Systems for complete monitoring of the project.

### 3. Additional Conditions for Green Building Norms:

The contractor shall follow the following guidelines laid here under so that the GRIHA rating is not suffered on account of acts and action, omission, negligence of the contractor or his team:-

#### **Preserve and protect landscape during construction & Soil conservation till post-construction:**

1. The contractor shall preserve the topsoil and existing vegetation. The contractor shall by proper planning of timing of construction activity shall be minimize site disturbance such as soil pollution due to spilling of the construction material and its mixing rain water. The contractor shall use staging and spill prevention and control plan to restrict the spilling of the contaminated material on site. The contractor shall also control erosion and sedimentation.

2. The contractor shall restrict the construction to pre-planned/pre-designated areas with approval from Engineer-in-Charge. The contractor shall submit site plan showing staging and spill prevention measures, erosion and sedimentation control measures along with photographic records to show that other areas have not been disrupted during construction and to show erosion and sedimentation control measures adopted. The contractor shall submit site plan showing demarcate areas on site from which top soil has to be gathered, designate area where it will be stored, measures adopted for top soil preservation.

3. The contractor shall immediately after award of work shall excavate the topsoil for a depth of 200 mm and re-store the same at pre-designated space (in consultation with Engineer-in-Charge) and also take measures (stockpiling, mulching) that this topsoil is not disturbed till the same is utilized or the work is completed. The payment for excavation and preservation of topsoil shall be paid in the respective items of the agreement.

4. The contractor shall Vegetate / mulch areas where vehicles do not ply. The contractor shall apply gravel /landscaping rock to the areas where mulching /paving is impractical. The contractor shall indentify roads on side that would be used for vehicular traffic. The contractor shall upgrade vehicular roads (if these are unpaved) by increasing the surface strength by improving particle size, shape, and mineral types that make up the surface and base. Add surface gravel to reduce source of dust emission and Limit amount of fine particles (smaller than 0.075 mm) to 10%–20%.

5. The contractor shall limit vehicular speed on-site to 10 km/h.

6. The contractor shall reduce air pollution by wetting the surface by spraying water

- (i) on any dusty materials before transferring, loading, and unloading,
- (ii) areas where demolition work is being carried out,

- (iii) any unpaved main-haul road, and
- (iv) Areas where excavation or earth-moving activities are to be carried out.

7. The contractor shall minimize the disruption of the natural ecosystem.

8. The Contractor shall Plant a minimum of 1500 trees of variety as described by the PMC in the Campus. Whereas for the same the Contractor shall initially develop and maintain a nursery at such a place as directed by the Engineer- in – Charge. /PMC/ Officer appointed by Engineer-in-Charge

**Provide minimum level of sanitation/safety facilities for construction workers:**

9. The contractor shall strictly follow the provisions contained in Clause-18 & its sub-clause; Clause-19 & its sub-clauses of GCC-2010 for providing basic amenities to the workers. The contractor shall ensure cleanliness of workplace with regard to the disposal of waste and efficient provide clean drinking water and latrines and urinals as per applicable standard. The contractor shall strictly follow the “CYASHADA SAFETY CODE” of GCC-2010.

10. The contractor shall comply with the National Building Code 2005 norms on construction safety for ensuring safety during construction. The National Building Code 2005 have provisions for clean and hygienic accommodation, toilet facilities, purified drinking water, general store, a subsidized canteen, medical facilities, day care centre and onsite safety equipments, etc.

11. The contractor shall adopt additional best practices and prescribed norms as in NBC 2005.

12. The contractor shall submit sufficient documentary & photographic evidences in compliance to above three paras.

**Reduce air pollution during construction :**

13. The contractor shall ensure proper screening, covering stockpiles, covering brick and loads of dusty materials, wheel-washing facility and water spraying facility to reduce air pollution during construction. The site roads should be regularly sprayed with water and wheels of all vehicles should be washed to prevent air pollution. The contractor shall transfer, handle / store dry loose materials such as bulk cement and dry pulverized flay ash inside a totally enclosed system.

14. The contractor shall install dust screen (at least 3 M high) around the disturbed area to prevent air pollution and spillage to undisturbed site area.

15. The contractor shall undertake the responsibility to prevent air pollution (dust & smoke), ensure availability of adequate water supply for dust suppression, devise methodology to minimize impact of dust on the surrounding environment and ensure that these methods are implemented. The contractor shall provide documentary evidence regarding the method of working, plant equipment and air-pollution-control system being adopted on the site.



16. The contractor shall efficiently use the natural resources (water, energy & materials) and takes measures to conserve the natural resources.

**Efficient water use during construction :**

17. The contractor shall prevent wastage of water during curing. The contractor shall also make efforts to minimize use of potable water during construction by proper & efficient construction water management on site.

18. The contractor shall construct Sedimentation tank for collecting of excess curing water.

**Reduction in waste during construction. Efficient waste segregation. Storage and disposal of wastes & Resource recovery from waste :**

19. The contractor shall ensure maximum resource recovery and safe disposal of wastes generated during construction and reduce the burden on landfill. The contractor shall segregate inert, chemical and hazardous wastes separately. The contractor shall make all efforts to recycle/safe disposal of segregated wastes (oil, paint, batteries & asbestos). The contractor shall dispose-off the inert waste at landfill sites duly approved by local body/Engineer-in-charge.

20. The contractor shall keep record of all waste generated during construction activity and storage facility for segregated inert and hazardous waste before recycling and disposal.

21. The contractor shall use multi-colored bins for waste segregation at source at his own cost.

22. The contractor shall (in consultation with Engineer-in-charge) allocate separate space for the collected waste before transferring to the recycling/disposal stations.

23. The contractor shall make arrangements for recycling of waste through local (Junk) dealers. The contractor shall also keep record of such transactions and provide the same to the department as and when required.

24. The contractor shall make all efforts for achieving zero waste generation by adopting appropriate resource recovery measures.

**Use low-VOC paints/adhesives/sealants :**

25. The contractor shall use zero/low-VOC paints duly approved by Engineer-in-charge. The contractor shall use water-based acrylic paints duly approved by Engineer-in-charge and shall not use solvent based oil paints. The contractor shall also submit certificates & vouchers from suppliers/manufacturers that the paint used are zero/low-VOC paints.

The prescribed VOC limits for paints to be used are given in the table below:-

• *VOC Limits for paints*

Paint application	VOC Limits (g of VOC per litre)	
Interior coating	Flat	<50
	Non Flat	<100
Exterior coating	Flat	<200
	Non Flat	<100

Anti corrosive	Gloss/semi Gloss/Flat	<250
----------------	--------------------------	------

• *VOC Limits for paints*

Coatings	VOC Limits (g of VOC per litre)
Clear wood finishes	350
• Varnish	550
• Lacquer	
Floor coating	100
Stains	250

26. The contractor shall use water based low-VOC sealants (acrylics, silicones and siliconized acrylics) & adhesives (acrylics or phenolic resins) duly approved by Engineer-in-charge. The solvent oil based/low in oil solvent content sealants (urethanes and butyls) & adhesives shall not be used in the construction. The contractor shall also submit certificates & vouchers from suppliers/manufacturers that the sealants/ adhesives used are low-VOC sealants/adhesives.

27. The contractor shall not use wood in construction. The composite wood products shall be free from urea-formaldehyde resins. The flush door proposed to be used as per the item of this NIT shall confirm to CYASHADA Specification 2009 with upto date correction slips. The contractor shall also submit certificates & vouchers from suppliers/manufacturers that the composite wood products are free from urea-formaldehyde resins.

**Minimize ozone depleting substances :**

28. The contractor shall employ 100% zero ODP (ozone depletion potential), HCFC (hydrochloro-fluorocarbon) free and CFC (chloro-fluorocarbon) free insulation such as HCFC free rigid form insulation, mineral fibre cellulose insulation, glass fibre, wood fibre board, cork wool, expanded (bead) polystyrene, recycled newspaper and jute & cotton duly approved by Engineer-in-charge. The contractor shall not use materials which are not inherently zero-ODP such as polyurethane foams and

polyisocyanurates. The contractor shall also submit certificates & vouchers from suppliers/manufacturers that the insulation used are ODP/CFC/HCFC free.

**Ensure water quality :-**

29. The contractor shall ensure that water used in construction meets the water quality norms as prescribed in the Indian Standards for various applications. The contractor shall get the water tested with regard to its suitability of use in the works and get written approval from the Engineer-in-charge before he proceeds with the use of same of execution of works. If the water is not suitable, the contractor shall arrange Municipal water or from any other sources at his own cost and nothing extra shall be paid to the contractor on this account. The water shall be got tested at frequency specified in latest CYASHADA specifications/BIS code.

**47. PRESERVATION OF EXISTING TREES.**

It is obligatory on the part of Contractor to take utmost care to preserve the existing trees as it is and in no case contractor shall be allowed to cut the existing trees or the branches there of, without written permission of the Engineer-in-Charge and the competent authority. The Existing trees shall be protected by erecting 1.2 m high temporary half brick partition wall in the form of tree guard, at no extra cost.

4. Entry and exit of the construction vehicle shall be properly maintain by merging in and diverging out so as to avoid the accidents .
5. The contractor shall display the board at site showing the name of work, Project cost, Project duration, Name of contractor.etc. as directed by Engineer-In - Charge.
6. Contractor shall be fully responsible for any mishaps / accidents during construction at the time of construction. He should make all necessary safety arrangements to ensure safety of existing building users. He should get necessary insurance cover. Offer of contractor shall be inclusive of all costs for making such insurance cover and safety arrangements. He shall not be paid separately for making such necessary arrangements.
7. Any damages to the existing structure shall be made good by the contractor at his cost , as per the instructions of engineer in charge. He shall not be paid separately for making such necessary repairs to damages. Offer of contractor shall be inclusive of all costs for making such necessary repairs.
8. The contractor should make adequate provision and make preventive arrangement to avoid dust and noise pollution in the premises at his own cost

**ELECTRICAL INSTALLATIONS ( SPECIAL CONDITIONS)**

**SCOPE OF WORK**

Scope of work covered under this tender shall be as mentioned but not limited to following :

- i) Internal Electrification design, Supply, Installation, testing & Commissioning.
- ii) The necessary permission along with the approved plans for Electrical installation shall be got approved from appropriate authority/ authorities by Entrepreneur & on completion of these works further NOC / Permission for use of those also be obtained by the entrepreneur and submitted to Engineer-in-charge.
- iii) The electrical supply for the other activities than these will have to be obtained separately from electric supply company by the contractor.

**STANDARDS FOR ELECTRICAL WORK**

All Electrical Work shall be carried out as per

- i) The relevant Indian Standards formulated by Bureau of Indian Standards New Delhi.
- ii) Indian Electricity Rules 1956 (Revised)\
- iii) National Electrical Code.
- iv) Chapter 16 of YASHADA Hand Book – Government of Maharashtra
- v) Development Control Regulations.
- vi) Development Control Regulation of Maharashtra State and rules of local bodies pertaining of E.I. works.

**WIRING ON SURFACE OF WALL / CEILING**

**(I) Wiring in PVC casing capping**

PVC casing-n- capping type wiring to be adopted with its accessories such as T, bends, elbows etc.

PVC casing-n-capping and its accessories shall be confirm to IS 14927 Part I. The route of casing-n-capping on wall and ceiling should be approved prior to fixing by Engineer-in-charge.

**(II) Wiring in PVC conduit**

Conduit wiring system with Rigid Non-metallic conduit to be fixed on wall and ceiling as per design requirement. The conduit shall conform to IS:9537 (Part-3) and corresponding accessories shall conform to IS :3419. Conduits shall be joined by means or compiling. For long urns, an junction inspection type couplers, junction boxes shall be provided at intervals not exceeding junction.

**Bunching of Insulated Wires**

- 1) Conductors for concealed and wiring on surface of all ceiling in conduits shall be bunched. The number of insulated cables that may be drawn into single conduits is given in the following table. In this table the space factor should not exceed 40%.

	Size of conduit (mm) outside diameter.				
Nominal cross section area mm.	20	25	32	38	50

## Tender for Construction of CGG –Residential & Academic Building at Baner Yashada Pune

	No. of cables, Max.				
	5	10	14	--	--
2.5	5	10	14	--	--
4.0	3	6	10	14	--
6	2	5	8	11	--
10	--	4	7	9	--
16	--	2	4	5	12
25	--	--	2	2	6
35	--	--	--	2	5
50	--	--	--	2	3

Design of wiring, Mains shall be such that voltage drop shall be limited to 1% of the system voltage for single phase & 1.5% of the system voltage for motor load like Pumps. Lifts etc. and 2% of the system voltage for other three phase loads.

2) Conductors for surface wiring in casing-n-capping shall be restricted to occupy not more than 60% the space in casing-n-capping on it fixing position on wall ceiling.

### **MINIATURE CIRCUIT BREAKER'S DISTRIBUTION BOARD :**

Distribution boards along with the controlling MCB's / Fuse or Isolator as shown shall be fixed in sheet enclosure suitable for recessed mounting in wall. Distribution boards shall be made of 16 WG sheet steel duty rust inhibited through a process of degreasing acid pickling and spray painted to an approved colour over a coat of red oxide primer.

Three Phase boards shall have phase barriers and a wire channel on three sides Neutral bar shall be a solid tinned copper bar with tapped holes and chase headed screws. For three phase DB's independent neutral bars shall be provided.

All DB's shall be internally pre-wired using PVC insulated copper wires brought to a terminal grip of appropriate rating for outgoing feeders.

Conduit knockouts shall be provided as required / shown on drawings and the entire boards shall be rendered dusts and vermin proof with necessary rubber gaskets.

MCB's shall have quick make and break non welding self wiping silver alloy contacts for 10 K.A. short circuit both on the manual and automatic operation. Each pole of the breaker shall be provided both inverse time thermal over load and instantaneous over current tripping with trip free mechanism. In case of multi pole breakers, the tripping must on all the poles and operating shall be common to IS:8828.

Pressure clamp terminals for stranded /solid conductor insertions are acceptable upto 4 Sq.mm. Aluminium of 2.5 Sq.mm. copper and for high ratings, the terminals shall be suitable shrouded wherever MCB isolators are specified they are without the tripping elements.

Fuse shall be HRC links, Bottle type fuse are not acceptable. Fuse carrier terminals shall be suitable shrouded rewirable fuse carrier shall be porcelain.

Distribution boards shall have HRC / Rewirable fuses as shown on the schedule and drawing. Board shall be with the requirements of IS:2675 and making arrangement of bus bars shall be in accordance with IS: 2675 bus bars shall be suitable for the incomer switch rating and sized for a temperature rise of 35<sup>0</sup> C over ...ambient. Each board shall have two separate earthing terminals. Circuit diagram indicating the load distribution shall be posted on the inside of the DBs as instructed. One earthing terminal for single phase and two terminal for 3 phases DB's shall be provided with an earth strip connecting the brass studs and outgoing ECC earth bars.

In case of MB distribution boards, the backup fuses wherever shown shall be not less than 63 Amp. with a delayed characteristic and a minimum pre arcing time of 0.5 sec. at 9 KA fault current.

All outgoing feeders shall terminate on a terminal strip which in turn is interconnected to the

## Tender for Construction of CGG –Residential & Academic Building at Baner Yashada Pune

MCB Fuse base by means of insulated single conductor copper wire as follows :

Upto 15 Amps.	-	2.5	Sq.mm.
25 Amps.	-	4.0	Sq.mm.
63 Amps.	-	10	Sq.mm.

### **EARTHING**

Earthing shall be done in accordance with IS-3043 of 1987

#### **Systems of earthing –**

Equipment and portion of installation shall be deemed to be earthed only if earthed in accordance with the directed earthing system. In all cases, the relevant provisions of Rule 33 and 61 of the Indian Electricity Rules, 1956, shall be complied with.

#### **Earth Electrodes**

Type	:	Earth plate electrodes shall be provided and they shall not be less than 60 cm. x 60 cm. x 6 mm. copper as per Clause 9.2 of IS-3043.
Installation	:	Electrodes shall as far as possible be embedded below permanent moisture level. In addition, they shall be buried at a depth of not less than 3 M. Complete installation shall be as per IS-3043 and as per plate No. 4 of Chapter 16 of YASHADA Handbook.

Earth station shall be 60 cm. x 60 cm. x 6 mm. copper buried in

Specifically prepared earth pit so as to keep top of earth plate 3 M. below ground with 40 Kgs. each charcoal and salt ( with alternate layers of charcoal and salt) with 19 mm. dia. GI pipe provide with funnel with a wire mesh for watering and brick masonry block, CI cover etc. complete as per Para 9 of IS-3043 of 1987 with necessary length of double copper earth strip of adequate size bolted with lug to the plate and covered in adequate size GI pipe 2.5 M. long complete connected to the switch gear with end socket as per direction and duly tested by earth tester and recording results.

Difference between two earth pits shall not be less than 6 Metres i.e. double the depth of each electrode.

### **General Rules Applying to All Systems of Earthing**

#### **Method of Earthing :**

#### **A. Connection of Earthing conductors :**

- 1) Main earthing copper strip shall be laid from the earth station provide in the sub station, H.T. Equipment , VBC, Stabilizer and Transformer shall be earthed in the sub stations as per the provision of IS 3043 - 1987.
- 2) Main LT panel connection shall be taken from earth electrode provided near main LT panel room.
- 3) There will be copper strip of vertical risers from the earth pits independently provided for earthing of distribution floor panels located at different floors.
- 4) Interloping of sub panels to room DB's shall be done with PVC insulated copper conductor of

**Tender for Construction of CGG –Residential & Academic Building at Baner Yashada Pune**

appropriate size.

**B) Cable sheathing and armouring :**

These shall be earthed at the ends adjacent to switch boards at which they originate or otherwise at the commencement of the run by an earthing conductor connected to an earth clip, clamp or gland in effective electrical contact with cable sheathing and armouring.

**C) Earthing Conductor :**

Every earthing conductor shall be either stranded strips or circular or rectangular bar. Protection against mechanical injury shall be provide where necessary. The earth conductor may be of high conductivity copper. The size of earthing conductors shall corresponds to the load current as given below.

Size of earth conductors form main switchboard to sub main switches or DB's.

Cross sectional area of current carrying conductor copper (Sq.mm.)	Cross section area of current carrying conductor copper.	
	(Sq.mm.)	(Sq.mm.)
4	4	12
6	4	12
10	6	10
16	10	8
25	16	8
35	16	8
50	25	6
70	35	2
95	50	20 x 3 mm.
120	70	25 x 3 mm.

**LIST OF APPROVED MATERIALS TO BE USED ON WORK**

PVC Rigid conduits / PVC Trunking (Casing-n-capping)	Precision, Diamond, Pressfit
PVC Copper wires FR /FRLS grade	Polycab, RR Cables, L &T, KEI
MCB (All poles), EICB (All Poles), RCCB (All Poles), RCBO (All Poles) MCB Distribution boards)	Havells, L&T, Siemens, Legrand.
MCCB (All Poles)	Havells, Merlin-Gerin, Schneider, L&T, Legrand.

Signature of Contractor

No. of Corrections

Executive Engineer

Page 151 of 182

**Tender for Construction of CGG –Residential & Academic Building at Baner Yashada Pune**

	MCCB Distribution Boards	Havells, Merlin-Gerin, Schneider, L&T, Legrand.
	Fluorescent / T-8, T-5 fittings	Wipro, Crompton, Philips, Havells, GR, K-Lite, Tulip
	Ceiling Fans, Exhaust Fans, Bracket Fans, Wall Mounting Fans.	Crompton, Bajaj, Anchor, Havells, Almonard.
	<u>Wiring Accessories</u> 1. Modular type switches, sockets, accessories	Crabtree, Legrand, MK India.
	Fluorescent tubes, MF/GF Lamps	Osram, Crompton, Bajaj, Philips.
	PVC /XLPE armoured Alluminium / Copper cables	Polycab, RR Cables, Finolex
	Engineering Plastic Body Storage type Water Heater	Racold, Sperehot, Bajaj
	Decorative Wall Fittings / Mirror Light Fittings	Eglo, Massive, Phillips



## QUALITY CERTIFICATION STANDARDS AND TESTING FOR GRID-CONNECTED ROOFTOP SOLAR PV SYSTEMS/POWER PLANTS

Quality certification and standards for grid-connected rooftop solar PV system are essential for the successful mass-scale implementation of this technology. It is also imperative to put in place an efficient and rigorous monitoring mechanism adherence to these standards. Hence all components of grid-connected rooftop solar PV system/plant must conform to the relevant standards and certification given below.

<b>Solar PV Modules / Panels</b>	
IEC 61215/ IS 14286	Design Qualification and Type Approval for Crystalline Silicon Terrestrial Photovoltaic (PV) Modules
IEC 61701	Salt Mist Corrosion Testing of Photovoltaic (PV) Modules
IEC 61853- Part 1 IS 16170 Part 1	Photovoltaic (PV) Modules performance testing and energy rating irradiance and temperature performance measurements and power rating
IEC 62716	Photovoltaic (PV) Modules - Ammonia (NH <sub>3</sub> ) Corrosion Testing (As per the site condition like dairies toilets)
IEC 61730 - 1, 2	Photovoltaic (PV) Modules Safety Qualification - Part 1 : Requirements for construction Part 2 : Requirements for Testing
<b>Solar PV Inverters</b>	
IEC 62109-1	Safety of power converters for use in photovoltaic power system Part 1 : General requirement and Safety of power converters for use in photovoltaic power systems Part 2 : Particular requirements for inverters. Safety compliance (Protection degree IP 65 for outdoor mounting IP 54 for Indoor mounting)
IEC/IS 61683 (as applicable)	Photovoltaic Systems - Power conditioners : Procedure for Measuring Efficiency (10%, 25%, 50%, 75%, & 90-100% Loading Conditions)
IEC 62116 UL 1741 / IEEE1547 (as	Utility - interconnected Photovoltaic Inverters - Test Procedure of Islanding Prevention Measures
IEC 60255-27	Measuring relays & protection equipment - Part 27 : Product safety requirements
IEC 60068 - / IEC 62093 (as applicable)	Environmental Testing of PV System - Power Conditioners and Inverters
<b>Fuses</b>	

IS/IEC 60947 (Part 1,2 & 3) EN50521	General Safety requirements for connectors switches circuit breakers (AC/DC) a) Low -voltage Switchgear and Control-gear Part 1 : General rules b) Low -voltage Switchgear and Control-gear Part 2 : Circuit Breakers c) Low -voltage Switchgear and Control-gear Part 3 : Switches disconnectors,
--	---

	switch - disconnectors and fuse - combination units d) EN 50521 : Connectors for Photovoltaic system - Safety requirements and tests
IEC 60269-6	Low - voltage fuses - Part 6 : Supplementary requirements for fuse - links for the protection of solar photovoltaic energy systems
<b>Surge Arrestors</b>	
BFC 17 - 102 : 2011	Lightening Protection Standard
IEC 60364-5-53/IS 15086-5(SPD)	Electrical Installation of buildings - Part 5-53 Selection and erection of electrical equipment - solution switching and control
IEC 61643 - 11 2011	Low - voltage surge protective devices - Part 11 Surge protective devices connected to low -voltage power systems Requirements and test methods
<b>Cables</b>	
IEC 60227/IS694 IEC 60502/IS1554 (Part 1 & 2) /IEC 69947 (as applicable)	General test and measuring method for PVC (Polyvinyl chloride) insulated cables (for working voltages up to and including 1100 V and UV resistant for outdoor installation)
BS EN 50618	Electric cables for photovoltaic system (BT (DE/NOT) 258) mainly for DC Cables
<b>Earthing / Lightning</b>	
IEC 62561 Series (Chemical earthing ) (as applicable)	IEC 62561-1 Lightning protection system components (LPSC) - Part 1 : Requirements for connection components IEC 62561-2 Lightning protection system components (LPSC) - Part 2 : Requirements for conductors and earth electrodes IEC 62561-7 : Lightning protection system components(LPSC) - Part 7 : Requirements for earthing enhancing
<b>Junction Boxes</b>	
IEC 60529	Junction boxes and solar panel terminal boxes shall be of the thermo-plastic type with IP 65 protection for outdoor use and IP 54 protection for indoor use
<b>Energy Meter</b>	
IS 16444 or as specified by the DISCOMS	A.C Static direct connected watt-hour Smart Meter Class 1 and 2 Specification (with Import & Export / Net energy measurements)
<b>Solar PV Roof Mounting Structure</b>	
IS 2062 / IS 4759	Material for the Structure mounting

**Note -** Equivalent standards may be used for different system components of the plants

Signature of Contractor

No. of Corrections

Executive Engineer

Page 154 of 182

## LIST OF STANDARDS

The following list records those standards which are acceptable as 'good practice' and 'accepted standards' in the fulfilment of the requirements of the code. The latest version of a standard shall be adopted at the time of enforcement of the code. The standards listed may be used by the Authority as a guide in conformance with the requirements of the referred clauses in the code.

	<b>IS No.</b>	<b>Title</b>
(1)	14671:1999	Code of practice for installation and maintenance of hydraulic lifts
(2)	14665 (Part 1): 2000  (Part 3/ Sec 1 & 2) : 2000 (Part 4/ Sec 1 to 9) : 2001	Electric Traction Lifts Guidelines for outline dimensions of passenger, goods, service and hospital lifts Safety rules, Section 1 Passenger and goods lifts, Section 2 Service lifts Components, Section 1 Lift Buffers, Section 2 Lift Guide Rails and Guide Shoes, Section 3 Lift Carframe, Car, Counterweight and Suspension, Section 4 Lift Safety Gears and Governors, Section 5 Lift Retiring Cam, Section 6 Lift Doors and Locking Devices and Contacts, Section 7 Lift Machines and Brakes, Section 8 Lift Wire Ropes, Section 9 Controller and Operating Devices
(3)	14665 (Part 4/ Sec 1 to 9) : 2001	Electric Traction lifts : Part 4 Components Section 1 Lift Buffers, Section 2 Lift Guide Rails and Guide Shoes, Section 3 Lift Carframe, Car, Counterweight and Suspension, Section 4 Lift Safety Gears and Governors, Section 5 Lift Retiring Cam, Section 6 Lift Doors and Locking Devices and Contacts, Section 7 Lift Machines and Brakes, Section 8 Lift Wire Ropes, Section 9 Controller and Operating Devices
(4)	14665 (Part 2/ Sec 1 & 2):2000	Electric Traction Lifts : Part 2 Code of practice for installation, operation and maintenance, Section 1 Passenger and goods lifts, Section 2 Service lifts
(5)	962:1989	Code of practice for architectural and building drawings ( <i>second revision</i> )
(6)	3043:1987	Code of practice for earthing
(7)	IS/IEC 60529:2001	Degrees of protection provided by enclosures (IP CODE)
(8)	14665 (Part 3/ Sec 1 & 2): 2000	Electric Traction Lifts : Part 3 Safety rules, Section 1 Passenger and goods lifts, Section 2 Service lifts
(9)	IS 15785 : 2009	Code of practice for Installation and maintenance of lifts without conventional machine

- room
- (10) IS 15330:2003 Code of practice for Installation and maintenance of lifts for handicapped persons
- (11) IS 8216:1976 Guide For Inspection Of Wire Ropes
- (12) NBC-2016 National Building Code of India 2016 Volume-2 Part 8 Building Services Section 5 & 5a Installation Of Lifts,
- (13) Lift ACT & Rules The Maharashtra Lift, Escalators & Moving Walkway Act And Relevant Rules
- (14) Local Authority Rules The Development Control Regulations Of The Local Aut

**ADDITIONAL TENDER CONDITIONS**  
**SPECIAL ATTENTION TO CONTRACTORS**

1. As the contract includes work of Electrical Installation with the civil work the Civil Contractor should have requisite registrations.
2. Agencies (Civil Contractor) not having the registration for carrying out above mentioned Electrical work may go in for an agreement of Joint Venture for execution of Electrical work included in the Tender with Licensed Electrical Contractor (LEC) having valid registration certificate issued by Executive Engineer (Electrical) YASHADA in Maharashtra State and registered with Chief Engineer (Electrical), YASHADA Mumbai, duly **Notarised & Registered**.
3. The agreement should be made with concerned LEC for erection, testing, commissioning till the work is handed over. Attested copy of agreement should be enclosed in envelope no. 1. However, the entire responsibility to complete the work (Civil, & Electrical) will lie with the Civil Contractor only.
4. While submitting the tender, Civil Contractor should submit the consent letters of concerned LEC from as per Proforma attached with the tender, from whom he has proposed to execute the electrical work. The consent letter shall be enclosed in envelope no. 1.
5. After opening the tender the successful Tenderer should submit the Original agreement of duly registered Joint Venture with LEC from whom the consent letter was already taken and submitted in envelope No. 1. The Joint Venture documents submitted by the successful Tenderer shall be got checked & verified from Executive Engineer (Electrical), P W Electrical Division, Pune. The Civil Contractor entering into Joint Venture will not be allowed to change the LEC subsequently.
6. On completion of work, the Electrical Contractor shall submit the Test Report of the installation to the Engineer-in-charge. The final payment to the Contractor will be released only after the submission of Test Report.
7. All the requisite permissions along with the approved plan (drawings) shall be obtained from the appropriate authority/authorities by the Contractor and on completion of work; further NOC/Permission for use of those also shall be

obtained by the Contractor. All the NOC/Permissions along with approved plan (drawings) shall be submitted to the Engineer-in-charge.

8. Defect liability period of **electrical items** will be for 12 months.  
**and 36 months for LED fixtures** from the date of installations.
9. Successful Tenderer has to furnish copies of original bills of purchase of material with details of taxes made against this tender work to the Executive Engineer (Electrical), P W Electrical Division, Pune for verification of genuineness of material in the interest of Government work.
10. The makes/brands mentioned in the tender for various items shall not be changed. If any unavoidable condition arises, the deviation in makes/brands should be got approved from Superintending Engineer, Pune Regional Electrical Circle, Pune prior to its use on the work.
11. The excess in quantity, extra items, will be governed by the rules under YASHADA manual. However the Price Escalation Clause (i.e. PVC) will be governed by the formulae with the values prevailing in the CSR for electrical items.
12. Before starting electrical work, if, Civil contractor intends to get Electrical work done through another agency (LEC other than with whom the original agreement is executed) **Or** if, Department directs Civil Contractor to get the Electrical work from another agency (LEC) due to bad work/slow work, etc., by the original agency (LEC), then, in such case Civil Contractor will enter into an agreement with new agency (LEC) for Electrical portion of work after pre-qualification by Executive Engineer (Electrical), P W Electrical Division, Pune, as to experience of new agency and final standing valid registration in appropriate class and nature and magnitude of similar works executed with Govt. department. A copy such agreement will be submitted to the Executive Engineer (Electrical), P W Electrical Division, Pune, who will then accord permission to proceed with the work from the new agency.

**LETTER OF CONSENT**

To

The Registrar,  
YASHADA,Pune.

Subject : **Your office e-tender Tender Notice No 20 of 2022-23**  
**Name of Work : Construction of Center for Good Governance[CGG] – Residential & Academic Building at YASHADA, Pune**

Sir,

I / We \_\_\_\_\_

am / are ready to execute the said electrical installation on behalf of the \_\_\_\_\_

\_\_\_\_\_  
(Civil Contractor) as per the terms and conditions agreed between the Yashada  
Pune and the \_\_\_\_\_

------(Civil Contractor) .  
which will be valid till the defects liability period of this contract.

Date :

Name of Firm and address

Place :

\_\_\_\_\_

## **GENERAL GUIDELINES FOR WATERPROOFING WORK FOR REFERENCE OF CONTRACTOR**

**( NOTE : The Contractor is required to give detailed specifications for each item of waterproofing work).**

### **1. Roof Slab and Terrace :**

Providing average 112 mm. thick cement based waterproofing treatment with brick bat coba bedding by keeping the treatment minimum 75 mm. thick at the rain water pipe point and keeping the gradient not flatter than 1 in 100.

- a) Cleaning the surface to the requirements.
- b) Giving a coat of wash mixed with cement.
- c) Providing 12 mm. thick cement mortar bed with admixture of waterproofing compound to form a bed for brick bats. Special care shall be taken at the junction of parapet and terrace slabs to ensure gaps, if any, are properly sealed.
- d) Placing brickbats of varying sizes ( average 80 mm thick ) to a proper slope and grouting their joints with chemical process in cement mortar with 2% with waterproofing compound.
- e) Providing all around the terrace large waterproof wattas (roundings) upto a height of 30 cm. in P.C.C. or as directed above the finished level of waterproof treatment.
- f) Finishing and curing for 14 days.
- g) Carrying out the test. Payment for the item shall be released only after results of pond test are satisfactory.

### **2. Toilets :**

- a) Cleaning the surface to the Department's requirements.
- b) Giving a coat of wash mixed with cement.
- c) Providing 25 mm. thick waterproof treatment to the bottom of toilet floors.
- d) Providing 20 mm. to 25 mm. thick cement mortar waterproof treatment to the walls of toilets upto the height of 1.00 metre above the finished floor level.
- e) Providing waterproof wattas all around the toilets.



f) Grouting the mouths of inlets and outlets.

g) Filling sunk portion with brick bats including water proof mortar and the top surface left rough to form a key for tiles.

**OVERHEAD TANK :**

The work under some items in Schedule "B" of the tender pertains to construction of underground / overhead water tank. After completion of the work, water tank as a whole shall be tested for water tightness and leakages , if any, shall be rectified forthwith without any extra cost to the Department.

## GENERAL CONDITIONS / SPECIFICATIONS FOR WATERPROOFING

### Rates for respective items shall include for the additional specifications :

1. The work of waterproofing described in the following items shall be carried out by the contractor only through a renowned specialist waterproofing agency using cement waterproofing compounds, as approved in writing by the Executive Engineer.
2. The Contractor shall give before actual execution, detailed specifications for each item of work of waterproofing to be executed according to the specifications of the specialist agency he proposes to employ, for approval. The work shall not be started unless approval in writing is given by the Engineer-in-charge to the said specification.
3. The contractor shall give a guarantee bond on requisite stamp paper for a minimum period of 10 years for all the items of waterproofing done. During the guarantee period, the contractor shall entirely be responsible to rectify any defect at his own cost to maintain the work in waterproof condition. The waterproofing contractor shall also have rectification work at his own cost. The form of written guarantee shall be on a legal stamped agreement acceptable to the Government. The Guarantee shall be given within one month from the date of completion of waterproofing treatment but any delay in furnishing the guarantee shall not relieve the contractor from the implications of this clause.
4. DELETED.
5. The waterproofing agency shall provide and install at its own cost the following for its own use and remove the same after completion of the work :
  - i) Two pumps electrical / diesel operated for watering and curing at any level in the building. Curing for all items shall be carried out for a minimum period of 14 days.
  - ii) Temporary Mild Steel water storage tanks.
  - iii) Temporary galvanized iron pipings and fittings for water line.
  - iv) Flexible hose lengths.
  - v) Cement godown , site office.
6. Injections to reinforced cement concrete slab, wherever required have to be undertaken by the contractor free of cost.
7. Before starting the waterproofing work, the surface receiving the treatment shall be cleaned properly.

8. The item of waterproofing as given in the Schedule "B" applies for work in any position and on any floor and at any height. The lift of the materials shall not form any criteria for extra payment.

9. For the reference of contractor, guideline specifications for waterproofing are attached herein with the General Specifications for waterporrfing.

**GUARANTEE BOND FOR WATERPROOFING AND POLYURETHANE**

**( On Stamp Paper worth Rs. 100/- )**

**NAME OF WORK :**

**NAME OF AGENCY :**

**Agreement No.**

The Contractor thereby declared that the waterproofing work carried out under this contract shall be of the best quality and workmanship and shall be strictly in accordance with the specifications and particulars contained / mentioned in the clause hereof and the contractor hereby guarantee that the said work would continue to conform to the description and quality aforesaid for a period of ten years from the date of handing over the said work to the Department and notwithstanding the fact that the Department may have inspected and or approved the said work. If during the aforesaid period of ten years, the said work be discovered not to conform to the description and quality aforesaid or have deteriorated ( and the decision of the Engineer-in-charge in that behalf will be final and conclusive) the Department will be entitled to reject the said work or such portion thereof as may be discovered not to conform to the said description and quality. On such rejection, the work will be at the Contractor's risk and all the provisions herein contained relating to rejection of work etc. shall apply. The contractor shall, if so called upon have to make good the work etc. or such portion thereof, as is rejected by the Engineer-in-charge, otherwise the contractor shall pay to the Department, such damages, as may arise by the reason of the breach of the condition herein contained. Nothing herein contained shall prejudice any other right of the Department in that behalf under this contract or otherwise.

**Date :**

**Place :**

**Contractor**

# SECTION – 6

FORM OF BID

**VOLUME-III**

## FORM OF BID

<b>Description of the Work</b>	:-	<b>Construction of Center for Good Governance[CGG] – Residential &amp; Academic Building at YASHADA, Pune</b>
--------------------------------	----	---

To,  
 Executive Engineer,  
 YASHADA, Pune

1. We offer to execute the works described above and remedy any defects therein in conformity with the conditions of contract, specification, drawings, Bill of Quantities and Addenda for the sum(s) \_\_\_\_\_ of .....
2. We undertake, if our Bid is accepted, to commence the Works as soon as is reasonably possible after the receipt of the Engineer's notice to commence and to complete the whole of the Works comprised in the Contract within the time stated in the document.
3. We agree to abide by this Bid for the period of 75 days from the date fixed for receiving the same and it shall remain binding upon us and may be accepted at any time before the expiration of that period.
4. Unless and until a format Agreement is prepare and executed this Bid, together with your written acceptance thereof, shall constitute a binding contract between us.
5. We understand that you are not bound to accept the lowest or any tender you may receive.
6. We accept the appointment of Shri ..... as the Dispute Review Expert.

Dated this ..... day of ..... 20.....  
 Signature \_\_\_\_\_ in the capacity of \_\_\_\_\_ duly authorised  
 sign bids for and on behalf of  
 ..... (in block capitals or  
 typed)  
 Address  
 .....  
 . Witness  
 .....  
 Address  
 .....  
 Occupation  
 .....

*# Note-The bidder will submit this form online without his financial offer. The bidder shall fill the rates online in the BOQ sheet provided in the e-tender portal only.*

SECTION - 7  
BILL OF QUANTITIES  
**VOLUME-III**

**Attached separately in soft copy) –  
Envelope II**

SECTION – 8  
SECURITIES AND OTHER FORMS  
**VOLUME-III**



**Tender for Construction of CGG –Residential & Academic Building at Baner Yashada Pune**

**PERFORMANCE BANK GUARANTEE**

To,

**Registrar,  
YASHADA, Pune**

WHEREAS \_\_\_\_\_ [name and address of Contractor] (hereafter called "The Contractor") has undertaken, in pursuance of Contract No. \_\_\_\_\_ dated \_\_\_\_\_ to execute \_\_\_\_\_ [name of Contract and brief description of Works] (hereinafter called "the Contractor")

AND WHEREAS we have agreed to give the Contractor such a Bank Guarantee.

NOW THEREFORE we hereby affirm that we are the Guarantor and responsible to you on behalf of the Contractor, up to a total of \_\_\_\_\_ [amount of guarantee]\* \_\_\_\_\_ (in words), such sums being payable in the types and proportions of currencies in which the Contract Price is payable, and we undertake to pay you, upon your first written demand and without cavil or argument, any sum or sums within the limits of \_\_\_\_\_ [amount of guarantee] as aforesaid without your needing to prove or to show ground or reasons for your demand for the sum specified therein.

We hereby waive the necessity of your demanding the said debt from the contractor before presenting us with the demand.

We further agree that no change or addition to or other modification of the terms of the Contract or of the Works to be performed there under or of any of the Contract documents which may be made between your and the Contractor shall in any way release us from any liability under this guarantee, and we hereby waive notice of any such change, addition or modification.

This guarantee shall be valid 28 days from the date of expiry of the Defect Liability Period.

Signature and Seal of the Guarantor \_\_\_\_\_

Name of Bank \_\_\_\_\_

Address \_\_\_\_\_

Date \_\_\_\_\_

---

\* An Amount shall be inserted by the Guarantor, representing the percentage the contract price specified in the Contract including additional security for unbalanced Bids, if any and denominated in Indian Rupees.

**Tender for Construction of CGG –Residential & Academic Building at Baner Yashada Pune**

**INDENTURE FOR SECURED ADVANCES**

FROM 31

(For use in cases in which the contract is for finished work and the contractor has entered into an agreement for the execution of a certain specified quantity of work in a given time.)

This indenture made the \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_ BETWEEN \_\_\_\_\_ (hereinafter called the contractor which expression shall where the context so admits or implies be deemed to include his executors, administrators and assigns) or the one part and the employer of the Other Part.

Whereas by an agreement dated \_\_\_\_\_ (hereinafter called the said agreement) the contractor has agreed.

AND WHEREAS the contractor has applied to the Employer that he may be allowed advanced on the security of materials absolutely belonging to him and brought by him to the site of the works the subject of the said agreement for use in the construction of such of the works as he has undertaken to executive at rates fixed for the finished works (inclusive of the cost of materials and labour and other charges)

AND WHEREAS the Employer has agreed to advance to the Contractor the sum of Rupees \_\_\_\_\_ on the security of materials the quantities and other particulars of which are detailed in Accounts of Secured Advances attached to the Running Account bill for the said works signed by the Contractor on \_\_\_\_\_ and the Employer has reserved to himself the option of making any further advance or advance on the security of other materials brought by the Contractor to the site of the said works.

Now THIS INDENTURE WINTNESSE that in pursuance of the said agreement and in consideration of the sum of Rupees \_\_\_\_\_ on or before the execution of these presents paid to the Contractor by the Employer (the receipt where of the Contractor doth hereby acknowledge) and of such further advance (if any) as may be made to him as a for said the Contractor doth hereby covenant and agree with the President and declare as follows :

(1) That the said sum of Rupees \_\_\_\_\_ so advanced by the Employer to the Contractor as aforesaid and all or any further sum or sums advanced as aforesaid shall be employed by the Contractor in or towards expending the execution of the said works and for no other purpose whatsoever.

Signature of Contractor

No. of Corrections

Executive Engineer  
Page 170 of 182

**Tender for Construction of CGG –Residential & Academic Building at Baner Yashada Pune**

(2) That the materials details in the said Account of Secured Advances which have been offered to and accepted by the Employer as security are absolutely the Contractor's own propriety and free from encumbrances of any kind the contractor will not make any application for or receive a further advance of the security of materials which are not absolutely his own property and free from encumbrances of any kind and the contractor indemnified the Employer against all claims to any materials in respect of which an advance has be made to him as aforesaid.

(3) That the materials detailed in the said account of Secured Advance and all other materials on the security of which any further advance or advance may hereafter be made as aforesaid (hereafter called the said materials) shall be used by the Contractor solely in the execution of the said works in accordance with the directions of the Engineer.

(4) That the Contractor shall make at his own cost all necessary and adequate arrangements for the proper watch, safe custody and protection against all risks of the said materials and that until used in construction as aforesaid the said materials shall remain at the site of the said works in the Contractor's custody and on his own responsibility and shall at all times be open to inspection by the Engineer or any officer authorised by him. In the event of the said materials or any part thereof being stolen, destroyed or damaged or becoming deteriorated in a grater degree than is due to reasonable use and wear thereof the Contractor will forthwith replace the same with other materials of like quality or repair and make good the same required by the Engineer.

(5) That the said materials shall not be any account be removed from the site of the said works except with the written permission of the Engineer or an officer authorized by him on that behalf

(6) That the advance shall the Employer of the price payable in full when or before the Contractor receives payment from the Employer of the price payable to him for the said works under the terms and provisions of the said agreement. Provided that if any intermediate payment are made to the Contractor on account of work done than on the occasion of each such payment the Employer will be at liberty to make a recovery from the contractor's bill for such payment by deducting there from the value of the said materials than actually used in the construction and in respect of which recovery has not been made previously, the value for this purpose being determined in respect of each description of materials at the rates are which the amounts of the advances made under these presents were calculated.

(7) That if the Contractor shall at any time make any default in the performance or observance in any respect of any of the terms and provisions of the said agreement or of these presents the total amount of the advance or advances that may still be owing of the

## **Tender for Construction of CGG –Residential & Academic Building at Baner Yashada Pune**

Employer shall immediately on the happening of such default be repayable by the Contractor to be the Employer together with interest thereon at twelve percent per annum from the date or respective dates of such advance or advances to the date of repayment and with all costs, charges, damages and expenses incurred by the Employer in or for the recovery thereof or the enforcement of this security or otherwise by reason of the default of the Contractor and the Contractor hereby covenants and agrees with the Employer to repay and pay the same respectively to him accordingly.

(8) That the contractor hereby charges all the said materials with the repayment to the Employer of the said sum of Rupees \_\_\_\_\_ and any further sum or sums advanced as aforesaid and all costs, charges, damages and expenses payable under these presents PROVIDED ALWAYS and it is hereby agreed and declared that notwithstanding anything in the said agreement and without prejudice to the power contained therein if and whenever the covenant for payment and repayment here-in-before contained shall become enforceable and the money owing shall not be paid in accordance there with the Employer may at any time thereafter adopt all or any of the following courses as he may deem best :

- (a) Seize and utilise the said materials or any part thereof in the completion of the said works on behalf of the contractor in accordance with the provisions in that behalf contained in the said agreement debiting the contractor with the actual cost of effecting such completion and the amount due to the contractor with the value of work done as if he had carried it out in accordance with the said agreement and at the rates thereby provided. If the balance is against the contractor, he is to pay same to the Employer on demand.
- (b) Remove and sell by public auction the seized materials or any part thereof and out of the moneys arising from the sale retain all the sums aforesaid repayable or payable to the Employer under these presents and pay over the surplus (if any) to the Contractor.
- (c) Deduct all or any part of the moneys owing out of the security deposit or any sum due to the Contractor under the said advance shall not be payable.

(9) That except in the event of such default on the part of the contractor as aforesaid interest on the said advance shall not be payable.

(10) That in the event of any conflict between the provisions of these presents and the said agreement the provisions of these presents shall prevail and in the event of any dispute or difference arising over the construction or effect of these presents the settlement of which has

**Tender for Construction of CGG –Residential & Academic Building at Baner Yashada Pune**

not been here-in-before expressly provided for the same shall be referred to the Employer whose decision shall be final and the provision of the Indian Arbitration Act for the time being in force shall apply to any such reference.

**Tender for Construction of CGG –Residential & Academic Building at Baner Yashada Pune**

Letter of Acceptance

(Letterhead paper of the Employer)

To,

\_\_\_\_\_ [name and address of the Contractor]

\_\_\_\_\_

\_\_\_\_\_

Dear Sirs,

This is to notify you that your online bid dated \_\_\_\_\_ for execution of the \_\_\_\_\_ (name of the contract and identification number, as given in the Instructions to Bidders) for the Contract Price of Rupees \_\_\_\_\_ (\_\_\_\_\_ ) (amount in words and figures), as corrected and modified in accordance with the Instructions to Bidders<sup>1</sup> is hereby accepted by our agency.

We accept / do not accept that \_\_\_\_\_ be appointed as the Adjudicator<sup>2</sup>. You are hereby requested to furnish Performance Security, in the form detailed in Para 34.1 of ITB for an amount equivalent to Rs. \_\_\_\_\_ within 07 days of the receipt of the letter of acceptance valid up to 28 days from the date of expiry of defects Liability Period i.e. up to \_\_\_\_\_ and sign the contract, failing which action as stated in Para 34.2 of ITB will be taken.

Yours faithfully,

Authorised Signature

Name and title of Signatory

Name of Agency

<sup>1</sup> Delete "Corrected and" or "and modified" if only one of these actions applies. Delete as corrected and modified in accordance with the Instructions to Bidders, if corrections or modifications have not been affected.

<sup>2</sup> To be used only if the contractor disagrees in his Bid with the Adjudicator proposed by the Employer in the "Instructions to Bidders".

**Tender for Construction of CGG –Residential & Academic Building at Baner Yashada Pune**

Issue of Notice to proceed with the work

(Letter head paper of the Employer)

\_\_\_\_\_ (Date)

To,

\_\_\_\_\_ [name and address of the Contractor]

\_\_\_\_\_

\_\_\_\_\_

Dear Sirs,

Pursuant to your furnishing the requisite security as stipulated in ITB Clause 34.1 and signing  
of the Contract for the work of

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

Bid Price of Rs. \_\_\_\_\_.

You are hereby instructed to proceed with the execution of the said works in  
accordance with the documents.

Yours faithfully,

Registrar,  
YASHADA, Pune

Signature of Contractor

No. of Corrections

Executive Engineer  
Page 175 of 182

**Tender for Construction of CGG –Residential & Academic Building at Baner Yashada Pune**

**AGREEMENT FORM**

**Agreement**

This agreement, made the \_\_\_\_\_ day of \_\_\_\_\_ between \_\_\_\_\_ (name and address of the Employer) [hereinafter called “the Employer] and \_\_\_\_\_ (name and address of contractor) hereinafter called “the Contractor” of the other part.

Whereas the employer is desirous that the Contractor execute \_\_\_\_\_ (name and identification number of Contractor) (hereinafter called “the Works”) and the Employer has accepted the Bid by the Contractor for the execution and completion of such Works and the remedying of any defects therein, at a cost of Rs \_\_\_\_\_

NOW THIS AGREEMENT WITNESSTH as follows :

- (1) In this Agreement, words and expression shall have the same meanings as are respectively assigned to them in the conditions of contract hereinafter referred to and they shall be deemed to form and be read and construed as part of this Agreement.
- (2) In consideration of the payments to be made by the Employer to the Contractor as hereinafter mentioned, the Contractor hereby covenants with the Employer to all aspects with the provisions of the contract.
- (3) The Employer hereby covenants to pay the Contractor in consideration of the execution and completion of the Works and the remedying the defects wherein Contract Price or such other sum as may become payable under the provisions of the Contract at the times and in the manner prescribed by the Contract.
- (4) The following documents shall be deemed to form and be ready construed as part of this agreement viz.
  - i) Letter of Acceptance
  - ii) Notice to proceed with the works
  - iii) Contractor’s Bid
  - iv) Condition of contract : General and Special
  - v) Contract Date
  - vi) Additional condition
  - vii) Drawings
  - viii) Bill of Quantities and
  - ix) Any other documents listed in the Contract Data as forming part of the Contract.

In witnessed whereof the parties there to have caused this Agreement to be executed the day and year first before written.

The Common Seal of \_\_\_\_\_ was hereunto affixed in the presence of :  
Signed, Sealed and Delivered by the said \_\_\_\_\_

in the presence of :

Binding Signature of Employer \_\_\_\_\_

Binding Signature of Contractor \_\_\_\_\_

Signature of Contractor

No. of Corrections

Executive Engineer  
Page 176 of 182



**Tender for Construction of CGG –Residential & Academic Building at Baner Yashada Pune**

UNDERTAKING

I, the undersigned do hereby undertake that our firm M/s. \_\_\_\_\_  
\_\_\_\_\_ agree to abide by this bid for a period \_\_\_\_\_ days  
for the date fixed for receiving the same and it shall be binding on us and may be accepted at  
any time before the expiration of that period.

\_\_\_\_\_  
(Signed by an Authorized Officer of the Firm)

\_\_\_\_\_  
Title of Officer

\_\_\_\_\_  
Name of Firm

\_\_\_\_\_  
DATE

Tender for Construction of CGG –Residential & Academic Building at Baner Yashada Pune

**LETTER OF CONSENT**

To

Registrar,  
YASHADA, Pune

Subject : **Your office e-tender Tender Notice No 31 of 2023-24**  
**Name of Work : Construction of Center for Good  
Governance [CGG] – Residential and Academic Building at  
Baner YASHADA, Pune -41104**

Sir,

Signature of Contractor

No. of Corrections

Executive Engineer  
Page 178 of 182

**Tender for Construction of CGG –Residential & Academic Building at Baner Yashada Pune**

I / We \_\_\_\_\_

am / are ready to execute the said electrical installation on behalf of the \_\_\_\_\_

\_\_\_\_\_  
(Civil Contractor) as per the terms and conditions agreed between the Yashada  
Pune and the Chief Engineer, Public Works Region, Pune and the \_\_\_\_\_

------(Civil Contractor) . Further it is hereby agreed that I / We

------(Name of Firm) will go into

joint venture with \_\_\_\_\_

under the joint supervision of Executive Engineer, Public Works (North) Division,

Pune / Executive Engineer, Pune Electrical Division, Pune which will be valid till the

defects liability period of this contract.

Date :

Name of Firm and address

Place :

\_\_\_\_\_

**AFFIDAVIT**  
**(on Rs. 100/- Stamp Paper)(English)**

<b>Name of work:-</b>	<b>Construction of Center for Good Governance [CGG] – Residential and Academic Building at Baner YASHADA, Pune -411045</b>
-----------------------	--

I .....Age.....Address.....  
..... (Authorized signatory to sign the contract), hereby submit, vide this affidavit in truth, that I am the owner of the contracting firm ...../ authorized signatory and I am submitting the documents in Envelope No. 1 or the purpose of scrutiny of the contract. I hereby agree to the conditions mentioned below

1. I am liable for action under Indian Penal Code for submission of any false /fraudulent paper / information submitted in Envelope No. 1.
2. I am liable for action under Indian Penal Code if during contract period and defect liability period, any false information, false bill of purchases, supporting proof of purchase, proof of testing submitted by my staff, subletting company or by myself, I will be liable for action under Indian Penal Code.
3. I am liable for action under Indian Penal Code if any paper are found false /fraudulent during contract period and even after the completion of contract(finalisation of final bill ).

**(Signature of Contractor)**  
**(Seal of company)**

# **VOLUME-IV**

## **Section 9**

# SECTION – 9

## DRAWINGS

### **VOLUME-IV**

**(a)Residential Building (details  
on next 49 pages)**

**(b)Academic Building (details on  
next 129 pages)**