

## **CONTRACT FOR CONSULTANT'S SERVICES**

## Between

The Chief Engineer,

Mumbai Metropolitan Region Development Authority

Engineering Division, 2nd floor, MMRDA New Office Building,

Bandra-Kurla Complex, Bandra (East), Mumbai- 400051

## And

STUP Consultants Pvt. Ltd.

Plot No. 22A, Sector 19C, Palm Beach Marg, Vashi,
Navi Mumbai 400705, Maharashtra, India

For

Project Management Consultancy Services for Design and Construction of Sewri to Worli Elevated Connector (Third call)

Dated: 12th March 2021

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II. FORM OF CONTRACT



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Project Management Consultancy Services for Design and Construction of Sewri to Worli Elevated Connector (Third call)

## II. FORM OF CONTRACT

This CONTRACT (hereinafter called the "Contract") is made the 12th day of the month of March., 2021, between, on the one hand The Chief Engineer, Mumbai Metropolitan Region Development Authority (hereinafter Called the "Employer") which expression shall, unless it be repugnant to the context or meaning thereof, be deemed to include its successor or successors and assignee or assignees of the FIRST PART and, on the other hand, (M/s. STUP Consultants Pvt. Ltd.) (hereinafter called the "Consultants") of

the SECOND PART

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## WHEREAS

- (a) The Employer has requested the Consultants to provide certain consulting services as defined in the General Conditions of Contract attached to this Contract (hereinafter called the "Services");
- (b) The Consultants, having represented to the Employer that they have the required professional skills and personnel and technical resources, have agreed to provide the Services on the terms and conditions set forth in this Contract for carrying out Services for Construction and DLP period i.e. technical supervision monitoring quality assurance and other allied services including preparation of designs of structures and issue of working drawings for completion of work, project management & proof checking of the designs for the proposed work of Providing Project Management Consultancy for the work of for Design and Construction of Sewri to Worli Elevated Connector.

NOW THEREFORE the parties hereto hereby agree as follows:

- The following documents attached hereto shall be deemed to form an integral part of this Contract:
- (a) The General Conditions of Contract (hereinafter called "GC")'
- (b) The Special Conditions of Contract (hereinafter called "SC");
- (c) The following Appendices :

Appendix A: (Terms of Reference) Description of the Services

Appendix B: Reporting Requirements

Appendix-C: Key designations and minimum supporting staff - consultants professional Staff

Appendix D: Consultancy fee and payment schedules

Appendix E: Services and facilities provided by the Employer

Appendix F: Form of Guarantee for advance payments

Appendix G: Corrigendum's / modifications / corrections, CSD as per pre bid meeting, Letter of intent, Letter of acceptance, Work order Letter of power of attorney etc.

2. The mutual rights and obligations of the Employer and the Consultants shall be as set forth in the Contract; in particular;

The Consultants shall carry out the Services in accordance with the Provisions of the Contract; and

Engineering Division M.M.R.D.A.

(b) The Employer shall make payments to the Consultants in accordance with the Provisions of the Contract.

IN WITNESS WHEREOF, the Parties hereto have caused this Contract to be signed in their respective names as of the day and year first above written.

The Fees is Rs. 11,77,23,020/\_for project management (Supervision and DLP period)
& proof checking of the designs for the proposed work of "Providing Project Management Consultancy Services for Design and Construction of Sewri to Worli Elevated Connector".

Bid of the Consultant M/s. STUP Consultants Pvt. Ltd. is approved by Metropolitan Commissioner, MMRDA on the above conditions.

FOR AND ON BEHALF OF
MUMBAI METROPOLITAN REGION DEVELOPMENT AUTHORITY

CHIEF ENGINEER, ENGINEERING DIVISION

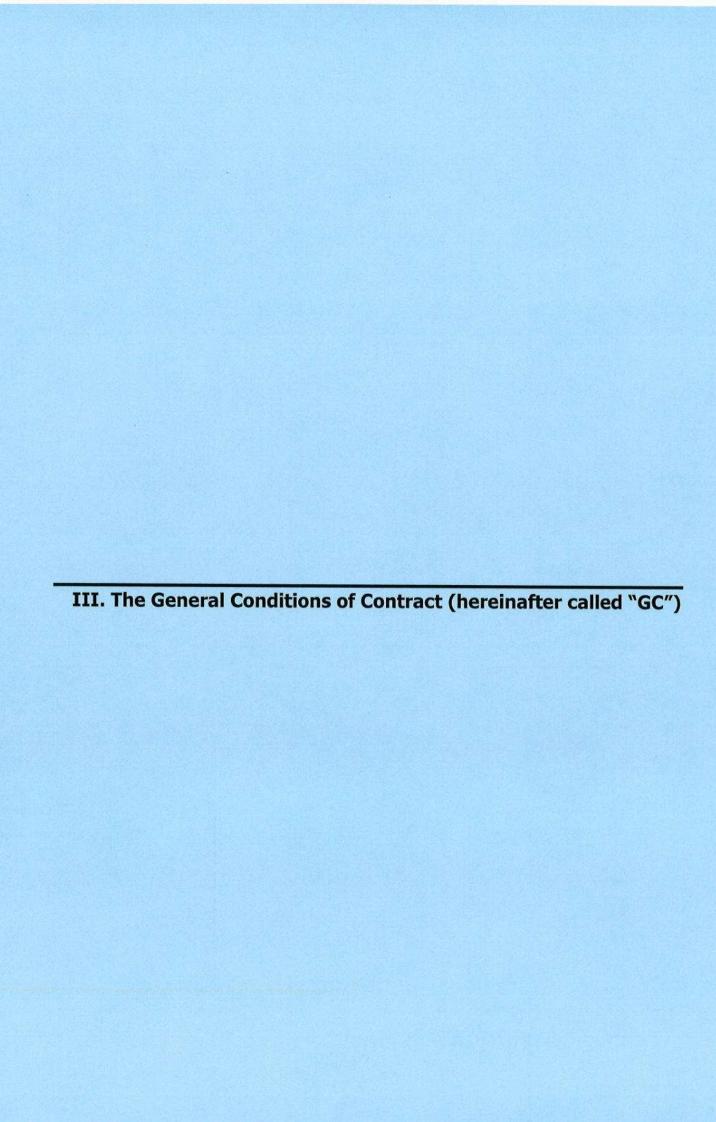
FOR AND ON BEHALF OF CONSULTANT STUP CONSULTANTS PVT. LTD.

M/s. STUP CONSULTANTS PVT. LTD.

(BY AUTHORIZED SIGNATORY)

SUNTL DUTT JOINT VICE PRESIDENT





#### III. GENERAL CONDITIONS OF CONTRACT

#### 1. General Provisions

#### 1.1. Definitions

Unless the context otherwise requires, the following terms whenever used in this Contract have the following meanings:

- (a) "Applicable Law" means the laws and any other instruments having the force of law in India;
- (b) "Contract" means the Contract signed by the Parties, to which these General Conditions of Contract are attached together with all the documents listed in Clause 1 of such signed Contract;
- (c) "Effective date" means the date on which this contract comes into force and effect pursuant to clause GC 2.1;
- (d) "Employer" means MMRDA represented by Metropolitan Commissioner.
- (e) "Engineer in charge" any officer designated by the Employer for the project.
- (f) "GC" means these General Conditions of Contract:
- (g) "Government" means the Government of India / Government of Maharashtra.
- (h) "Local currency" means the currency of the Indian Government;
- (i) Deleted.
- (j) "Party" means the Employer or the Consultants, as the case may be and Parties means both of them.
- (k) "Personnel" means persons hired by the Consultants or by any Sub-consultant as employees and assigned to the performance of the Services or any part thereof.
- "SC" means the Special Conditions of Contract by which these General Conditions of Contract may be amended or supplemented;
- (m) "Services" means the work to be performed by the Consultants pursuant to this Contract, as described in Appendix A hereto;
- (n) "Sub-consultant" means any entity to which the Consultants subcontract any part of the Services in accordance with the provisions of Clause GC 3.7; and
- (o) "Third Party" means any person or entity other than the Government, the Employer, the Consultants or a Sub-consultant.

## 1.2. Relation between the Parties

Nothing contained herein shall be construed as establishing a relation of master and servant or of principal and agent as between the Employer and the Consultants. The Consultants, subject to this Contract, have complete charge of Personal and Subconsultants, if any, performing the Services and shall be fully responsible for the Services performed by them or on their behalf hereunder.

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PALL VASHI,

TEL:40887777

Chief Engineer
Engineering Division

M.M.R.D.A.

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## 1.3. Law Governing Contract

This Contract, its meaning and interpretation, and the relation between the Parties shall be governed by the Applicable Law in India.

## 1.4. Language

This Contract has been executed in the language specified in the SC, which shall be the binding and controlling language for all matters relating to the meaning or interpretation of this Contract.

#### 1.5. Headings

The headings shall not limit, alter or affect the meaning of this Contract.

#### 1.6. Notices

- 1.6.1. Any notice, request or consent required or permitted to be given or made pursuant to this Contract shall be in writing. Any such notice, request or consent shall be deemed to have been given or made when delivered in person to an authorized representative of the Party to whom the communication is addressed, or when sent by registered mail, telegram or facsimile to such Party at the address specified in the SC.
- 1.6.2. Notice will be deemed to be effective as specified in the SC.
- 1.6.3. A Party may change its address for notice hereunder by giving the other Party notice of such change pursuant to the provisions listed in the SC with respect to Clause GC 1.6.2.

## 1.7. Location

The Services shall be performed at such locations as are specified in Appendix A (Terms of Reference) hereto and, where the location of a particular task is not so specified, at such locations, whether in Jurisdiction of Mumbai Metropolitan Region, as the Employer may approve.

## 1.8. Authority of Member in Charge

#### Deleted

## 1.9. Authorized Representatives

Any action required or permitted to be taken, and any document required or permitted to be executed, under this Contract by the Employer or the Consultants may be taken or executed by the officials specified in the SC.

#### 1.10. Taxes and Duties

Unless otherwise specified in the SC, the Consultants, Sub-consultants and Personnel shall pay such taxes, duties, fees and other impositions as may be levied under the Applicable Law.

## 2. Commencements, Completion, Modification and Termination of Contract

#### 2.1. Effectiveness of Contract

This Contract shall come into force and effect on the date (the "Effective Date") notice to proceed with the work to the contactor of the work issued by MMRDA and instructing

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Chief Engineer Engineering Division M.M.R.D.A.

MMRDA

the Consultants to begin carrying out the Services. This notice shall confirm that the effectiveness conditions, if any, listed in the SC have been met.

## 2.2. Termination of Contract for Failure to Become Effective

If this Contract has not become effective within such time after the date of the Contract signed by the Parties as shall be specified in the SC, either Party may, by not less than four (4) weeks' written notice to the other Party, declare this Contract to be null and void, and in the event of such a declaration by either Party, neither Party shall have any claim against the other Party with respect hereto.

#### 2.3. Commencement of Services

The Consultants shall begin carrying out the Services from the date of work order

#### 2.4. Expiration of Contract

Unless terminated earlier pursuant to Clause GC 2.9 hereof, this Contract shall expire when services have been completed and all payments have been made at the end of such time after the Effective Date as shall be specified in the SC.

#### 2.5. Entire Agreement

This Contract contains all covenants, stipulations and provisions agreed by the Parties. No agent or representative of either Party has authority to make, and the Parties shall not be bound or be liable for, any statement, representation, promise or agreement not set forth herein.

#### 2.6. Modification

Modification of the terms and conditions of this Contract, including any modification of the scope of the Services, may only be made by written agreement between the Parties. Pursuant to Clause GC 7.2 hereof, however, each Party shall give due consideration to any proposals for modification made by other Party.

## 2.7. Force Majeure

#### 2.7.1. Definition

- (a) For the purpose of this Contract, "Force Majeure" means an event which is beyond the reasonable control of a Party, and which makes a Party's performance of its obligations hereunder impossible or so impractical as reasonably to be considered impossible in the circumstances, and includes, but is not limited to war, riots, civil disorders, earthquake, fire, explosion, storm, flood or other adverse weather conditions, strikes, lockouts or other industrial action (except where such strikes, lockouts or other industrial action are within the power of the Party invoking Force Majeure to prevent), confiscation or any other action by government agencies.
- (b) Force Majeure shall not include (i) any event which is caused by the negligence or intentional action of a Party or such Party's Sub-consultants or agents or employees, not (ii) any event which a diligent Party could reasonably have been expected to both (A) take into account at the time of

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the conclusion of this Contract and (B) avoid or overcome in the carrying out of its obligations hereunder.

(c) Force Majeure shall not include insufficiency of funds or failure to make any payment required hereunder.

## 2.7.2. No Breach of Contract

The failure of a Party to fulfill any of its obligations hereunder shall not be considered to be a breach of, or default under, this Contract insofar as such inability arises from an event of Force Majeure, provided that the Party affected by such an event has taken all reasonable precautions, due care and reasonable alternative measures, all with the objective of carrying out the terms and conditions of this Contract.

#### 2.7.3. Measures to be taken

- (a) A Party affected by an event of Force Majeure shall take all reasonable measures to remove such Party's inability to fulfill its obligations hereunder with a minimum of delay.
- (b) A party affected by an event of Force Majeure shall notify the other party of such event as soon as possible, and in any event not later than fourteen (14) days falling the occurrence of such events, providing evidence of the nature and cause of such event, and shall similarly give notice of the restoration of normal conditions as soon as possible.
- (c) The parties shall take all reasonable measures to minimize the consequences of any event of Force Majeure.

## 2.7.4. Extension of Time

Any within which a Party shall, pursuant to this Contract, complete any action or task, shall be extended for a equal to the time during which such Party was unable to perform such action as a result of Force Majeure.

## 2.7.5. **DELETED.**

#### 2.7.6. Consultation

Not later than thirty (30) days after the Consultants, as the result of an event of Force Majeure, have become unable to perform a material portion of the Services, the Parties shall consult with each other with a view to agreeing on appropriate measures to be taken in the circumstances.

## 2.8. Suspension

The Employer may, by written notice of suspension to the Consultants, suspend all payments to the Consultants hereunder if the Consultants fail to perform any of their obligations under this Contract, including the carrying out of the Services, provided that such notice of suspension (i) shall specify the nature of the failure, and (ii) shall request the Consultants to remedy such failure within a not exceeding thirty (30) days after receipt by the Consultants of such notice of suspension.

TA 2.9. Termination

## 2.9.1. By the Employer

The Employer may, by not less than thirty (30) days' written notice of termination to the Consultants (except in the event listed in paragraph (f) below, for which there shall be a written notice of not less than sixty (60) days, such notice to be given after the occurrence of any of the events specified in paragraphs (a) through (g) of this Clause GC 2.9.1 terminate this Contract:

- (a) if the Consultants fail to remedy a failure in the performance of their obligations hereunder, as specified in a notice of suspension pursuant to Clause GC 2.8 hereinabove, within thirty (30) days of receipt of such notice of suspension or within such further as the Employer may have subsequently approved in writing;
- (b) if the Consultants become (or, if the Consultants consist of more than one entity, if any of their Members becomes) insolvent or bankrupt or enter into any agreements with their creditors for relief of debt or take advantage of any law for the benefit of debtors or go into liquidation or receivership whether compulsory or voluntary;
- (c) if the Consultants fail to comply with any final decision reached as a result of arbitration proceedings pursuant to Clause GC 8 hereof;
- (d) if the Consultants submit to the Employer a statement which has a material effects on the rights, obligations or interests of the Employer and which the Consultants know to be false;
- (e) if, as the result of Force Majeure, the Consultants are unable to perform a material portion of the Services for anotheless than sixty (60) days; or
- (f) If the Employer, in its sole discretion and for any reason whatsoever, decides to terminate this Contract.
- (g) if the Consultant, 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 clause:

"Corrupt practice" means the offering, giving, receiving or soliciting of anything of value to influence the action of a public official in the selection process or in contract execution.

"fraudulent practice" means a misrepresentation of facts in order to influence a selection process or the execution of a contract to the detriment of the employer, and includes collusive practice among consultants (prior to or after submission of proposals) designed to establish prices at artificial non-competitive levels and to deprive the employer of the benefits of free and open competition.

#### 2.9.2. By the Consultants

The Consultants may, by not less than thirty (30) days' written notice to the Employer, such notice to be given after the occurrence of any of the events specified in paragraphs (a) through (d) of this Clause GC 2.9.2 terminate this Contract:

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- (a) if the Employer fails to pay any money due to the Consultants pursuant to this Contract and not subject to dispute pursuant to Clause 8 hereof within sixty (60) days after receiving written notice from the Consultants that such payment is overdue;
- (b) if the Employer is in material breach of its obligations pursuant to this Contract and has not remedied the same within forty – five (45) days (or such longer as the Consultants may have subsequently approved in writing) following the receipt by the Employer of the Consultants' notice specifying such breach;
- (c) if, as the result of Force Majeure, the Consultants are unable to perform a material portion of the Services for an afont less than sixty (60) days; or
- (d) if the Employer fails to comply with any final decision reached as a result of arbitration pursuant to Clause GC 8 hereof.

## 2.9.3. Cessation of Rights and Obligations

Upon termination of this Contract pursuant to Clause GC 2.2 or GC 2.9 hereof, or upon expiration of this Contract pursuant to Clause GC 2.4 hereof, all rights and obligations of the Parties hereunder shall cease, except:

- such rights and obligations as may have accrued on the date of termination or expiration;
- (ii) the obligation of confidentiality set forth in Clause GC 3.3 hereof;
- (iii) the Consultants' obligation to permit inspection, copying and auditing of their accounts and records set forth in Clause GC 3.6 (ii) hereof; and
- (iv) any right which a Party may have under the Applicable Law.

## 2.9.4. Cessation of Services

Upon termination of this Contract by notice of either Party to the other pursuant to Clause GC 2.9.1 or GC 2.9.2 hereof, the Consultants shall, immediately upon dispatch or receipt of such notice, take all necessary steps to bring the Services to a close in a prompt and orderly manner and shall make every reasonable effort to keep expenditures for this purpose to a minimum. With respect to documents prepared by the Consultants and equipment and materials furnished by the Employer, the Consultants shall proceed as provided, respectively, by Clauses GC 3.9 or GC 3.10 hereof.

## 2.9.5. Payment upon Termination

Upon termination of this Contract pursuant to Clause GC 2.9.1 or GC 2.9.2 hereof, the Employer shall make the following payments to the Consultants (after offsetting against these payments any amount that may be due from the Consultant to the Employer).

- (a) Remuneration pursuant to Clause GC 6 hereof of Services satisfactorily performed prior to the effective date of termination.
- (b) Reimbursable expenditures pursuant to Clause GC 6 hereof for expenditures actually incurred prior to the effective date of termination; and

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(c) Except in the case of termination pursuant to paragraphs (a) through (d) of Clause GC 2.9.1 hereof, reimbursement of any reasonable cost incident to the prompt and orderly termination of the Contract including the cost of the return travel of the Consultants' personnel and their eligible dependents.

## 2.9.6. Disputes about Events of Termination

If either Party disputes whether an event specified in paragraphs (a) through (c) of Clause GC 2.9.1 or in Clause GC 2.9.2 hereof has occurred, such Party may, within forty-five (45) days after receipt of notice of termination from the other Party, refer the matter to dispute settlement pursuant to Clause GC 8 hereof.

## 3. Obligations of the Consultants

#### 3.1. General

#### 3.1.1. Standard of Performance

The Consultants shall perform the Services and carry out their obligations hereunder with all due diligence, efficiency and economy, in accordance with general accepted professional techniques and practices, and shall observe sound management practices, and employ appropriate advanced technology and safe and effective equipment, machinery, materials and methods. The Consultants shall always act, in respect of any matter relating to this Contract or to the Services, as faithful advisers to the Employer, and shall at all times support and safeguard the Employer's legitimate interests in any dealings with Sub-consultants or Third Parties.

## 3.1.2. Law Governing Services

The Consultants shall perform the Services in accordance with the Applicable Law and shall take all practicable steps to ensure that any Sub-consultants, as well as the Personnel of the Consultants and any Sub-consultants, comply with the Applicable Law.

#### 3.2. Conflict of Interests

## 3.2.1. Consultants Not to Benefit from Commissions, Discounts, etc.

The remuneration of the Consultants pursuant to Clause GC 6 hereof shall constitute the Consultants' sole remuneration in connection with this Contract or the Services and, subject to Clause GC 3.2.2 hereof, the Consultants shall not accept for their own benefit any trade commission, discount or similar payment in connection with activities pursuant to this Contract or to the Services or in the discharge of their obligations hereunder, and the Consultants shall use their best efforts to ensure that any Sub-consultants as well as the Personnel and agents of either of them, similarly shall not receive any such additional remuneration.

3.2.2. Engagement in preparation of DPR, Bid Documents for appointment of Contractor and Project Management Consultant for the "Construction of Sewri to Worli Elevated Connector" in last 5 years of the Bid Due date shall be

MMRDA

considered as conflict of interest. In such cases the firm / bidder shall not be considered as eligible for participation in this bid.

## 3.2.3. Consultants and affiliates not to engage in certain activities

The Consultants agree that, during the term of this Contract and after its termination, the Consultants and any entity affiliated with the Consultants, as well as any Sub-consultant and any entity affiliated with such Sub-consultant, shall be disqualified from providing goods, works or services (other than the Services and any continuation thereof) for any project resulting from or closely related to the Services.

## 3.2.4. Prohibition of conflicting activities

The Consultants shall not engage, and shall cause their Personnel as well as their Sub-consultants and their Personnel not to engage, either directly or indirectly, in any of the following activities:

- (a) during the term of this Contract, any business or professional activities in the Government's country which would conflict with the activities assigned to them under this Contract; and
- (b) after the termination of this Contract, such other activities as may be specified in the SC.

## 3.3. Confidentiality

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The Consultants, their Sub-consultants and the Personnel of either of them shall not, either during the term or within two (2) years after the expiration of this Contract, disclose any proprietary or confidential information relating to the Project, the Services, this Contract or the Employer's business or operations without the prior written consent of the Employer.

## 3.4. Liability of the Consultants

Subject to additional provisions, if any, set forth in the SC, the Consultants' liability under this Contract shall be as provided by the Applicable Law.

## 3.5. Insurance to be taken out by the Consultants

The Consultants (i) shall take out and maintain, and shall cause any Sub-consultants to take out and maintain, at their (or the Sub-consultants', as the case may be) own cost but on terms and conditions approved by the Employer, insurance against the risks, and for the coverage, as shall be specified in the SC, and (ii) at the Employer's request, shall provide evidence to the Employer showing that such insurance has been taken out and maintained and that the current premiums therefore have been paid.

#### 3.6. Accounting, Inspection and Auditing

The Consultants (i) shall keep accurate and systematic accounts and records in respect of the Services, hereunder, in accordance with internationally accepted accounting principles and in such form and detail as will clearly identify all relevant time charges and cost, and the bases thereof (including such bases as may be specifically referred in the SC); (ii) shall permit the Employer or its designated representative ically, and up to one year from the expiration or termination of this

Chief Engineer
Engineering Division
M.M.R.D.A.

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Contract, to inspect the same and make copies thereof as well as to have them audited by auditors appointed by the Employer.

## 3.7. Consultants' actions requiring employer's prior approval

The following shall obtain the Employer's approval in writing before taking any of the following actions:

- (a) appointing such members of the Personnel as are listed in Appendix C (Key designations and minimum supporting staff 'Consultants' Sub-consultants' Key Personnel")
- (b) entering into a subcontract for the performance of any part of the Services, it being understood (i) that the selection of the sub-consultant and the terms and conditions of the subcontract shall have been approved in writing by the Employer prior to the execution of the subcontract, and (ii) that the Consultants shall remain fully liable for the performance of the Services by the Sub-consultant and its Personnel pursuant to this Contract; and
- (c) Any other action that may be specified in the SC.

## 3.8. Reporting Obligations

The Consultants shall submit to the Employer the reports and documents specified in *Appendix B* hereto, in the form, in the numbers and within the time s set forth in the said Appendix.

## 3.9. Documents prepared by the Consultants to be the property of the Employer.

All plans, drawings, specifications, designs, reports, other documents and software prepared by the Consultants for the Employer under this Contract shall become and remain the property of the Employer, and the Consultants shall, not later than upon termination or expiration of this Contract, deliver all such documents to the Employer, together with a detailed inventory thereof. The Consultants may retain copy of such documents and software. Restrictions about the future use of these documents and software, if any, shall be specified in the SC.

## 3.10. Equipment and materials furnished by the Employer.

Equipment and materials made available to the Consultants by the Employer, or purchased by the Consultants with funds provided by the Employer, shall be property of the Employer and shall be marked accordingly. Upon termination or expiration of this Contract, the Consultants shall make available to the Employer an inventory of such equipment and materials and shall dispose of such equipment and materials in accordance with the Employer's instructions. While in possession of such equipment and materials, the Consultants, unless otherwise instructed by the Employer in writing, shall insure them at the expense of the Employer in an amount equal to their full replacement value.

## 4. Consultants' personnel and sub-consultants

#### 4.1. General

The Consultants shall employ and provide such qualified and experienced Personnel and Sub-consultants as are required to carry out the Services as specified in V APPENDICE –

Chief Engineer
Engineering Division
M.M.R.D.A.

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A clause 17. Broad qualification and experience requirement for key professional Staff for Period.

## 4.2. Description of personnel

- (a) The titles, agreed job descriptions, minimum qualification and estimated of engagement in the carrying out of the Services of each of the Consultants' Key Personnel are described in Appendix C. If any of the Key Personnel has already been approved by the employers his / her name is listed as well.
- (b) If required to comply with the provisions of Clause GCC 3.1.1 hereof, adjustments with respect to theestimated engagement of Key Personnel set forth in Appendix C may be made by the Consultants by written notice to the Employer, provided (i) that such adjustments shall not alter the originally estimated engagement of any individual by more than 10% or one week, whichever is larger, and (ii) that the aggregate of such adjustments shall not cause payments under this Contract to exceed the ceilings set forth in Clause GC 6.1 (b) of this Contract. Any other such adjustments shall not be made without the Employer's written approval.
- (c) If additional work is required beyond the scope of the Services specified in Appendix A, the estimated of engagement of Key Personnel set forth in Appendix C may be increased by agreement in writing between the Employer and the Consultants, provided that any such increase shall not, except as otherwise agreed, cause payments under this Contract to exceed the ceilings set forth in Clause GC 6.1 (b) of this Contract.

## 4.3. Approval of personnel

The Key Personnel and Sub-consultants listed by title as well as by name in *Appendix C* as hereby approved by the Employer. In respect of other Key Personnel which the Consultants propose to use in carrying out of the Services, the Consultants shall submit to the employer for review and approval a copy of their biographical data and (in the case of Key personnel to be used within the country of the Government). If the Employer does not object in writing (stating the reasons of the objection) within twenty-one (21) calendar days from the date of receipt of such biographical data and (if applicable) such certificate, such Key Personnel shall be deemed to have been approved by the Employer.

#### 4.4. Working hours, overtime, leave etc.

- (a) Working hours and holidays for Key Personnel are set forth in Appendix C hereto. To account for travel time, foreign Personnel carrying out Services inside India shall be deemed to have commenced (or finished) work in respect of the Services such number of days before their arrival (or after their departure from).
- (b) The Key Personnel shall not be entitled to be paid for overtime nor to take paid sick leave or vacation leave except as specified in Appendix C hereto, and except as specified in such Appendix, the Consultants n' remuneration shall be deemed to cover these items. All leave to be allowed to the Personnel is included in the staffmonths of service set forth in Appendix C. Any taking of leave by Personnel shall be



subject to the prior approval by the Consultants who shall ensure that absence for leave purposes will not delay the progress and adequate supervision of the Services.

## 4.5. Removal and / or replacement of personnel

- (a) Except as the Employer may otherwise agree, no changes shall be made in the Key Personnel. If, for any reason beyond the reasonable control of the Consultants, it becomes necessary to replace any of the Personnel, the Consultants shall forthwith provide as a replacement a person of equivalent or better qualifications.
- (b) If the Employer (i) finds that any of the Personnel has committed serious misconduct or has been charged with having committed a criminal action, or (ii) has reasonable cause to be dissatisfied with the performance of any of the Personnel, then the Consultants shall, at the Employer's written request specifying the grounds therefore, forthwith provide as a replacement a person with qualifications and experience accept able to the Employer.
- (c) Any of the Personnel provided as a replacement under Clauses (a) and (b) above, the rate of remuneration applicable to such person as well as any reimbursable expenditures (including expenditures due to the number of eligible dependents) the Consultants may wish to claim as a result of such replacement, shall be subject to the prior written approval by the Employer. Except as the Employer may otherwise agree, (i) the Consultants shall bear all additional travel and other costs arising out of or incidental to any removal and / or replacement, and (ii) the remuneration to be paid for any of the personnel provided as a replacement shall not exceed the remuneration which would have been payable to the Personnel replaced.
- (d) After award of contract the Client expects all of the proposed key personnel to be available during implementation of the contract. The client will not consider substitutions during contract implementation except under exceptional circumstances. For the reason other than death/ extreme medical ground (i) for total replacement up to 10% of key personnel, remuneration shall be reduced by 10% (ii) for replacement between 10% to 50%, remuneration shall be reduced by 15% (iii) for replacement beyond 50% of the total key personnel, the Client may initiate debarment proceedings so as to debar such consultant for future projects of MMRDA for a period of 12 months to 24 months. If, for any reason beyond the reasonable control of the consultants, it becomes necessary to replace any of the personnel, the consultants shall forthwith provide as a replacement a person of equivalent or better qualification and experience.

## 4.6. Deleted.

## 5. Obligations of the Employer

#### 5.1. Assistance and Exemptions

Unless otherwise specified in the SC, the Employer shall use its best efforts to ensure that the Government shall:

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- (a) assist the Consultants, Sub-consultants and Personnel with such documents as shall be necessary to enable the Consultants, Sub-consultants or Personnel to perform the Services.
- (b) assist for the Personnel and, if appropriate, their eligible dependents to be provided promptly with all necessary entry documents required for their stay in India.
- (c) DELETED
- (d) Issue to officials, agents and representatives of the Government all such instructions as may be necessary or appropriate for the prompt and effective implementation of the Services;
- (e) assist the Consultants and the Personnel and any Sub-consultants employed by the Consultants for the Services from any requirement to register or obtain any permit to practice their profession or to establish themselves either individually or as a corporate entity according to the Applicable Law;
- (f) grant to the Consultants, any Sub-consultant and the Personnel of either of them the privilege, pursuant to the Applicable Law, of bringing into Government's country reasonable amounts of foreign currency for the purpose of the services or for the personnel use of the personnel and their dependents and of withdrawing any such amounts as may be earned therein by the personnel in the execution of the services; and
- (g) Provide to the Consultants, Sub-consultants and Personnel any such other assistance as may be specified in the SC.

## 5.2. Access to Land

The Employer warrants that the Consultants shall have, free of charge, unimpeded access to all land in the Government's country in respect of which access is required for the performance of the Services. The Employer will be responsible for any damage to such land or any property thereon resulting from such access and will indemnify the Consultants and each of the Personnel in respect of liability for any such damage, unless such damage is caused by the default or negligence of the Consultants or any Subconsultant or the Personnel of either of them.

#### 5.3. Changes in the Applicable Law

If, after the date of this Contract, there is any change in the Applicable Law with respect to taxes and duties which increase or decreases the cost or reimbursable expenses incurred by the Consultants in performing the Services, then the remuneration and reimbursable expenses otherwise payable to the Consultants under this Contract shall be increased or decreased accordingly by agreement between the Parties hereto, and corresponding adjustments shall be made to the ceiling amounts specified in Clause GC 6.1 (b).

#### 5.4. Services, facilities and property of the Employer

The Employer shall make available to the Consultants and the Personnel, for the purposes of the services and free of any charge, the services, facilities and property described in Appendix E at the times and in the manner specified in said Appendix E,

> MMRDA Chief Engineer Engineering Division M.M.R.D.A.

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provided that if such services, facilities and property shall not be made available to the Consultants as and when so specified, the Parties shall agree on (i) any time extension that it may be appropriate to grant to the Consultants for the performance of the Services, (ii) the manner in which the Consultants shall procure any such services, facilities and property from other sources, and (iii) the additional payments, if any, to be made to the Consultants as a result thereof pursuant to Clause GC 6.1 (c) hereinafter.

## 5.5. Payment

In consideration of the Services performed by the Consultants under this Contract, the Employer shall make to the Consultants such payments and in such manner as is provided by Clause GC 6 of this Contract.

## 5.6. Counterpart Personnel

- (a) If so provided in Appendix E hereto, the Employer shall make available to the Consultants, as and when provided in such Appendix E, and free of charge, such counterpart personnel to be selected by the Employer, with the Consultants' advice, as shall be specified in such Appendix E. Counterpart personnel shall work under the exclusive direction of the Consultants. If any member of the counterpart personnel fails to perform adequately any work assigned to him by the Consultants, which is consistent with the position occupied by such member, the Consultants may request the replacement of such member, and the Employer shall not unreasonably refuse to act upon such request.
- (b) Deleted

## 6. Payments to the Consultants

#### 6.1. Cost Estimates / Ceiling Amount

- (a) An estimate of the cost of the Services payable in local currency is set forth in Appendix D.
- (b) Except as may be otherwise agreed under Clause GC 2.6 and subject to Clause GC 6.1 (c), payments under this Contract shall not exceed the ceilings in local currency specified in the SC. The Consultants shall notify the Employer as soon as cumulative charges incurred for the Services have reached 80% of either of these ceilings.
- (c) Notwithstanding Clause GC 6.1 (b) hereof, if pursuant to clauses GC 5.3, 5.4 or 5.6 hereof, the Parties shall agree that additional payments in local currency shall be made to the Consultants in order to cover any necessary additional expenditures not envisaged in the cost estimates referred to in Clause GC 6.1(a) above, the ceiling or ceilings, as the case may be, set forth in Clause GC 6.1 (b) above shall be increased by the amount or amounts, as the case may be, of any such additional payments.

## 6.2. Remuneration and reimbursable Expenditures

(a) Subject to the ceilings specified in Clause GC 6.1 (b) hereof, the Employer shall pay to the Consultants (i) remuneration as set forth in Clause GC 6.2 (b), and (ii)

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- reimbursable expenditure as set forth in Clause GC 6.2 (c). If specified in the SC, said remuneration shall be subject to price adjustment as specified in the SC.
- (b) Remuneration for the Personnel shall be determined on the basis of time actually spent by such Personnel in the performance of the Services after the date determined in accordance with Clause GC 2.3 and Clause 2.3 (or such other date as the Parties shall agree in writing) at the rates referred to, and subject to such additional provisions as are set forth, in the SC.
- (c) Reimbursable expenditures actually and reasonably incurred by the Consultants in the performance of the Services, as specified in Clause SC 6.3 (b)

## 6.3. Currency of Payment

- (a) DELETED
- (b) The SC shall specify which items of remuneration and reimbursable expenditures shall be paid, respectively, in foreign and in local currency.

## 6.4. Mode of Billing and Payment

Billing and payments in respect of the Services shall be made as follows:

- (a) DELETED.
- (b) As soon as practicable and not later than fifteen (15 days) after the end of each calendar month during theofthe Services, the Consultants shall submit to the Employer, in duplicate, itemized statements, accompanied by copies of receipted invoices of the amounts payable pursuant to Clauses GC 6.3 and 6.4 for such month. Each such separate monthly statement shall distinguish that portion of the total eligible costs which pertains to remuneration from that portion which pertains to reimbursable expenditures.
- (c) The Employer shall cause the payment of the Consultants icily as given in schedule of payment above within sixty (60) days after the receipt by the Employer of bills with supporting documents. Only such portion of a monthly statement that is not satisfactorily supported may be withheld from payment. Should any discrepancy be found to exist between actual payment and costs authorized to be incurred by the Consultants, the Employer may add or subtract the difference from any subsequent payments. Interest at the rate specified in the SC shall become payable as from the above due date on any amount due by, but not paid on, such due date.
- (d) The final payment under this Clause shall be made only after the final report and a final statement, identified as such, shall have been submitted by the Consultants and approved as satisfactory by the Employer. The Services shall be deemed completed and finally accepted by the Employer and the final report and final statement shall be deemed approved by the Employer as satisfactory ninety (90) calendar days after receipt of the final report and final statement by the Employer unless the Employer, within such ninety (90) day, gives written notice to the Consultants specifying in detail deficiencies in the Services, the final report or final statement. The Consultants shall thereupon promptly make any necessary corrections, and upon completion of such corrections, the foregoing process shall be repeated. Any amount which the Employer has paid or caused to

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be paid in accordance with this Clause in excess of the amounts actually payable in accordance with the provisions of this contract shall be reimbursed by the Consultants to the Employer within thirty (30) days after receipt by the Consultants of notice thereof. Any such claim by the Employer for reimbursement must be made within twelve (12) calendar months after receipt by the Employer of a final report and a final statement approved by the Employer in accordance with the above.

(e) All payments under this Contract shall be made to the account of the Consultants specified in the SC.

## 7. Fairness and good faith

## 7.1. Good Faith

The Parties undertake to act in good faith with respect to each other's rights under this Contract and to adopt all reasonable measures to ensure the realization of the objectives of this Contract.

## 7.2. Operation of the Contract

The Parties recognize that it is impractical in this Contract to provide for every contingency which may arise during the life of the Contract, and the Parties hereby agree that it is their intention that this Contract shall operate fairly as between them, and without detriment to the interest of either of them, and that, if during the term of this Contract either Party believes that this Contract is operating unfairly, the Parties will use their best efforts to agree on such action as may be necessary to remove the cause or causes of such unfairness, but no failure to agree on any action pursuant to this Clause shall give rise to dispute subject to arbitration in accordance with Clause GC 8 hereof

## 8. Settlement of Disputes

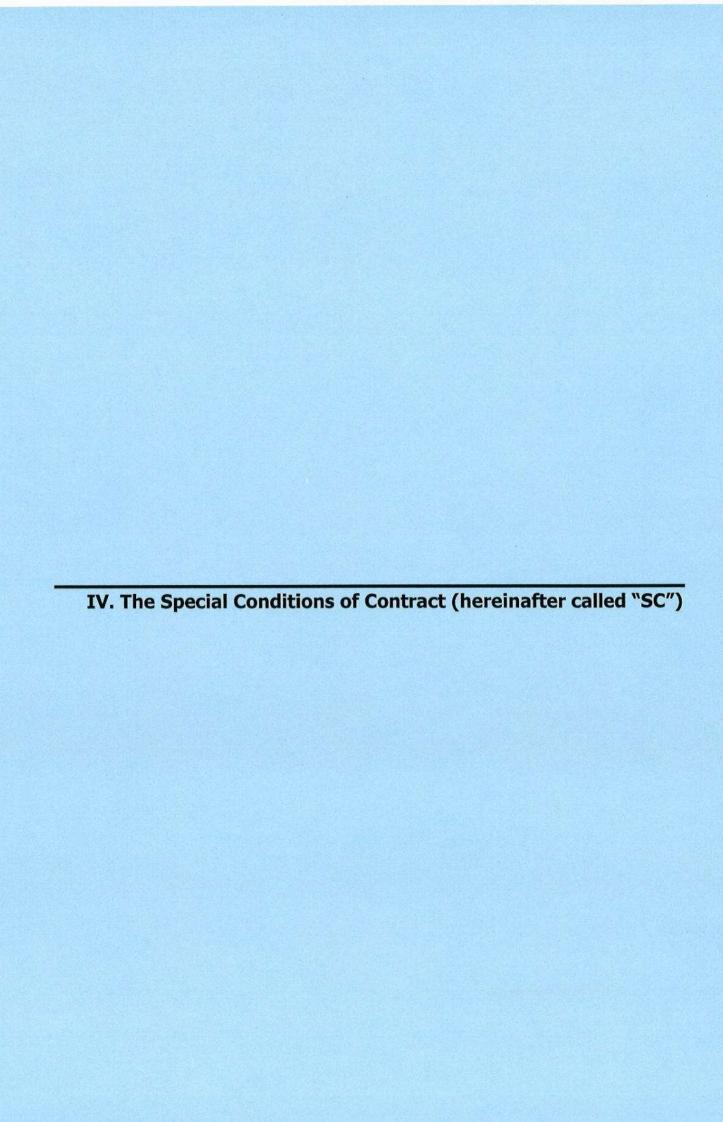
## 8.1. Amicable Settlement

The Parties shall use their best efforts to settle amicably all disputes arising out of or in connection with this Contract or the interpretation thereof.

## 8.2. Dispute Settlement

Any dispute between the Parties as to matters arising pursuant to this Contract which cannot be settled within thirty (30) days after receipt by one Party of the other Party's request for such amicable settlement may be submitted by either Party for settlement in accordance with the provisions specified in the SC.





## IV. SPECIAL CONDITIONS OF CONTRACT

Number of Clause	Amendments of, and Supplements to, Clauses in the General Conditions of Contract.
1.1(g)	"Government" means the Government of India / Government of Maharashtra.
1.4	The language is: English
1.6.1	The address is:
	a) Employer: Engineer-in-Chief / Chief Engineer,
	Engineering Division, Mumbai Metropolitan Region
	Development Authority (MMRDA) C14-C15, E-BLOCK,
	Bandra-Kurla Complex, Bandra (East), Mumbai - 400 051.
	Fax:022-26594076
	E-mail: chiefengineer1@mailmmrda.maharashatra.gov.in
	b) Consultants: STUP CONSULTANTS PVT. LTD. PLOT NO. 22A SECTOR -19C PALM BEACH MARCH, VASHI, NAVI MUMBAI
	PLOT NO. 22A SECTOR 19C
	PALM BEACH MAKET, VASHI, NAVI MUMBAI
	Fax: (022) E-mail: navimumbaie stupma
1.6.2	Notice will be deemed to be effective as follows:
	(a) in the case of personal delivery or registered mail, on delivery;
	(b)in the case of telegrams, 24 hours following confirmed transmission; and
	(c) in the case of facsimiles, 24 hours following confirmed transmission.
1.9	The Authorized Representatives are:
	For the Employer:; 1)Chief Engineer, Engineering Division, MMRDA
	For the Consultants: 1) Shri SUNIL DUTT JOINT VICE PRESIDE
1.10	The consultants, Sub-consultants and the Personnel shall pay the taxes, duties,
	fees, levies and other impositions levied under the existing, amended or
	enacted laws during life of this contract and the employer shall perform such
2.2	duties in regard to the deduction of such tax as may be lawfully imposed.
2.2	The time shall be 45 days.
2.3	The time shall be 7 days.
2.4	The time of contract shall be 36 months Plus DEFECT LIABILITY period of 60
	months.  The time will commone from work and a logged to the Consultant
3.4.	The time will commence from work order issued to the Consultant.
3.4.	Limitation of the Consultants liability towards the Employer.
	(a) Except in case of gross negligence or willful misconduct on the part of the Consultants or on the party of any person or firm acting on behalf of the
	Consultants in carrying out the Services, the Consultants, with respect to damage caused by the Consultants to their Employer's property, shall not
	be liable to the Employer:
	(i) For any indirect or consequential loss or damage; and
	(ii) For any direct loss or damage that exceeds
	(A) the total payments for Professional Fees and Reimbursable
Jan	Expenditures made or expected to be made to the Consultants

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Number	Amendments of, and Supplements to, Clauses in the General Conditions of	
of Clause	Contract.	
	hereunder, or	
	(B) the proceeds the Consultants may be entitled to receive from any	
	insurance maintained by the Consultants to cover such a liability,	
	whichever of (A) or (B) is higher.	
	(b) This limitation of liability shall not affect the Consultants' liability, if any,	
	for damage to Third Parties caused by the Consultants or any person or	
	firm acting on behalf of the Consultants in carrying out the Services.	
3.5	The risks and the coverage shall be as follows:	
	(a) Third Party motor vehicle liability insurance as required under Motor	
	Vehicles Act, 1988 in respect of motor vehicles operated in India by the	
	Consultants or their Personnel or any Sub-consultants or their Personnel	
	for the of consultancy.	
	(b) Third Party liability insurance with a minimum coverage, of Rs. 5.00 lacs	
	for the of consultancy.	
	(c) Professional liability insurance, as mentioned in Clause 3.4 (a) (ii) above,	
	with a minimum coverage equal to estimated remuneration and	
	reimbursable.	
	(d) Employer's liability and workers' compensation insurance in respect of the	
	Personnel of the Consultants and of any Sub-consultant, in accordance with	
	the relevant provisions of the Applicable Law, as well as, with respect to	
	such Personnel, any such life, health, accident, travel or other insurance as	
	may be appropriate; and	
	(e) Insurance against loss of damage to (i) equipment purchased in whole or in	
	a part with funds provided under this Contract, (ii) the Consultants	
	property used in the performance of the Services, and (iii) any documents	
	prepared by the Consultants in the performance of the Services.	
	(f) 3.7(c) The other actions are:	
	(i) Taking any action under a civil works contract designating the	
	Consultants as "Engineer", for which action, pursuant to such civi	
	works contract, the written approval of "Employer" is required.	
3.9	The Consultants shall not use these documents for purposes unrelated to this	
	Contract without the prior written approval of the Employer.	
4.6	The person designated as Team Leader in Appendix C, shall serve in that	
	capacity as specified in GCC Clause 4.6.	
6.1.(b)	The ceiling in local currency is the standard fee prescribed in the Appendix-D	
6.2.(a) (ii)	Nil	
6.2 (b) (i)	1) It is understood (i) that the remuneration rates shall cover (A) such salarie	
J (5) (5)	and allowances as the Consultants shall have agreed to pay to the Personne	
	as well as factors for social charges and overhead, and (B) the cost of	
	backstopping by home office staff not included in the Personnel listed i	
NTS	Appendix C, and (C) the Consultants' fee, (ii) that bonuses or other means of	

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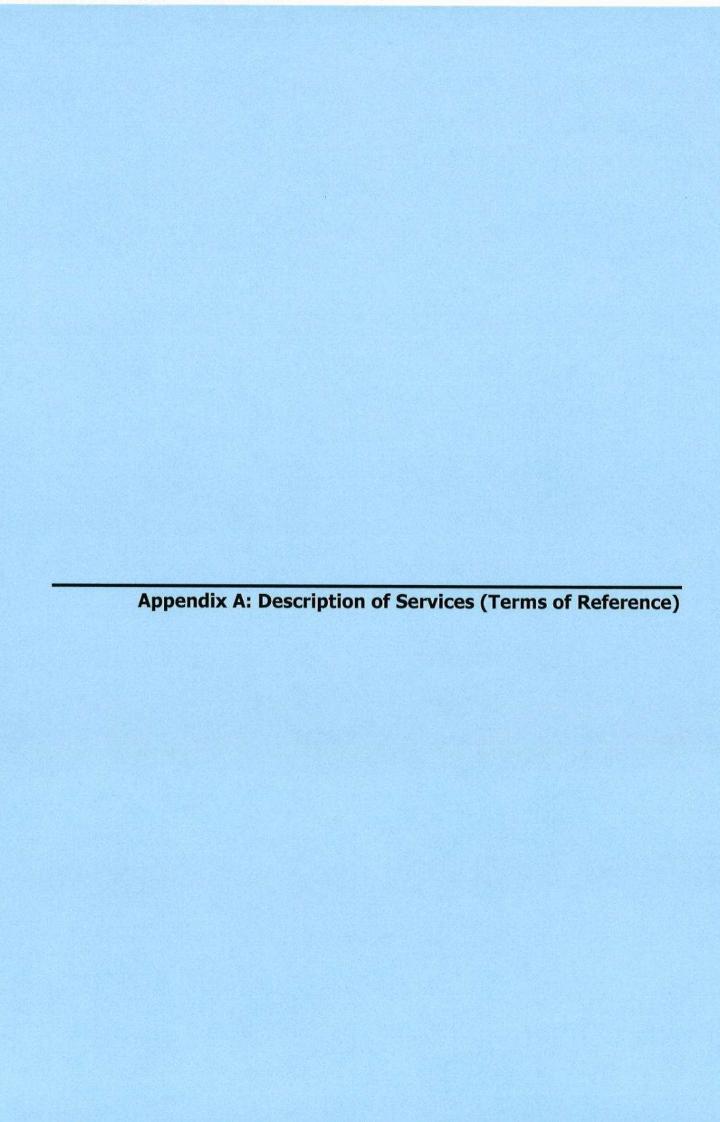
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Number	Amendments of, and Supplements to, Clauses in the General Conditions	
of Clause	Contract.	
6.2 (b) (ii)	profit-sharing shall not be allowed as an element of overhead, and (iii) that any rates specified for persons not yet appointed shall be provisional and shall be subject to revision, with the written approval of the Employer, once the applicable salaries and allowances are known.  2) Remuneration for period of less than one month shall be calculated on an hourly basis for actual time spent in the Consultants' home office and directly attributable to the Services (one hour being equivalent to 1/240th of a month) and on a calendar day basis for time spent away from home office (one day being equivalent to 1/30th of a month).  The rates for local Personnel are set forth in Appendix D.	
6.3(b)(i)	Remuneration for local Personnel shall be paid in local currency.	
6.4 (a)	deleted	
6.4 (c)	The interest rate is: Nil	
6.4 (e)	the accounts are: - For local currency:	
8.2	Disputes shall be settled in accordance with the following provisions:	
	<ul> <li>8.2.1 If a dispute of any kind whatsoever arises between the Engineer-incharge and the Consultant in connection with, or arising out of, the Contract or the scope of the work, whether during the study or after completion of the study and whether before or after repudiation or termination of the Contract, including any dispute as to any opinion, instruction, determination, certification or valuation of the Engineer In charge, the matter shall be in the first place, be referred in writing to the Engineer In charge within 30 days of its occurrence for review, with a copy to the Employer. If the Consultant fails to refer the dispute for review within 30 days, the Engineer In charge's decision shall be final and binding on the Consultant. Such reference shall state that it is made pursuant to this Clause. No later than the fourteenth day after the day on which he received such reference, the Engineer In charge shall give notice of his decision to the Employer and the Consultant. Such decision shall state that it is made pursuant to this Clause.</li> <li>Notwithstanding the arising of any dispute, unless the Contract has already been repudiated or terminated, the Consultant shall, in every case, continue to proceed with the work with all due diligence and the Consultant and the Engineer In charge shall give effect forthwith to every such decision unless and until the same shall have been revised, as hereinafter provided.</li> <li>8.2.2 If either the Employer or the Consultant disagrees with the decision of the Engineer In charge, the decision shall then be referred by the Employer or by the Consultant, within 30 days of the decision of the Engineer-In-charge to the Metropolitan Commissioner, MMRDA. The</li> </ul>	

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## Appendix-A

## **Project Management Consultancy**

## 1.1. Introduction:

MMRDA has prepared the Detailed Project Report for Sewri to Worli Elevated Connector.

1.2. The Mumbai Metropolitan Region Development Authority (MMRDA) will be the Implementing Agency for the Projects. The scope of work will be primarily but not limited to the following:

## Scope of work

Providing Project Management Consultancy Services during construction period and DLP Sewri to Worli Elevated Connector .i.e. technical supervision, monitoring quality assurance, contract management and other allied services including supervision of geotechnical investigations, detailed scrutiny of designs and issuing working drawings submitted by the Contractor for the Elevated Bridge & its approaches, Construction of slip Road, foundation and substructure for ROBS at Sewri & Elphinston railway station, reinstatement of SWD and Footpath damaged during construction, implementation of Traffic improvement plans, Utility investigation & Utility Diversion plan & implementation of Preparation & implementation of Quality Assurance Plan, Preparation & implementation of Safety Plan, Implementation of Environment Monitoring plan, CRZ condition compliance, Preparation of traffic diversion plan & approval from competent traffic authority. Permissions from MCGM tree Authority for tree cutting & compliance of condition, preparation & follow up of Resettlement & Rehabilitation proposal for the project etc..

Detail scope of work is mentioned in Chapter I-C scope of work.

In order to quickly take up the implementation of the project it is proposed to appoint suitable consultants to supervise and get work done from the contractor as per specifications laid down in the tender documents. Consultant with proven relevant experience in implementing projects of a similar nature and size will be appointed for Construction supervision contract. The consultants may submit their proposals considering the above-mentioned components.

In order to quickly take up the implementation of the project it is proposed to appoint suitable consultants to supervise and get work done from the contractor as per specifications laid down in the tender documents. Consultant with proven relevant experience in implementing projects of a similar nature and size will be appointed for Construction supervision contract. The consultants may submit their proposals considering the above-mentioned components.

The Consultants may, if they wish, services of other consultants / sub-consultants in order to enhance their capability/capacity. They may also hire the services of suitably qualified and experienced key professional staff (ensuring their availability for the project duration) to enhance the quality of the team, if such staff is not readily available

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within their own organization. However, majority of the key professional staff should be permanent employees of the consultants.

## 1.3. Objective of the Consultancy:

The Consultancy services shall include:

- Construction supervision, Project Management, Contract Management, Quality Control and Assurance during the implementation of the project & allied works.
- Detailed scrutiny of designs of structures submitted by contractor and issue of working drawings for the work.
- iii) Ensure that high quality construction is achieved and all works are executed in full compliance with the engineering design, technical specifications and other stipulations of the contract documents and within the specified time.

## 1.4. Scope of Work:

The assignment will be as below.

- 3.1 Services in construction
- 3.2 Services in DLP

## 1.5. Scope and detailed tasks under:

Services in construction phase and DLP phase.

The consultants shall supervise the Civil Works of the Contractor appointed by MMRDA under and as per the directives of the Engineer-in-charge of MMRDA for the said wok. The tasks are as below:

## 1.6. The Works:

The subjected work generally includes the following tasks, (but not limited to these) as required on existing/proposed alignments:

- 1. Design & Construction of four lane bridge & its approaches
- Design and construction of foundation and substructure work for ROB at Sewri Railway station and Elphinston Railway station (New Prabhadevi Road)
- Construction of slip roads at Elphinston Bridge
- 4. Traffic safety features including traffic control during construction
- 5. Road signs and markings
- 6. Environmental protection measures
- 7. Strengthening, relocation of affected utility services
- 8. Construction of C.C./R.C.C. Retaining Walls / Reinforced earth structure
- 9. Reinstatement of existing roads damaged during construction.
- 10. Maintenance of existing road & storm water drains during construction period
- 11. Relocation /Shifting of storm water drains affected during construction
- 12. Environmental protection measures /compliance of the clearances/EMP
- 13. Allied ancillary Works

The detailed scope of work is mentioned in Chapter I-C scope of work.

## DLP

DLP will commence from date of completion of the project as per Completion Certificate issued for the work by Engineer in Charge. DLP will be bifurcated in two parts

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a) DLP for flexible pavement

2 Years

b) DLP for Rigid pavement & structures

5 Years

#### 1.7. The Consultants role:

MMRDA in its role as 'Employer" will engage the Consultancy firm to undertake supervision and contract management of the proposed construction work including proof checking of designs. The Senior Resident Engineer of the so selected consultant will be working under the "Engineer in-charge of MMRDA" and submit day-to-day report to him. The Engineer-in-charge will be overall in-charge of the Project for all decisions and instructions.

- 1.8. Supervision team will be composed of suitably qualified and experienced staff. The indicative qualifications and experience criteria are given in *Annexure-I* of the TOR. The criteria indicated are given for the guidance of the consultants. The relevant professional experience means the actual experience in the concerned area of expertise on similar highways projects. The quality of experience will be given due weightage during the evaluation and award of contract.
- 1.9. The suggested qualifications and experience for sub-professional staff indicated in Annexure-I shall determine the approval of these personnel. The Employer's approval in respect of these personnel shall be required before deployment.
- 1.10. For all positions as mentioned Appendix C the deployment of appropriate personnel is considered essential for the successful completion of the project. Consultants are therefore advised to propose highly experienced and competent personnel for these positions.

## 1.11. Duties and responsibilities of PMC and their representatives:

The duties of the PMC and their representatives are described as under:

- Proof checking of Design submitted for Flyover elements (Ancillary & Main viaduct work)
- ii) Giving the layout of the work as per the approved drawings.
- iii) Assisting the Engineer-in-charge of MMRDA for executing the work as per the provisions and specifications of the Bid documents. This would include timely completion of the critical activities, quality control and Quality assurance.
- iv) Preparing the Daily, Weekly and Monthly reports and submitting them to the Engineer-in-charge for appraisals and orders in the matter.
- Preparing running account bills as per the directives of Engineer-in-charge for scrutiny, processing and payment of the bills to the contractor.
- vi) Preparing final bill as per the directives of Engineer-in-charge including compliance of technical and audit remarks if any.
- vii) Assisting Engineer-in-charge during the defects liability as per the terms of the contract.
- 1.12. The duties of the PMC shall be to carrying out proof checking of Structural design and working drawings, issue of working drawings (Good for Construction) of each component of work to the Contractor for execution, properly supervise the works and approve the materials and workmanship for the works in co-operation and in consultation with Engineer-in-charge. The PMC shall administer all the construction

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works contracts and will ensure that the contractual provisions, whether related to quality or quantities of the work are duly implemented. The PMC shall have no authority to relieve the contractors of any of their duties or obligations under the construction contracts or to impose additional obligations not included in the contracts. The duties of the Engineer will also include issue of drawings, details as approved by Engineer-incharge, MMRDA as specified in detail in the construction contract documents and coordination of the individual supervision teams to ensure that technical policies are correctly and consistently implemented on all the construction contracts. The principal responsibilities of the PMC will be, but will not be limited to, the following:

- To carry out generally all the duties of the PMC as specified in the construction contract, within any limitations specified therein.
- To ensure that the detailed design and working drawings are issued to the contractor in time.
- To ensure that the construction works are in accordance with the technical specifications. Environmental Management Plan and other stipulations of the construction contract documents.
- 4. To check the feasibility of drawings prepared by MRIDC for ROB & FOB work at Sewri & Prabhadevi (Elphinston road). Also to supervise the work of foundation substructure of ROBs & FOBs in consultation with MRIDC till the completion of the work assigned to MRIDC.
- 5. To ensure a system of quality assurance of work, approve materials and their sources, review bituminous mix designs and concrete mix designs proposed by the contractors and approve/suggest modifications to the contractor's proposed mix designs, laying methods, sampling and testing procedures and quality control measures to ensure the required standard and consistency in quality.
- 6. To check the laboratory and field tests carried out by the contractors and to develop a mechanism in consultation with the employer to involve the Team Leader / Resident Engineers in carrying out an adequate number of independent tests other than the regular testing done by laboratory personnel;
- 7. To monitor and check the daily quality control and quantity measurements of the works carried out under the contracts, keep all measurement records as per the directions of the employer and submit interim payment proposals when the quality of the works is satisfactory and the quantities are correct to the Engineer-in-charge, MMRDA.
- To direct the contractors to take all necessary steps including those mentioned in the construction contract to protect the environment on and off the site which arise due to construction operations.
- To issue certificates for interim payments to the contractors, and certify completion
  of parts of the totality of the works where applicable. Details of interim progressive
  payments are to be recorded in a measurement book before issue of interim
  certificates.



Chief Engineer
Engineering Division
M.M.R.D.A.

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- 10. Other responsibilities of the PMC will be to carry out all such duties which are essential for the effective implementation of the construction contracts including, but not limited to, the following:
  - a) To prepare, in consultation with the employer a construction supervision manual defining routines and procedures to be adopted in contract management, construction supervision and administration of the contracts and a maintenance manual for defects liability and beyond.
  - b) To assist/advise the employer in handing over the sites and in establishing milestones (if any) for completion of contracts.
  - c) To prepare in consultation with the employer guidelines to be adopted by the employer during the defects liability and maintenance manual for a further of 5 years.
  - d) To verify the list of items and quantities of all items in the BOQ and propose modifications to the same, if necessary, for the approval of the Employer.
  - e) To assist the employer in monitoring the progress of the works and in project implementation through computer aided project management techniques and Management Information Systems (MIS).
  - f) To write a daily project diary which shall record all events pertaining to the administration of the contracts, requests from and orders given to the contractors, and any other information which may at a later date be of assistance in resolving queries which may arise concerning the execution of the works and shall be submitted to Engineer-in-charge.
  - g) To prepare and submit daily, monthly and quarterly progress reports, together with detailed quality control test statements in an approved format and to prepare a detailed sectional/final completion report for each contract and complete team final report for the project.
  - h) To prepare as necessary detailed recommendations to the employer for contract variations and addenda to ensure the best possible technical results are achieved with the available funds.
  - To assist the employer in taking over of completed works from the contractors, in particular by preparing lists of defects to be corrected by the contractors.
  - j) To prepare specific engineering reports when requested by the Engineer which shall include an analysis of the problems encountered and proposed solutions.
  - k) To assist the employer in providing clarifications/explanations to observations, if any, made from time to time by the Auditor.
  - To prepare a training manual outlining the training procedures and to impart on the job training to the employer's personnel associated with the project.
  - m) To prepare revised estimates etc., if required and accordingly advise P.I.U. in modifying the cash flow estimate.
  - n) To assist the employer in co-ordination with other agencies and hold coordination meetings to facilitate the proper and timely implementation of the project.

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o) To carry out any other duties relevant to the project agreed during contract negotiations.

## 1.13. Actions requiring specific approval of the Employer.

The Engineer will be required to obtain the specific approval of the Employer in respect of the following:

- Approving subletting of works
- ii) Granting claims to the agency
- iii) Ordering suspension of the work
- iv) Determining an extension of time.
- v) Ordering waving off the penalty and arranging the repayment of compensation for delay
- vi) Issuing a variation order
- vii) Ordering any works/test beyond the scope of the contract
- viii) Determining rates for the extra items/extra work
- ix) Any variation in the contract conditions.

#### Duties and responsibilities of the Key persons: : 1.14.

Detailed information on the major tasks and duties each member of the4 engineering design team and the construction supervision team shall perform is provided as follows:

Position	Major Tasks & Duties
Team leader	The Team Leader shall function as the Engineer's Representative in administering the Contract. The Team Leader shall manage and coordinate the consulting team to ensure the Project is implemented in accordance with the Contract including & It includes & without being limiting to:
	A. During Design stage
	<ol> <li>To develop project control systems.</li> </ol>
	ii. To finalize of project organization chart.
	iii. To establish project communication and reporting system.
	iv. To prepare of Project Master Schedule with base line.
	v. To prepare Design / Drawings deliverables schedule.
	vi. To Co-ordinate and follow-up with contractor's design consultants for their inputs
	vii. To set up ,track, monitor a design deliverable schedule viii. To Monitor the progress of Checking and approval of the Contractor's design & issue of working drawings in accordance with Contractors' work programs.
	ix. To Review all surveys, field investigations, designs, drawings and specifications, recommending any changes needed to provide more cost-effective solutions, and approving the design drawings and changes in the specification;
	x. To maintain Cost control during all stages of design and design development

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Position	Major Tasks & Duties
	B. During construction stage
	<ul> <li>i. Monitoring, inspecting and certifying the temporary and permanent Works ensuring they are constructed in accordance with the provisions of the Contract, including the Contractor's approved Quality Assurance Plan, Health and Safety Plan, Environmental Management Plan and Method Statements.</li> <li>ii. Ensuring that the construction methods as proposed by the Contractor comply with the requirements of the approved EMP, including implementation of the Environmental Monitoring Plan;</li> <li>iii. Monitoring the Contractor's laboratory testing and carrying out Independent testing as required through quality control Engineers</li> <li>iv. Coordinate the preparation, approval of the Project Security Plan and implementation by the Contractor.</li> <li>v. Measuring the Works agreeing and certifying interim and final payment certificates for submission to the client.</li> <li>vi. Assess and, where appropriate, make recommendations on applications of contractor for extension of time, claims for additional payment and other contractual disputes issuing site.</li> </ul>
	instructions, variation orders, provisional sum orders and day works orders, as appropriate.
	C. Monitoring physical and financial progress
	<ul> <li>ii. Monitoring project development against agreed scheduling.</li> <li>iii. Review and agree with the Employer the Contractors' work programs and subsequently monitoring the construction progress in accordance with Contract requirements.</li> <li>iii. Updating / revising project scheduling, developmental goals physical and financial achievements.</li> <li>iv. Assist Client in Forward physical and financial Planning.</li> <li>v. Preparing &amp; submitting Monthly Progress Reports &amp; Quarterly Progress Reports in a form agreed and submit these within 10 days of the end of the month to which they refer; These report to cover physical progress, financial progress, compliance with the environmental mitigation requirements, results of the project performance monitoring system, quality control, wor progress, implementation issues, and arbitration or litigation etc.</li> </ul>
	D. Post construction period
	i. Advice about probable date of Substantial Completion
	<ul><li>ii. Preparing &amp; addressing the schedule of defects</li><li>iii. Provide assistance in Testing and commissioning of the facility</li></ul>
	<ul><li>iv. Collection and integration of various O and M manuals,</li><li>v. Reconciliation and Certification of Final bills of contractors,</li></ul>

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Position	Major Tasks & Duties
	vi. Preparation of project close-out report including maintenance manual.  vii. Collate and verify all As-built drawings  viii. Addressing any queries during defects liability period.  ix. Co-ordination with the Contractors to rectify the defects during the defects liability period,  E. Overall project
	<ol> <li>Monitoring traffic diversion plan by maintaining close liaison with the Employer and other relevant agencies including the police, other government and regional authorities and, local stakeholders;</li> </ol>
	ii. Identifying sub-surface, surface and overhead utility services may be sewer, water mains, storm water drains, telephone cables, electric lines, etc. essential and have to be maintained in working order during different stages of construction by temporary/permanent diversions or by supporting in position. Since these affect construction and project implementation time schedule/ costs for which necessary planning/ action needs to be initiated in advance.
	<ul> <li>iii. To Lead project meetings as necessary for review of progress by conducting weekly meeting with contractor to identify problems for monitoring project development goals against stipulated goals in project indicator framework.</li> <li>iv. Attending all meeting with clients ,drafting minutes of meetings and records of all other contractually relevant matters</li> </ul>
	v. To feedback to client on the Master Budget of the project vi. Assisting client in dealing with RTI compliance, Audit, Publi relations (excluding media reports) and Compliant redress.
Resident Engineer	The duties of the Resident Engineer are under the overall control to supervise construction of the work and to test or order to test an examine any materials to be used or workmanship employed it connection with the works. They shall have no authority to relieve the contractor of any of their duties or obligations under the contract or to order any works involving delay or any extra payment, or to make an variation of quantities or rates in the works. The Team Leader may from
	time to time delegate to the resident engineer any of the duties an authorities vested in his scope and he may at any time revoke suc delegation. The principal responsibilities of the resident engineer at likely to be as follows:  i. To assist Team Leader in administering the Contract & performing all above tasks
li.	ii. To manage and coordinate the consulting team to ensure the Proje

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Position	Major Tasks & Duties
	is implemented in accordance with the Contract in consultation with
1.5	the Team Leader.
	iii. Lead the construction supervision task teams. Ensure all
	deliverables are prepared in accordance with quality and time
	constraints.
	iv. Ensure full and detailed permanent site records, which will include
	site correspondence, survey data, quality acceptance data, site
	diaries, measurement and certification, minutes of meetings, and
	records of all other contractually relevant matters.
	v. To Review and check the bill of quantities prepared by contractor &
	scrutinized by Quanity surveyor
	vi. Certify advance payments in accordance with the contracts when
	necessary.
	vii. Certify interim and final payment certificates for submission to th
	employer,
	viii. Ensure that all supervision team members undertak
	comprehensive day-to-day field contract supervision, qualit
	assurance, measurements and administration services at the site.
	ix. Provide the contractors with all necessary survey data and reference
	for setting out the works.
	x. Receive, assess and approve the contractors' implementation
	work plans and programs.
	xi. Ensure that the rehabilitation works are executed in accordance
	with all the provisions of the contract, including those concerning
	standards of workmanship, and other safety provisions an
	protection of the environment.
	xii. Day to day correspondences including contractual issues.
Structural	i. To study & Analyze Employer's requirement for design.
and the second	
Engineer (PC	ii. To Prepare the Design Brief in terms of function ability, cost, time quality and safety
& steel)	iii. To Check & verify designer's submissions (design basis report
	value engineering, cost benefit analysis, drawings etc)
	iv. To review and approve the Detailed Engineering Design, including
	drawings, specifications and supporting calculations an
	documentation for the Project submitted by the Contractor.
	m c c with contractor that all design conditions including
Yi =	design code, control points such as position of public utilities, an
	cross sections in collaboration with Highway Engineer
	vi. To Conduct the full basic design, mainly span arrangement, type
	vi. To Conduct the full basic design, matriy span arrangement, type superstructure/substructure/foundation based on the prelimina
	structural analysis before the detailed design approval vii. Conduct the detailed design of the bridges based on the approv
SI	VII. Conduct the detailed design of the bridges based on the approv

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Position	Major Tasks & Duties
	basic design viii. Checking the drawings prepared by the contractor & issuing issue of working drawings in accordance with Contractors' work programs.  ix. Review the method statement of bridge construction submitted by the contractor and provide comments or give no-objection.  x. Reviewed fabricator shop drawings for compliance with design drawings.  xi. Controls manufacturer's shop drawings and connection calculation notes and details.  xii. Supervises/Approves steel structure drawings issued by designers.  xiii. Assigning and supervising the Welding Engineer and Steel Inspector on a daily basis so that all contractor activities are adequately covered.  xiv. Approval erection sequence methodology which depict the safe
	erection of the steel structure.
Quality Control Engineer	<ul> <li>i. Overall monitoring the construction activities in respect of the quality of the work.</li> <li>ii. Prepare QA/QC plan and Method Statement</li> <li>iii. Quality assurance and control to ensure conformance to drawings and specifications.</li> <li>iv. Ensure that the construction materials conform to the quality norms specified in the Codes / specifications in the bid documents.</li> <li>v. Ensure that field / laboratory tests regarding the quality control are carried out as per the norms / procedures specified in codes / specifications in the bid documents.</li> </ul>
	<ul> <li>vi. Check the results of the field / laboratory tests regarding th quality control and take remedial actions in case of any non-conformity.</li> <li>vii. Prepare and submit the periodic Quality Control Reports to MMRDA.</li> <li>viii. Conduct workshops for the site Engineers / labours to update them about the Quality Assurance &amp; Quality Control procedures so as to ensure that the QA &amp; QC norms are adhered to.</li> </ul>
Contract specialist	<ol> <li>Assist the MMRDA to design, administrate and monitor al procurement activities to ensure compliance with agreed procurement frameworks.</li> </ol>
	<ul> <li>ii. Evaluate the claims submitted by the contractor with support from the engineers and provide a draft answers to Team Leader.</li> <li>iii. Support. to the Team Leader to issue the variation order to the contractor and various certificates to the contractor.</li> </ul>

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Position	Major Tasks & Duties				
	v. Day to day correspondences in connection to contractual issues				
Safety	i. To monitor comprehensive Health and safety program which				
Engineer	would help to avoid and reduce the accidents.				
ing.mee.	ii. To establish the safety programmes, identification of safety hazard				
	which would be made by contractor prior to the construction,				
	iii. To carry out monthly safety audits on site during construction and				
	operation through safety Engineer .				
	iv. Ensure that the contractors provide sufficient safety devices and				
	sign boards for own safety as well as safety of genera traffic and				
	pedestrians through the review of the method statement and				
	periodical site patrol.				
1	and the sent rectors provide sufficient safety devices to the				
	construction Engineers, subordinate staff & labour working on th				
	site.				
	vi. Ensure adherence to the safety norms prescribed in the relevant codes / specifications in the bid documents.				
Geo-					
Technical/					
Foundation the contractor.  Engineer iii. To assist design engineer for review and assess bridge					
Engineer	detailed engineering including the geotechnical data to decide the				
	type of the foundation				
Quantity	i. Ensure full and detailed permanent site records, which will include				
surveyor	site correspondence, survey data, quality acceptance data, si				
Surveyor	diaries, measurement and certification, minutes of meetings, ar				
	records of all other contractually relevant matters.				
	ii. Review and check the inspection sheets submitted by the inspector				
8	iii. Review and check the interim payments and final payment clair				
	submitted by the contractor, particularly the bill of quantities do				
	by the contractor				
	iv. Provide or review the unit price for new work items when necessa				
	v. Support the Claim Specialist to evaluate the claims submitted by t				
	contractor.				
Transportati	i. Responsible for designing site basis traffic diversion plan as p				
on/Traffic	standard Planning and managing both vehicles and pedestrian				
engineer	consultation with traffic department.				
3	ii. Implementing all the necessary Traffic Management safety measur				
	on site.				

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Position	Major Tasks & Duties		
Field Engineer	<ol> <li>Measure the day-to-day quantities at site and confirm with the foreman or site supervisor of the contractor.</li> <li>Keep and maintain full and detailed measurement records, which will include quantity measurement data, site diaries and other records.</li> <li>Assist the engineer's representative for managing quantity and cost.</li> <li>Undertake day-to-day field contract supervision, quality contro and measurements at the site.</li> <li>Keep full and detailed permanent site records, which will data, day work records, site diaries, measurement and other field records.</li> <li>Prepare data presented in regular monthly progress reports. Provide measurement and inspection data required for interim payments.</li> <li>Provide the contractors with all necessary survey data and reference for setting out the works.</li> </ol>		

#### 1.15. Duties and responsibilities of the supporting technical staff

#### 1.15.1. General Responsibilities: The supporting technical staff

- Shall be responsible for provide valued Engineering services that will result in economical and quality end product.
- 2. Shall be responsible for provide valued Engineering services that will result in economical and quality end product.
- Shall Study all designs and drawings, Contract Agreement, Specifications etc. and ensure implementation at site including its proof checking.
- Shall be responsible for establishing and preservation of intermediate TBM with respect to GTS TBM in coordination with contractor.
- 5. Shall be responsible for setting out Geometrical vertical /horizontal curves during execution with reference to data of total station.
- 6. Shall be responsible for proof checking of all designs of structures and issue of working drawings for road and bridges within reasonable time frame, so that there shall not be in achieving the mile stones as mentioned in the tender documents of the work. He is also responsible for obtaining designs from the design consultants appointed by the contractor.
- 7. Shall be responsible for necessary changes if any if required in Geometrical vertical /horizontal alignment during execution and issue of modified working drawings along with L sections and Cross sections at every 10 M C/C along the length and 2 meter C/C across the width with due approval of Engineer –In-charge
- Shall be responsible for Shifting or removal permanent / semi permanent structures, trees, telephone lines, Electric line ,transformers or any other utilities identified during execution of work in co-ordination with respective department /Utility holders to clear the work front
- Shall be responsible for changes or modification in the road crust design if required as per site situation or constraint and issue of Cross section at

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- every 10 M C/C along the length and  $\,2\,$  meter C/C across the width with due approval of Engineer –In-charge
- 10. Shall be responsible for ascertaining the quality and quantity of all construction material of the quarries as identified by the contractor during execution of work and approval of the same
- 11. Shall be responsible for foundation passing, modification in design of Minor / Major Bridge/ Slab culverts and CD works if any, as per available foundation strata, assessment of safe bearing capacity of foundation strata, and issue of working drawings.
- 12. Shall be responsible for work execution methodology including diversion of road as well as diversion of traffic, stage wise construction as per final Geometrical horizontal, vertical alignment, and as per final pavement design. The Consultant shall evaluate alternative construction methods to reduce the construction and minimize disturbance to the existing traffic flow during construction. Consultant should adopt methodology with prior approval of Engineer –In-charge.
- 13. Will ensure deployment of requisite number of qualified and experienced Engineers at site on full time basis to supervise the day to day works and also shall be responsible for monitoring the progress of work as per approved program, construction procedures, practices, to ensure quality in day to day work as per drawing, specifications and standards.
- Shall be responsible for approval to the Request for Information (RFI) submitted by the contractor in the day to day working and maintaining the record of RFI.
- 15. Shall be responsible for overall monitoring of the construction activities and should be available at site everyday (including nights, if the contractor carries out work in shifts to achieve the project completion schedule) for supervision and coordination of site work with the MMRDA and Contractors.
- 16. Shall be responsible to maintain the execution at site as per the drawing.
- 17. Shall physically verify all dimensions of work on site and ensure that they are as per drawings. Discrepancies shall be corrected immediately, modification required if any shall done in consultation with bridge designer only.
- 18. Shall be responsible to maintain the records of day-to-day works
- 19. Shall be responsible for checking the all intermediate final levels of crust provided, maintaining level book, insuring thickness of crust by taking trial pits, steel reinforcement, centering, shuttering and scaffolding etc.
- 20. Shall be responsible to supervise the day to day works related to Bridge & construction of approaches like earth work, GSB work , WMM work , Bituminous work ,PCC, RCC, and all other items as stipulated contract documents of the contractor.

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- 21. Shall be responsible to maintain the day to day material inventory for all items, consumption of material for the work at site and shall ensured that the material used in work is as per the theoretical requirement.
- 22. Shall preserve field books and measurement books supplied by MMRDA in safe custody and shall return the same to MMRDA after completion of project or as advised by Engineer in Charge.
- 23. Shall maintain cement register, steel register, daily labour register, asphalt consumption register drawing register, hindrance register, register for payment of advances and recoveries, register for reconciliation of materials to facilitate recoveries, register for movement of field books / measurement books, site instructions book, diary of work, Quality Assurance (QA) records, etc. and any other register as advised and shall return all registers referred above after completion of the project or as advised by MMRDA.
- 24. Shall ensure that all instructions to the contactors are issued in writing. Work order book shall be maintained on the site in prescribed form approved by the MMRDA. PMCS shall maintain the record of all such instructions for verification at any time. It will be PMCS responsibility to regularize all verbal instructions given by competent authority in unavoidable circumstances by obtaining written confirmations / ratifications.
- 25. Shall advise MMRDA with regard to extra items/claims / disputes / arbitration cases and excess- saving in tender items between MMRDA and the Contractors, if any and assist MMRDA in case of any dispute till the cases are resolved either by mutual negotiation or through arbitration or court, as the case may be.
- 26. Shall be responsible for proof checking of the all designs for the projects.

#### 1.15.2. Quality Control Responsibilities

- Shall prepare quality assurance manual for contractor which including pre, during, post execution check lists, test frequency chart with acceptance criteria as per approved tender documents.
- 2. Submission of Detailed schedules and technical formats for inspection and testing of materials, indicating the inspections/test procedures and applicable acceptance limits at works/test in house and site for materials and equipment well in advance and got approved from the employer. Monitor the quality of the work and control the quality as per specification, relevant codes and as per sound Engineering practices.
- Shall maintain the registers for mandatory tests to be conducted for all materials before incorporation in the work as per requirement of the Vigilance and Quality Control cell of the MMRDA.
- Shall Inspect and approve the materials at site as per specifications before they are used in work.
- Shall be responsible for obtaining good workmanship with respect to lines, levels, finish, etc. Shall check all centerlines, dimensions, levels and plumb at

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- all stages of work with reference to working drawings and shall ensure correct dimensions/thickness of all elements of the bridge works.
- 6. Shall ensure that work proceeds as per tender conditions and specifications. All material brought to site shall be of approved quality and make, rejected material is removed from site and work executed is of high standard, good workmanship and of desired quality. PMCS shall also submit weekly reports of inventory of materials. Any compromise of quality in materials or workmanship shall be the responsibility of PMC & liquidated damages as deemed fit in lieu of this will be recovered from PMC
- PMCS will be required to submit reports concerning quality standard and progress of the project in the form as prescribed by the MMRDA time to time.
- If the work done by the contractor is found to not satisfactory, PMCS can instruct the contractor to suspend the work till rectification of work.
- Shall be responsible for ascertaining the quality and quantity of all construction material of the quarries as identified by the contractor during execution of work and approval of the same.
- Shall be responsible for preparation and approval for Job mix formulas of flexible pavement, rigid pavement, various grades of concrete for structures
- 11. Shall be responsible for full acquaintance with tender specifications, respective IS /IRC codes, MOR T& H,PWD red book etc and amendment if any and implanting the same during execution of work
- PMC should exclusively provide supervisory staff at Hot Mix plant and RMC plant of Contractor to ensure highest quality during execution of work.
- 13. PMC shall insure that all in house laboratory tests and test must be carried out in the presence of his representative including collection of the samples for in house / outside laboratory.

#### 1.15.3. Billing Responsibilities for Interim and final payment

- 1. The supervision consultant shall prepare and submit Engineer in-charge for verification, passing and payment of interim and final payment to the contractor. Interim payments shall be based on interim payment certificates processed by the supervision consultant following payment applications submitted by the contractors. The measurement books shall be in a form compatible with the output from the CADD system. Whenever measurements are to be made, the supervision consultants' resident engineers shall inform the contractors in advance. The employer's representative shall verify the measurements at any stage and process for passing and payment.
- 2. The Resident Engineer of supervision consultant shall be 100 % responsible for Checking of all the measurements recorded in the bill prepared by contractor at site with respect to approved drawings/specifications and to certify the accuracy of the same. If in case, it is necessary to take

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measurements at site and record and finalize the bills, the PMCS shall also do so to make timely payment for the works done.

- The PMCS shall certify the accuracy of the bill within week from the date of receipt of bill from
- 4. The PMC shall take day to day measurements jointly & make record entry in CADD format with contractor's representative for all bridge /road components, for bills / measurements, record them in measurement books (MBs) supplied by MMRDA and obtain contractors Signature in token of acceptance & Prepare Bills. Care shall be taken to take timely measurement of such items which may get embedded or hidden and not susceptible for measurement at a later date, which cannot be recorded in future shall be recorded before covering up the same.
- If contractor's representative fails to attend the joint measurements as fixed in writing or Contractor fails to countersign even after giving reasonable notice to the contractor, PMCS should take measurements and prepare bills and submit for payment.
- RA Bills shall be submitted only after the verification of the work executed
  as per stipulation in the specifications; drawings and Bill of Quantities
  prescribed in the contract agreement are in order.
- 7. In the matter of approving such bills, the PMCS shall conform adherence to the rules and instructions issued by the MMRDA, guarantee and correctness of all such certificates and shall hold themselves responsible for the correctness of all bills and certificates issued, scrutinized or checked by them, as to the quality of the work concerned as well as the quantities of various items of works. Before certifying any bill PMCS shall ensure that the work being certified is in general in accordance with the designs.
- 8. PMC shall check the quantities recorded for various items and keep watch on varations in the tender items and the reasons thereof. PMCS shall account for all variations in tender quantities with respect to execution drawings and submit a report. PMCS shall assess impact of excessive quantities on the cost of the project and wherever felt necessary by the MMRDA, prepare a Running Summary of Cost for approval of MMRDA. PMCS shall obtain approval from MMRDA, if the quantities put to tender are likely to exceed as per clause 38 before giving green signal to contractor to go ahead with the work
- 9. Shall prepare "Running Summary of Cost" for the project once in six months or as desired by the MMRDA and ensure that there will be no cost overrun. PMCS shall help MMRDA in preparing a note of revised sanction for the project if required during execution of the project.
- PMC shall ensure that following are not recommended for payment in interim bills / final bills.
  - Extra items / deviated / variation items not approved by MMRDA.
  - ii. Payments towards variation.

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- iii. Payments beyond financial sanction and
- iv. Payment for the work done in extended without sanction for the extension of time limit by the competent authority.
- 11. Prepare necessary snag list after virtual completion of work.
- On completion of work, the PMCS shall have the responsibility to finalize the final bills for the work as per actual execution.
- The PMCS should settle the Final Bill along with as build drawings within three months after completion of Project.
- 14. PMC shall ensure that contractors have taken requisite "All Risk Insurance Policies" to cover workman under Workman Compensation Act, loss /damage caused by natural calamities / accident / accidental collapse of partially completed work, materials and plant at site and for third party claims for injury / damages. PMCS shall ensure that all such policies remain in force throughout the execution of project and insurance policies shall also cover the maintenance of the work as per tender conditions.
- 15. Consultant is solely responsible for quantities of works proposed in the bill and quality of the work as specified in the tender document. Consultant should submit certification this regard along with bills.

#### 1.15.4. Extra works /Extra Items

- Shall suggest modification, if any, due to site conditions and advice with reasonable justification of cost variations on account of resultant extra items and excess supported with proper analysis.
- Shall suggest modification, if any, due to site conditions and advice with reasonable justification of cost variations on account of resultant extra items and excess supported with proper analysis.
- shall ensure that extra/variation items are not executed unless approved by MMRDA and rates are finalized. A register for extra/substituted items shall be maintained by PMCS.

#### 1.15.5. Progress of the Project.

- Shall be responsible for monitoring the progress as per mile stones prescribed in the tender documents.
- 2. Shall be responsible for monitoring the physical as well as financial progress of work with help of MIS, BAR chart, S curve, CPM/PERT or any modern technique as suggested by the MMRDA and monthly submission of the same on the last date of calendar month to MMRDA failing which consultant shall be liable for penalty of Rs. 1000/- per event per week.
- Shall be responsible for maintain documentary evidence for delay in achieving mile stones prescribed in the tender.
- Shall be responsible for completion of project as per scheduled time stipulated in agreement with the contractors.
- Shall submit physical and financial progress reports once in every month or as desired by MMRDA in standard pro forma approved by MMRDA.

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- 6. Shall anticipate time over runs which are beyond the control of the contractor, well before completion date and submit the proposal for extensions of time limit well in advance. In support of the proposal PMC shall maintain day to day record of front made available to the contractor achievement made in the available front. Similarly he should maintain a record of work held, its duration and reasons thereof. PMCS shall submit contractor's request for extension of time along with his recommendations well within time. Bill for work done in extended time, yet to be sanctioned, shall not be recommended.
- 7. Shall responsible to forecast issues ahead in time that would delay the project and caution for appropriate action. PMC shall also bring to the notice of the MMRDA any slippage in the progress of work as per schedule and any likely slippage due to constraints like short supply of construction materials, labour problems and non availability of drawings.etc.
- Shall responsible to provide valued Engineering service that will result in economical and Quality end product in the shortest durations.

#### 1.15.6. Safety Arrangement

- Shall ensure safety of the traffic, structure, by taking all necessary
  precautions and shall avoid such other factors which will endanger the
  safety of structure during/after construction.
- shall ensure that safety of personnel working at site/inspecting the site by taking precautions by putting sufficient barricades, night lamps near trenches, pits, and such other places and to insist on compliance of safety code such as use of helmets, gum boots etc on work site.

#### 1.15.7. Labour Laws

Shall ensure that contractors have complied with registration under Contract Labour (Regulation and Abolition) Act, 1970 and Central Rules, 1971 & abide by laws pertaining to labour including payment as per Minimum Wages Act and any other Act or enactment relating thereto & rules framed there under from time to time. The PMCS shall ensure compliance by the contractors of all labour laws & relevant Statutory Acts including Labour License, Minimum Wages Act, etc.

#### 1.15.8. Environmental Issues

- 1. Shall ensure that, contractor has submitted Environmental Management
- shall ensure that, contractor has taken all reasonable steps to protect the environment on and off the Site and to avoid damage or nuisance to persons or to property of the public or others resulting from pollution, noise or other causes arising as a consequence of his methods of operation
- Shall ensure that contractor has followed all guidelines given in Environmental Management Plan (appended in Volume III: Technical Specifications) prepared for this project specifically shall be followed during construction.

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4. The PMC shall ensure that any other Environmental related clearance / permission is required for the project, the same shall be obtained by the Contractor. The PMC shall point out such cases to the Employer and assist the Employer & Contractor to obtain the relevant clearance / permission.

#### 1.15.9. Site Co-ordination

- Shall keep a track of permissions required from local authorities and get revalidated whenever necessary.
- Shall attend site meetings / meetings in MMRDA and discuss site conditions, bottlenecks faced likely hindrances, time over runs, cost overruns and any other important matter along with solutions of the same.
- 3. To co-ordinate between the MMRDA and Contractors in all matters relating to work.
- 4. To arrange issue of preliminary completion report, defects liability completion report, final work completion report
- Any other construction management task not specifically mentioned but relevant to the realization of the project.
- Shall be responsible for co-ordination with all agencies working at site, liaison with local authorities /Government agencies/ other allied departments including utility providers for proper permissions to clear the work front in time.
- Shall co-ordinate with the utilizes providers to shift, if it is obstructing work site
- Shall prepare detailed proposal of utilizes in the prescribed from as specified by concern the Dept for shifting and submit, pursue, attend all joint inspections if asked by the concern utility provider.

#### 1.15.10. Defects Liability

- 1. Shall prepare maintenance manual for Defects Liability
- 2. Shall carry out joint inspections of the work at regular intervals (monthly) by the Resident Engineer along with the Contractor's representatives
- 3. If contractor's fails to attend the Joint inspections as fixed in writing ,Resident Engineer shall carry out visit independently every monthly to observe the defects and submit reports to employer with a copy to contractor. If Contractor fails to countersign the defects noticed even after giving reasonable notice to the contractor, PMCS should initiate suitable action as per Contract.
- 4. After the inspections the consultants shall submit a report (in 5 copies) detailing the defects noticed and the remedial measures to be taken by the Contractor. The consultants shall suggest and supervise the remedial measures, if any, require to be carried out by the contractors during defects liability and submit final rectification report to the MMRDA.

1.15.11. Traffic Diversion

The consultant Shall prepare the traffic diversion plan & presentation considering the traffic pattern in the near vicinity of the project area in

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consultation with the Traffic Police and local authority and submit the same to MMRDA for taking approval from the Traffic Police.

#### 1.15.12. Utilities:

The Consultant shall prepare plans, which show the location of existing underground and above ground public utilities in discussion with Contractor. These plans shall show the works proposed for diversion or replacement under the contract. To obtain data and to prepare the plans for diversion of existing utilities or new works, the Consultants shall consult with utility owners / stake holders and other agencies in the affected area, consult records and visually survey the site. It is expected that not all utility lines may be well recorded and hence to ensure that the work proceeds smoothly. The Consultant shall prepare a detailed report identifying and covering various utilities, which are likely to be installed in the near future so as to enable MMRDA to prepare a co-coordinated plan for simultaneous implementation with the road construction wherever possible.

#### 1.15.13. Tree Cutting:

The consultant shall identify the trees within the proposed Right of Way (ROW) which are required to be cut/ transplanted during the construction of the project and number the same. The consultant shall identify such trees by type, height, girth etc. and its distance from the centre line of the proposed road (or centre line of the existing road) and prepare a tree/Mangroves cutting proposal for submission to Tree Authority of local competent authority/MCGM/Forest Department/collector etc. The consultant shall obtain approval for the proposal after necessary compliance to the remarks made by Tree/forest Authority. Deposit for the trees/mangroves to be cut shall be the responsibility of concerned Project Implementing Agency. Requirement of compensatory plantation in lieu of the trees to be cut shall be prepared at the initial stage following the norms and practices of MCGM Tree Authority or other agencies.

#### 1.15.14. Implementation Schedule:

The Consultant shall prepare a works schedule for implementation of the project such that key dates as per contract documents and thus assist supervision of the contractor to achieve the mile stones mentioned in tender. Although final arrangements will be the responsibility of the contractor, the Consultant should prepare an initial temporary traffic diversion plan, optimum utilization of manpower and machinery in conjunction with the implementation schedule, such that the contractor may include for such works in the overall contract cost estimate.

The consultant shall be responsible for preparing variation orders consequent to any design changes. The construction supervision consultant will be responsible for minor design changes, subject to the employer's prior approval where so required.

1.15.15.

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#### 1.15.16. Interim and Final Payments:

The supervision consultant shall prepare and submit Engineer in-charge for verification, passing and payment of interim and final payment to the contractor. Interim payments shall be based on interim payment certificates processed by the supervision consultant following payment applications submitted by the contractors. The measurement books shall be in a form compatible with the output from the CADD system. Whenever measurements are to be made, the supervision consultants' resident engineers shall inform the contractors in advance. The employer's representative shall verify the measurements at any stage and process for passing and payment.

#### 1.15.17. Possible Additional Services:

The consultant may be required to carry out the following additional services as and when so requested by the Employer and on terms to be negotiated. The events are:

- i) preparation of reports or additional contract documents for consideration of proposals for the carrying out of additional work;
- ii) any other specialist services by the Engineer or by other specialists as may be agreed upon.
- iii) Fees towards the additional works/services carried out by the consultants shall be paid after mutual discussions and agreement.

# 1.15.18. Delay in implementation of the project after completion of Detailed Engineering:

In case the construction period of project is likely to get delayed, the following course of action is likely depending upon the probable extent of delay.

#### i) Delay of 6 months to 1 year:

The consultants can redeploy their supervision personnel earmarked for the project. Upon commencement of the supervision period, the consultants will be allowed to substitute their key personnel, if needed, provided that the alternate personnel possess equal or better qualifications and experience than the key personnel originally proposed as per TOR.

#### ii) Abnormal Delay (exceeding 1 year):

The contract between MMRDA and Consultant may be foreclosed. MMRDA will make fee payable against the activities completed.) The additional payments towards the extended s or the delayed s shall be as per the Appendix - D of the contract agreement.

#### 1.15.19. Services during Defect Liability:

The services to be provided by the consultants during the defects liability shall include the following:

During the first year after completion:

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If contractor's fails to attend the Joint inspections as fixed in writing, Resident Engineer shall carry out visit independently every fortnight to observe the defects and submit reports to employer with a copy to contractor. If Contractor fails to countersign the defects noticed even after giving reasonable notice to the contractor, PMCS should initiate suitable action as per Contract.

After the inspections the consultants shall submit a report (in 6 copies) detailing the defects noticed and the remedial measures to be taken by the Contractor. The consultants shall suggest and supervise the remedial measures, if any, require to be carried out by the contractors during defects liability and submit final rectification report to the MMRDA.

After the inspections the consultants shall submit a report (in 6 copies) detailing the defects noticed and the remedial measures to be taken by the Contractor. The consultants shall suggest and supervise the remedial measures, if any, require to be carried out by the contractors during defects liability and submit final rectification report to the MMRDA.

#### 1.15.20. Reporting requirements for Period:

The consultants shall prepare and submit the reports, as specified in Appendix B  $\,$ 

#### 1.15.21. Consultants Inputs required:

The consultants are required to make their own assessments of the manpower requirements in terms of man months for the different categories of personnel proposed to be deployed for the supervision works as envisaged in this TOR. The consultants shall address this aspect in their proposed methodology to be submitted to the Employer. Consultants are required to furnish CVs for the following key professional staff. CV's of field support staff are not required to be submitted, but the numbers and man months for such staff shall be included in the Technical Proposal and the costs in respect of these personnel are to be included in the Financial Proposal. The positions of field support staff will be evaluated only for the purpose of responsiveness and no points will be awarded for these positions.

#### 1.16. Key Professional Staff for Supervision Period

K-1.	Team Leader			
K-2.	Resident Engineer			
K-3.	Structural Engineer PC			
K-4.	Structural Engineer Steel			
K-5.	Quality Control Engineer			
K-6.	Contract specialist			
K-7.	Safety Engineer			
K-8.	Geo-Technical/Foundation Engineer			

Field Support Staff for Supervision period

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#### (Technical & Non-Technical)

- SS-1. Quantity surveyor
- SS-2. Transportation/ Traffic Engineer
- SS-3. Ir. Quantity surveyor
- SS-4. Jr. Quality Control Engineer
- SS-5. Surveyor
- SS-6. Lab technician
- SS-7 Field Engineer
- SS-8 Utility Engineer
- SS-9 Expert in social development (R&R)

Any deficiencies in qualification or in deployment on field shall not be entertained.

#### 1.18. Minimum manpower deployment:

Category-wise minimum manpower to be deployed for Supervision Period and DLP period are given in Appendix-C

#### 1.19. Implementation Schedule:

The work will be implemented within a time bound schedule up to original work contract plus approved extension if any .The implementation schedules (indicative only) for the work shall be as follows:

Supervision Period activity	36 Months plus DLP

- 1.20. The site supervision team would be mobilized on the date of actual commencement of works by the contractors with prior approval of Chief Engineer MMRDA. In addition to the above the assignment also includes services during the defects liability as mentioned in contract agreement of work execution. The Consultant has to ensure presence of Residential Engineer towards the end of Defects liability for preparation of Final Report and contract closure. During the Defects Liability, the Residential Engineer will continue on a part time basis with the supervision team members if required, would be mobilized on an as required basis.
- 1.21. Requirement of technical support staff would include structural Engineers, Supervisors, and Technicians etc. as felt necessary for providing services mentioned in TOR. The Supervision Consultant may propose the various categories of technical support staff and the corresponding person's month requirements. The Supervision Consultant should indicate in his technical proposal the qualification and experienced level of his proposed candidate for each category of technical support staff.
- 1.22. After award of the contract the Employer expects all the proposed key personnel to be available during implementation of the contract. The Employer will not consider substitutions during contract implementation except, under exceptional circumstances up to a maximum of one third of the key personnel. In case of replacements the Supervision Consultant will ensure that there is a reasonable overlap between the staff to be replaced and the replacement. The replacement should be strictly with the acceptance of MMRDA.

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#### 1.23. Accommodation, Laboratories and Vehicles:

The supervision consultant will be responsible for making his own arrangement for all his accommodation on rental basis (including the field office of the PMC and his Site Staff, including furniture, equipment and maintenance thereof) near the site and vehicles for transportation of PMC staff/field staff etc. (including crew, maintenance and repairs thereof). Accommodation as mentioned above shall have uninterrupted power and water supply. No separate payment will be made on this account. Under any circumstances PMC shall not avail this facility from the contractor

#### 1.24. Co-ordination and Consultation:

The consultant will be required to liaise and co-ordinate with all agencies affected by the proposed works. In particular, the consultant is required to co-ordinate design standards and specifications with other agencies or consultant engaged in the final engineering for other sections/packages of road network improvements under this project. A separate study for preparation and implementation of Resettlement Action Plan (RAP) and Environmental Management Plan (EMP) is being carried out for all the packages. The Consultants will closely co-ordinate with RAP/EMP consultants for R&R related issues as and when required.

#### 1.25. Outputs:

The various outputs required from the work have been stated in the descriptions of the Tasks (see below).

	Activity / Report	Copies	Duration in months after commencement of study
1	Monthly Progress Report	3	Monthly
2	Monthly Information System (MIS)	3	Monthly
3	S curve	3	Monthly
4	Quarterly Progress Reports	3	Every Quarter
5	Project Implementation completion report	5	On completion of the project
6	Defect Liability	3	Monthly in DLP period.

#### Additional copies of Reports:

The consultants shall submit additional copies of the above mentioned reports as required by the employer without any extra cost to the Employer.

#### 1.26. Duration of the work:

It is estimated that the duration of the PMC for the work will be up to the end of construction and the defect liability period.

#### 1.27. MMRDA Reviews:

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MMRDA will make reviews of the progress of the work but there are a number of key outputs which will condition the continuing work. The consultant will also produce working papers on important issues as required by the employer. The MMARDA will

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review consultant's reports as given in para. 1.25 above and also working papers. Additionally, MMRDA require and will review progress reports.

#### 1.28. Project Co-ordination:

The Chief Engineer, Engineering Division, MMRDA will function as principal coordinator to oversee the project and provide a principal point of contact with the consultant on behalf of the employers. It is envisaged that the study team will operate principally from office in Mumbai. The consultant will provide all facilities and equipment necessary for successful completion of the project. All data collected during the project, equipment (including computers) specifically purchased for the project by the consultant along with the user manuals, will become the property of the employer.

#### 1.29. Technical Advisory Committee:

The Employer may establish a Technical Advisory Committee (TAC) to guide the project. The role of this Committee will be to review the consultant's findings and provide advice to the team on technical matters. It is expected that the TAC will meet every month. Consultant will submit all reports for review for suggestions by TAC.

#### 1.30. Qualification and experience requirement for key professional Staff

Position	Tender Condition			
	Minimum Qualification & upper age limit	Minimum Overall Experienc e	Specific Experience of Similar Nature	
<b>Key Profe</b>	ssionals			
Team Leader	Graduation in Civil Engineering Upper age limit 65 years	20 years	Out of 20 years' experience, minimum 5 years' experience as a Team Leader (TL).  Experience in planning & execution/ supervision of one completed project having minimum 1500 meter Viaduct length in urban area as TL.  Experience in planning & execution/ supervision of one completed flyover/bridge/Metro having structural steel superstructure of at least 40 meter span as TL.	
Resident Engineer Graduation in Civil Engineering Upper age limit 65 years		20 Years	Out of 20 years' experience, 5 year experience as a Resident Engineer.  Minimum 5 years' experience of planning & execution/ supervision of one Elevated metro viaduct/ 2 lane flyover in urban area.  Experience in planning & execution	

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Position	Tender Condition		
	Minimum Qualification & upper age limit	Minimum Overall Experienc e	Specific Experience of Similar Nature
			having minimum 1500 meter Viaduct length in urban area.  Experience in planning & execution/ supervision of one completed flyover/bridge/Metro having structural steel superstructure of at least 40 meter span.
Structura l design Engineer PC	Graduation in Civil Engineering with post graduate degree in Structural Engineering Upper age limit 70 years	20 year	Out of 20 years' experience, 10 years' experience as a Structural design Engineer.  Having experience in designing/ Proof checking of pre-stressed Elevated metro/ min 2 lane flyover/ ROB/ Major Bridge projects having precast segmental work at least 1500 meter length in urban area.
Structur al design Engineer Steel	Graduation in Civil Engineering with post graduate degree in Structural Engineering Upper age limit 70 years	20 year	Out of 20 years' experience, 10 years' experience as a Structural design Engineer.  Experience of design/ Proof checking of Steel superstructure of Elevated metro viaduct / 2 lane flyover/ ROB/ Major Bridge having steel superstructure viaduct/ ROB of at least 40 meter span.
Quality Control /Quality Assuranc e Engineer	Graduation in Civil Engineering Upper age limit 65 years	15 year	Out of 15 year experience, minimum 5 years' experience as a Quality Control /Quality Assurance Engineer.  Experience of at least 1 completed project of Elevated metro / 2 lane flyover /Bridge costing not less than 100 Crore as a Quality Control / Quality Assurance Engineer
Contract	Graduation in Civil Engineering Upper age limit 70 years	20 year	Out of 20 year experience minimum 10 years' experience as Contract Engineer / Contract Specialist of project.  Experience of at least 1 completed project of elevated metro /Monorail viaduct /flyover/ROB costing not less than 300 Crore as a Contract Engineer / Contract Specialist

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Position	Tender Condition		
	Minimum Qualification & upper age limit	Minimum Overall Experienc e	Specific Experience of Similar Nature
Safety Engineer	Graduation in Civil Engineering OR Diploma in Civil/ Safety Upper age limit 65 years	15 Year	Minimum 5 year experience in Elevated metro viaduct/ 2 lane flyover in urban area as safety Engineer
Geo- Technica l/ Foundati on Engineer	BE civil Upper age limit 65 years	15 Year	Minimum 10 years in Elevated metro/ 2 lane flyover in urban area as geo-technical engineer
Support St ss-1 Quantity surveyor	aff Graduation in Civil Engineering Upper age limit 65 years	15 Years	Minimum 10 years of experience in Quantity survey and should have worked on flyover project in urban area.
SS-2 Transpor tation/Tr affic engineer	B.E. Civil, M. Tech / ME in Transportation / Traffic Engineering Upper age limit 65 years	15 Year	Minimum 5 years' experience in Transportation planning, traffic management, traffic design, highway design of flyover project in urban area.
SS-3 Jr. quantity Surveyo r	BE Civil /DCE  Upper age limit 65 years	10 Years	Min 2 years' experience as a Jr quantity Surveyor flyover / bridge project in urban area.
SS-4 Jr. Quality control Enginee	BE Civil /DCE Upper age limit 65 years	10 Years	Min 2 years' experience as a Jr Quality control Engineer flyover / bridge project in urban area.

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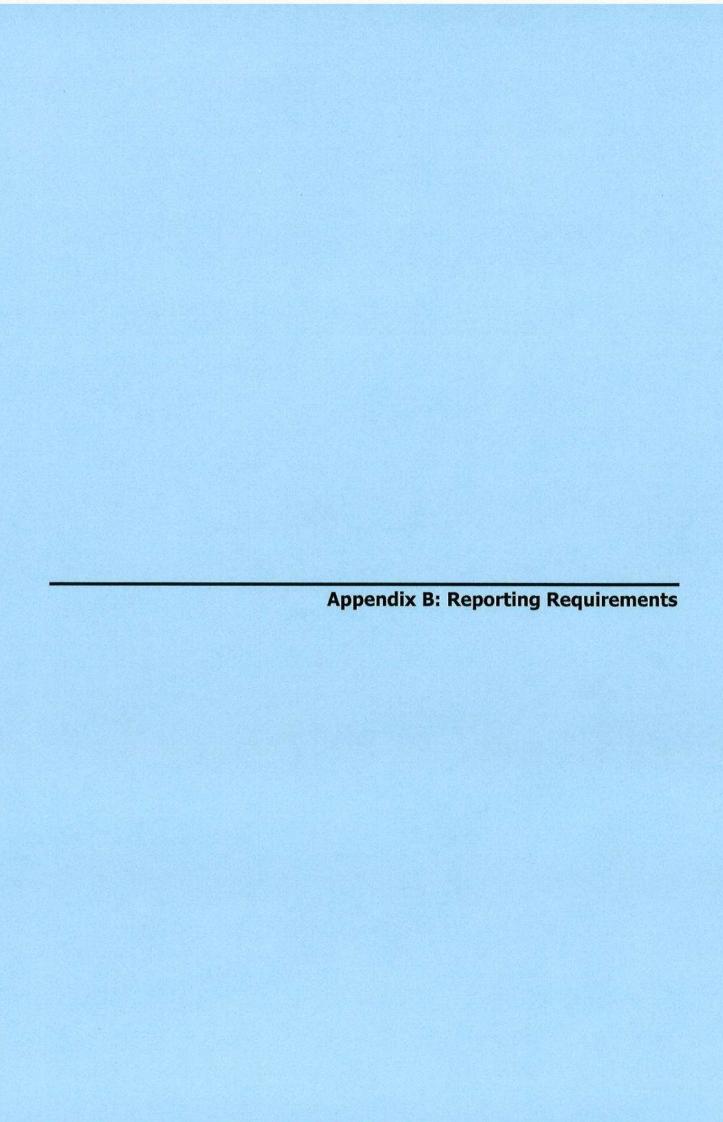
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Position	Tender Condition				
	Minimum Qualification & upper age limit	Minimum Overall Experienc e	Specific Experience of Similar Nature		
r					
SS-5 Surveyo r	BE Civil /DCE  Upper age limit 65  years	10 Years	Min 2 years' experience as Surveyor in flyove / bridge project in urban area.		
SS-6 Lab technici an	BE Civil /DCE Upper age limit 65 years	5 Years	Min 2 years' experience as Lab technician of flyover / bridge project in urban area.		
SS-7 Field Enginee	DCE/ B.E. Civil Upper age limit 65 years	5 Year	Min 2 years' experience as Field Engineer flyover / bridge project in urban area.		
SS- 8 Utility Enginee r	BE Civil Upper age limit 65 years	5 years	Min 2 year experience as Utility Engineer of flyover / bridge project in urban area.		
SS-9 Expert in social develop ment (R&R)	BE Civil	5 years	Min 2 year experience of R& R for urbaroad/flyover project in urban area.		

Any other support staff deployed by consultant shall be minimum graduate and shall be at the cost of consultant.

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# Appendix B Reporting requirements

#### Reports

#### 1. Monthly information System (MIS)

PMC shall submit MIS in approved format before last week of every month. Non-submission of MIS before end of second this will attract penalty as specified.

#### 2. Monthly Progress Reports:

The PM shall, by no later than the eighth working day after the end of each month, prepare a brief progress report summarizing the work undertaken for the preceding month along with **progress photographs**. The report will outline any problems encountered (administrative, technical or financial) and give recommendations on how such problems may be resolved, Brief work progress summaries will be included for ongoing road and bridge works, outlining problems encountered and proposing solutions. The reports shall also record the payment status of all contracts, all claims for costs or time extensions submitted by the contractors, and any actions required of the client and/ or other agencies to facilitate timely works implementation, the reports shall also be submitted in electronic format in addition to 6 nos. hard copies. Non submission of **Monthly Progress Reports** before end of first week of each month will attract as specified

The monthly progress reports shall also include

- Organization chart of contractor as well as PMC staff working on this project
- Deployment of Lab our and machinery chart
- Photographs of work pre, post and during execution
- Physical and financial progress against the approved Bar Chart
- MIS(Management Information system)
- Progress in S Curve
- Minutes of meeting if any
- Inspection and compliance report
- List of Extra item if any cropped during the month
- Abstract of quality control test as per Quality assurance plan giving details of internal and external test with comments

#### 3. Quarterly Progress Reports:

The PMC shall, by no later than the eight working after the end of each quarter, prepare a comprehensive report summarizing all activities under the services of the end of each quarter, and at other times when considered warranted by either the Engineer of the client due to delay of the construction works or due to the occurrence of technical or contractual difficulties, Such reports shall summaries (i) the activities of the Engineer (ii) the progress of the contracts, (iii) all contract variations, (iv) the status of contractor's claims, if any, (v) details and brief descriptions of any technical and contractual p0roblem, being encountered, (vi) details of the contracts as a whole comprising costs incurred, forecast cost and the financial plan (by Bank and MMRDA), (vii) any other relevant information for

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each of the ongoing contracts. The reports shall also be submitted in electronic format in addition to the 6 nos. hard copies.

#### 4. Engineering Reports:

The Engineer shall prepare specific report, required in the event of particular or unforeseen circumstances. Such reports shall be prepared on an 'ad-hoc' basis as requested by the Engineer and shall include on analysis of the engineering matter in question and shall propose possible solutions thereto.

#### 5. Section/Substantial Completion Reports and Project Final Report.

The Engineer shall prepare a comprehensive sectional/substantial completion report for each of the construction contracts, which reaches sectional/ substantial completion of the works by the contractors and before taking over by the client. The reports shall summaries the method of construction the construction supervision performed, problems encountered, solutions undertaken, and recommendations for future projects of a similar nature. The Engineer shall summaries and consolidates in a single Team Final Report the key information from the individual sectional/substantial completion reports.

#### 6. As built drawings:

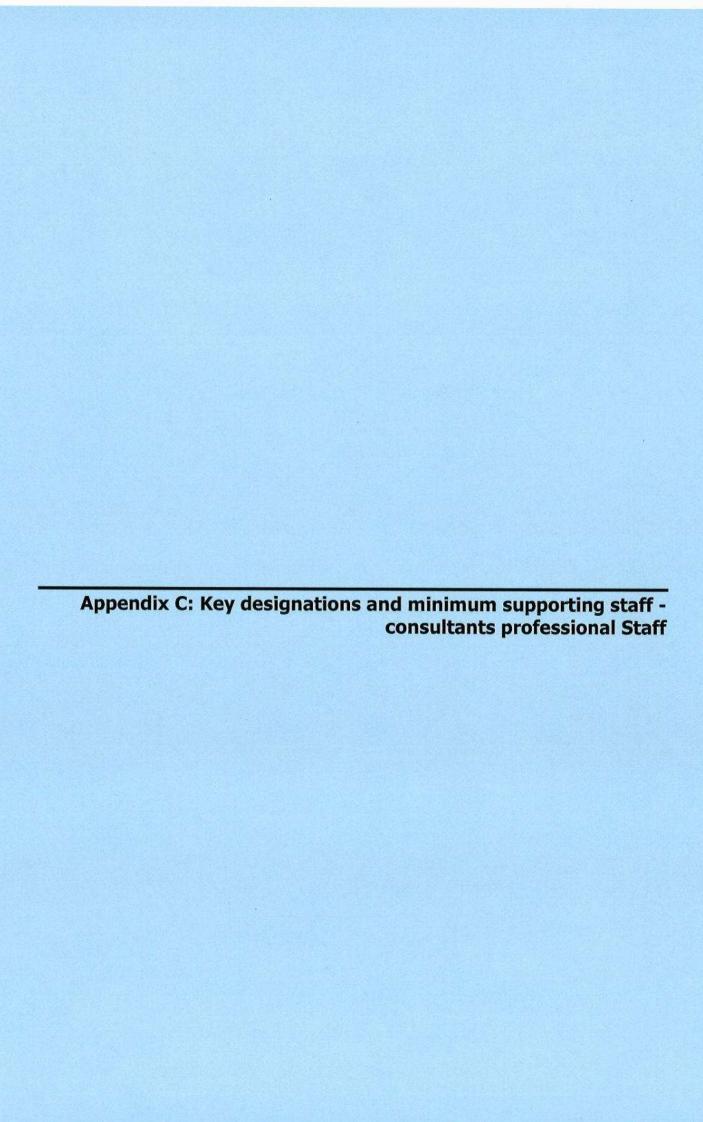
The consultant shall check the 'As built' drawings submitted by the contractor and approve the same. A CD containing approved, as built, drawings shall be submitted to MMRDA for records.

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#### Appendix-C

Refer Clause 4.1 of GCC)

Table -1

#### MINIMUM MANPOWER FOR PROOF CHECKING AND DURING CONSTRUCTION PERIOD

r. No.	Key Personnel	No of persons	No. of Man Months per person per month
Α	Minimum Key profession	al staff	
K-1.	Team Leader	1	1.00
K-2.	Resident Engineer	1	1.00
K-3.	Structural Engineer PC	1	0.50
K-4.	Structural Engineer Steel	1	0.50
K-5.	Quality Control Engineer	1	1.00
K-6.	Contract specialist	1	0.50
K-7.	Safety Engineer	1	1.00
K-8	Geo Technical/Foundation Engineer	1	0.50
В	Support staff		- Lugar
SS-1.	Quantity surveyor	1	1.00
SS-2.	Transportation/ Traffic Engineer	1	1.00
SS-3.	Jr. Quantity surveyor	1	1.00
SS-4.	Jr. Quality Control Engineer	1	1.00
SS-5.	Surveyor	1	1.00
SS-6.	Lab technician	2	1.00
SS-7	Field Engineer	4	1.00
SS-8	Utility Engineer	1	1.00
ss-9	Expert in social development (R&R)	1	1.0

#### MINIMUM KEY MANPOWER FOR DLP

Sr. No.	Key Personnel	No of persons	No. of Man days
1	Resident Engineer	1.00	60
2	Contract specialist	1.00	60
3	Field Engineer	1.00	60

#### Notes:

 The various personnel listed above shall be mobilized by consultant in accordance with construction program accepted by MMRDA. The deployment schedule of each key person shall be as approved by the Employer.

2) Key personnel shall be mobilized for duration necessary for their adequate input towards completion of the tasks assigned to them

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- 3) PMC will be penalized, if qualified Engineer is found not be performing / not present at site /office. A Penalty of Rs. 5000/- per day per person will be recovered from consultant's bill.
- 4) The deployment of the all positions to be mobilized shall be on the basis of the approved deployment schedule to suite the actual requirement as per the approved construction program of the project.
- 5) The consultant may propose and deploy additional manpower/staff necessary for timely execution during the construction period of project with no extra cost to the employer.

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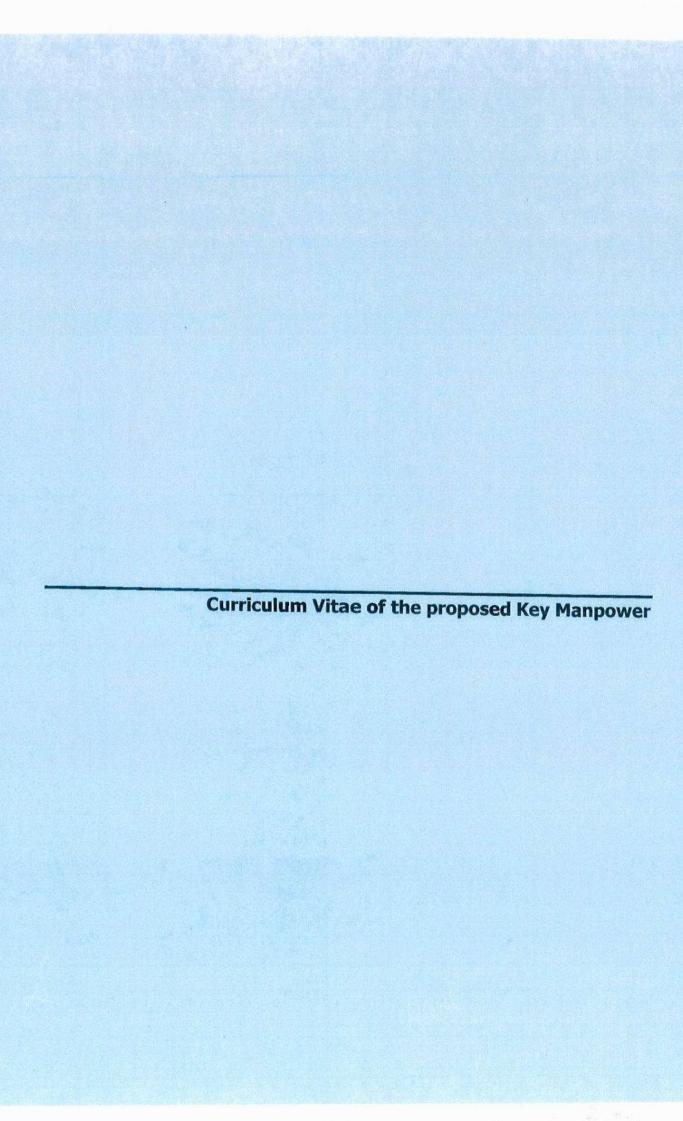
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Engineering Division



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# ANNEXURE I DETAILS OF KEY MANPOWER

	1917		Minimum				
Sr. No.	Key Personnel	No. of Persons	months per Person per month	Name of Person	Qualification	Total Experience	Specific Experience of Similar Nature
A	Minimum Key professional staff	essional sta					
	To be named at the time of bidding	time of bidd	ing				
¥-	Team Leader	-	1.00	P K Jain	Bachelor of Civil Engineering. Bangalore University 1982	37 Veare	37 Voore
K-2	Resident Engineer	-	1.00	Rajesh Jadhav	<ul> <li>M.E. (Construction Management); SPPU Pune; 2017</li> <li>B.E (Civil), Shivaji University Kolhapur, 1993</li> <li>PG Diploma in Business Management; Shivaji University; 1996</li> </ul>	27 Years	27 Years
K-3	Structural Engineer PC	-	0.50	Amit Ralkar	<ul> <li>Master of Engineering (Structural Engineering) in 2001 from Pune University</li> <li>Bachelor of Engineering (Civil) in 1998 from Walchand college of Engineering. Sangli</li> </ul>	21 Years	21 Years
<b>X</b>	Structural Engineer Steel	-	0.50	Devdatta C. Athavale	M. Tech (Structures), Vevesvaraya National Institute of Technology - 2003     B.E. (Civil) - Nagour University - 1998	21 Years	21 Years
K-5	Quality Control Engineer	-	1.00	H T Wagh	Bachelor of Engineering (Civil) 1991 from Pune University	27 Years	27 Years
9-X	Contract Specialist	-	0.50	A S Bokil	B.E (Civil ), University of Pune, 1989	28 Years	28 Years
K-7	Safety Engineer	-	1.00	S N Pote	<ul> <li>Diploma in Civil and Rural Engineering (DCRE) in 1984</li> <li>Graduate in Civil Engineering from J.R.N Rajasthan Vidyapeeth University 2015</li> </ul>	35 Years	35 Years
2 6	Geo-Technical / Foundation - Engineer	-	0.50	Sandeep Bhosle	<ul> <li>Ph. D. (Geotech. Engineering), Mumbai</li> <li>M. Tech. (Geotechnical Engineering) IIT Bombay in Jan 1996</li> <li>B.E in Civil Engineering (VJTI, Bombay University) in May 1994</li> </ul>	23 Years	23 Years
1	Support Start						
	Transportation / Traffic Engineer	~	1.00	Jose Thomas	M. Tech — Transportation Engineering from Calicut University in 1990     B. Tech (Civil) from Kerala University in 1986	30 Years	30 Years
1	103/6012						





1. Proposed Position : K-1: Team Leader		K-1: Team Leader		
2.	Name of Staff	:	P K Jain	
3.	Date of Birth	:	15.12.1957	
4.	Nationality	:	Indian	
5.	Education Qualification	:	Bachelor of Civil Engineering, Bangalore University, 1982	
	Contact Address with Phone and mobile numbers	:	C/o STUP Consultants Pvt. Ltd. Plot No. 22A, Sector 19C, Palm Beach Marg, Vashi, Navi Mumbai 022-4088 7777	
6.	Employment Record	:		
	From May 2012	:	May 1992 — Till date	
	Employer	1:	STUP Consultants P. Ltd.	
	Position held	<b> </b> :	Team Leader	
	From April 2012	:	August 1983 – April 1992	
	Employer	:	Gammon India Ltd.	
	Position held	:	Senior Bridge Engineer	

Project Name: Project management Consultancy Services for Proof checking, construction supervision, Quality Assurance, Quality Control & Quality Audit for the work of "Construction of 6 Lane two way flyover crossing 7 Tombs Junction (Shaikpet), Film Nagar road Junction, O.U. Colony Junction and Whisper Valley Junction under Engineering Procurement and Construction (EPC)/Turnkey - Basis

Period: August 2018 - On going

Client: Greater Hyderabad Municipal Corporation, Hyderabad

Position Held: Project Co-ordinator

Project Description: The project work comprises of construction of 6 Lane two way flyover crossing 7 Tombs Junction (Shaikpet), Film Nagar road Junction, O.U. Colony Junction and Whisper Valley Junction. The details of the project are as under:-

Project Length: 1737.78m Carriageway Width: 16.6 m

Bridge/Viaduct Length: 1340 m excluding Obligatory Span Length of 280 m

Length of solid approaches: 117.78 m approx.

Design speed: 80 KMPH

Number of Piers: 53 No's. (As per Agreement) Number of Abutments 2 No's. (As per Agreement)

Type of Foundation: Open Foundation

Project Name: Authority's Engineer for Construction and Development of 6 - Lane Hindon Elevated Road at Ghaziabad, U.P., India on T.O.D. (Transit Oriented Development) basis on Engineering Procurement and Construction (EPC) contract mode

Period: January 2015 - July 2018

Client: Ghaziabad Development Authority

Position Held: Team Leader

MUMP

Project Description: Ghaziabad Development Authority (GDA) has undertaken the Construction and

Development of 6 - Lane Hindon Elevated Road at Ghaziabad, U.P., India on T.O.D.(Transit Oriented Development) basis on (EPC) contract mode. The length of the corridor is 10.300 Kms. & the estimated project cost is Rs. 916.92 Crores.

Project Length: 10.3 Km

Main Carriageway Width (Six lane): 24.5 m (2 x 11 + 2 x 0.5 + 1.5)

Elevated Viaduct Length: 9.010 Km (Pre-cast Segmental Construction)

No of Spans: 291 nos. (226 main alignment, 36 nos. at kanawani Ramps, 29 nos. at '0' Chainage Ramps)

Design Speed: 100/80 kmph

Number of Segments: 3497 nos. of (24.5 m wide)

The elevated corridor has the following span arrangements:-

► LHS & RHS: 181 x 40.48 + 2 x 46.00 + 33 x 37.86 + 3 x 27.38 + 2 x 30.00 + 1 x 32.62 + ROB - 1x 27.649 + 1 x 50.047 + 1 x 50.102 + 1 x 27.693 m

Ramp A (At Zero Chainage): 7 x 31.300 + 3 x 31.000 + 1 x 31.008 + 1 x 31.023 + 1 x 31.173 + 1 x 31.400 + 1 x 31.639 + 1 x 30.980 m

Ramp B (At Zero Chainage): 5 x 31.000 + 1 x 30.926 + 1 x 30.679 + 1 x 30.634 + 1 x 30.865 + 1 x 30.999 + 1 x 31.018

Ramp A (At Kanawani): 12 x 31.00 + 6 x 20.659 + 3 x 27.00 m

Ramp B (At Kanawani): 10 x 31.00 + 3 x 27.00 m

➤ ROB (At Chainage 7+600): 1 x 27.649 + 1 x 50.047 + 1 x 50.102 + 1 x 27.693 m.

Maximum Span Length: 50.102m (Steel Composite) / 46.00m (PSC)

As Team Leader, responsible for assist the employer in proper monitoring / progress of works and implementation of the maintenance programme. Scrutinizing Contractors' detailed work programme and suggesting modifications. Approve the construction maintenance, erection and operation methods of contractor, Interpretation of the Technical Specifications and Contract Documents. Regular inspection of the contractor's equipment, plant, machinery and installations. Approve materials and ensure that the quality of the works in accordance with the contractual specifications. Also responsible for reviewing and approving the construction zone safety plans and traffic management and safety plans prepared by the Contractor and ensure their strict compliance as per the relevant guidelines, Reviewing all temporary works / staging along with the structural / bridge engineer from the safety point of view; Guide the field supervision teams and the contractor's site officers in complying with adequate construction safety standards in worksites, plant sites and quarry locations.

Project Name: Consultancy Services for Detailed Engineering Design and PMC for construction of Eastern Freeway section from Panjarpole to Chembur Mankhurd Link Road Km.0/000 to 2/500 Period: October 2009 - December 2014

Client: MMRDA

Position Held: Team Leader / Resident Engineer (Bridges)

Project Description: MMRDA has undertaken the development of the Eastern Freeway which is 16.9 km long considering the present situation, future traffic and other transportation demands. Thousands of commuters travelling from South Mumbai towards Thane - Nashik and Panvel - Pune will not only be able to save on travel time but also save fuel on completion of the project. This will also help clear traffic congestion in the Island city.

The Project is divided in 3 parts -

1. Part-I: Eastern Freeway - Orange Gate on P. D'Mello road to Anik Junction (Elevated corridor)

2. Part-II: Anik-Panjarpole Link Road (APLR)

3. Part-III: Panjarpole - Ghatkopar Link Road (PGLR)

The entirely elevated Panjarpole - Ghatkopar Link Road is the third part of the Eastern Freeway Project. It starts from Panjarpole Junction on the Sion - Panvel Link Road and culminates at Chembur - Mankhurd Link Road via Tukaram Patil Marg. This link road is 3 km long, 17.2 m. Wide and will provide 2+2 lanes

Salient Features of the Project	As per Original Scope	Additional Scope during the course of the Project works		
Length of Main carriageway	<u>1721.0 m</u>	335.0 m	1907 Sugaran Sa	
Length of Structural Ramp	793.0 m		S S PALLE A VAG S	
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Length of Solid Approach

112.0 m (At Main Carriageway): 516.0 m (At Ramp portions)

165.0 m (At Main carriageway) 1500.0 m (At Slip Road & Service road

The Types of Foundation for the project is 119 nos. pile foundations & 12 nos. open foundations. The type of sub structure is RCC Solid pier and Pier cap with M60 grade of concrete. The types of superstructure is Segmental construction (M60) for a length of 1510 m; T girder (M60) for a length of 981 m; & Steel composite superstructure for a length of 198 m & cast in situ integral super structure for a length of 160 m

As Team Leader / Resident Engineer (Bridges), responsible for assist the employer in proper monitoring / progress of works and implementation of the maintenance programme. Scrutinizing Contractors' detailed work programme and suggesting modifications. Approve the construction maintenance, erection and operation methods of contractor, Interpretation of the Technical Specifications and Contract Documents. Regular inspection of the contractor's equipment, plant, machinery and installations. Approve materials and ensure that the quality of the works in accordance with the contractual specifications. Also responsible for reviewing and approving the construction zone safety plans and traffic management and safety plans prepared by the Contractor and ensure their strict compliance as per the relevant guidelines, Reviewing all temporary works / staging along with the structural / bridge engineer from the safety point of view; Guide the field supervision teams and the contractor's site officers in complying with adequate construction safety standards in worksites, plant sites and quarry locations.

Project Name: Project Management services for 4-Laning of Lebad-Jaora Section of SH- 31 between Ch. 0.00 to Ch. 125 (project length: 125 kms.) on BOT Basis in the State of Madhya Pradesh

Period: November 2007- September 2009 Client: Essel Infraprojects / MPRDC Position Held: Resident Engineer

**Project Description:** The Project aims at developing the existing two lane section of Lebad-Ratlam-Jaora of NH-79 (earlier known as Mhow-Neemuch Road and classified as SH-31 till 2000) from km 0+000, to Km 125+000 to four lanes divided carriageway with partially access control including strengthening of existing carriageway on BOT basis. It traverse in the northern direction through the towns of Sadalpur, Nagda, Badnawar, Satrunda, Ratlam through two districts viz. Dhar and Ratlam and ends at Jaora (Km 125+000). As per Schedule B of Concession Document, three bypasses have been proposed at Ratlam "Hasanpalya Bypass" and Namli Bypass.

There are 8 major intersections, 3 railway level crossings, 2 major bridges and 34 minor bridges. Both the major bridges and 21 minor bridges have been recommended for reconstruction alongwith 3 new ROBs, 6 underpasses and 46 pipe culverts.

As Resident Engineer, responsibilities include assisting the Team Leader in administering the civil contracts, approve materials and ensure that the quality of the works in accordance with contractual specification. Approve the contractors' works programme and the sources of materials. Approval of the work methodology submitted by the contractor. Issue monthly progress report & quarterly progress report to the Client. Inspection of the works during the construction concerning safety, quality & progress of work. Maintenance of a day-by day project diary, which shall record all events pertaining to the administration of the contract. Also responsible for assisting the Team Leader in reviewing and approving the construction zone safety plans and traffic management and safety plans prepared by the Contractor and ensure their strict compliance as per the relevant guidelines, Reviewing all temporary works / staging along with the structural / bridge engineer from the safety point of view; Guide the field supervision teams and the contractor's site officers in complying with adequate construction safety standards in worksites, plant sites and quarry locations.

Project Name: Preparation of DPR, Detailed Design & PMC for the construction of Underpass along West of Chord Road at the Intersection of Magadi Road - Chord Road, Bangalore

Period: May 2006 - October 2007

Client: Bangalore Development Authority

Position: Team Leader

MUMIN

Chief Engineer



Project Description: The Site is located in the western part of Bangalore and is at the intersection of Chord Road, with Magadi Road. Magadi road and Chord Road junction is a Four-legged skew type intersection. The proposed underpass is a 4 lane divided two-way underpass along Chord Road and 2 lane one-way flyover with an upramp from Vijayanagar towards Majestic. The project details are as follows:

a) Total Width

For Flyover - 8.5 m

For Underpass - 18.8 m (Open portion)

22.0 m (Box portion)

b) Vertical clearance

5.5 m

c) Minimum width of Footpath

2.0 m

d) Length of Flyover

451.904 m - 507.316 m

e) Length of Underpass
f) Length of Underpass Box

138 m

f) Length of Underpass Box g) Width of Median

0.8 m (Open portion)

4.0 m (Box portion)

The project involve constructing a Pre-cast pre-stressed concrete girder, Cast-in- situ Diaphragm and cast-in-situ deck slab. The flyover approaches will have reinforced earth retaining walls (RE Panels) towards majestic and RCC walls towards Vijayanagar. Underpass open portion retaining walls shall be of RCC type

As Team Leader, responsible for assist the employer in proper monitoring / progress of works and implementation of the maintenance programme. Scrutinizing Contractors' detailed work programme and suggesting modifications. Approve the construction maintenance, erection and operation methods of contractor, interpretation of the Technical Specifications and Contract Documents. Regular inspection of the contractor's equipment, plant, machinery and installations. Approve materials and ensure that the quality of the works in accordance with the contractual specifications. Also responsible for reviewing and approving the construction zone safety plans and traffic management and safety plans prepared by the Contractor and ensure their strict compliance as per the relevant guidelines, Reviewing all temporary works / staging along with the structural / bridge engineer from the safety point of view; Guide the field supervision teams and the contractor's site officers in complying with adequate construction safety standards in worksites, plant sites and quarry locations.

Project: Proof checking of design & Project Management Consultancy Services for Interchange at the Intersection at Airport Road -IRR, Bangalore

Period: June 2003 - April 2006

**Client: Bangalore Development Authority** 

Position: Team Leader

MUN

**Project Description:** This 4 lane main flyover is along the Intermediate Ring Road and signal free junction is made possible by providing loops for free right turns. The project period is 15 months and cost of the project is Rs. 36 crores. The length of the main flyover is 435m with a width of 15.8m and total length of the loops is 1059m with a width of 8.0 m. The superstructure of flyover and loops are made of pre-stressed PSC Box Girder (Segmental construction). Approach ramps of the flyover are provided with reinforced earth retaining walls. Grade level bridges are proposed across the drain for service roads.

As Team Leader, responsible for assist the employer in proper monitoring / progress of works and implementation of the maintenance programme. Scrutinizing Contractors' detailed work programme and suggesting modifications. Approve the construction maintenance, erection and operation methods of contractor, Interpretation of the Technical Specifications and Contract Documents. Regular inspection of the contractor's equipment, plant, machinery and installations. Approve materials and ensure that the quality of the works in accordance with the contractual specifications. Also responsible for reviewing and approving the construction zone safety plans and traffic management and safety plans prepared by the Contractor and ensure their strict compliance as per the relevant guidelines, Reviewing all temporary works / staging along with the structural / bridge engineer from the safety point of view; Guide the field supervision teams and the contractor's site officers in complying with adequate construction safety standards in worksites, plant sites and quarry locations.

Project: Construction Supervision for 4-laning and Strengthening of existing 2-lane of Ratanpur to Himmatnagar Section of NH-8 (Package III) from Km 388.400 to Km 443.000 in Gujarat. Length – 54.600 Km.

Chief Engineer
Engineering Division
M.M.R.D.A.

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Period: April 2001 -- May 2003

Client: National Highways Authority of India

Position: Resident Engineer

Description: The Ministry of Road Transport & Highways, Govt. of India, as a part of National Highway Development Project, proposed to widen and strengthen the corridor connecting Delhi Mumbai, which forms a part of Golden Quadrilateral National Highway network connecting the four metropolitan cities in India. the present construction supervision package which falls on NH-8 in Gujarat is out of Domestic funded project. The assignment has been named as Consultancy Services for Construction Supervision of works for four laning and strengthening of the existing two lane stretches from Ratanpur to Gandhinagar (km 388.4 to km 495.00) on NH-8 in the state of Gujarat – Construction Supervision Package No. GQ/GM(PI)-III/SC/UG-I for contract packages UG/3 & UG/4 under domestic funding project.

As Resident Engineer, responsibilities include assisting the Team Leader in administering the civil contracts, approve materials and ensure that the quality of the works in accordance with contractual specification. Approve the contractors' works programme and the sources of materials. Approval of the work methodology submitted by the contractor. Issue monthly progress report & quarterly progress report to the Client. Inspection of the works during the construction concerning safety, quality & progress of work. Maintenance of a day-by day project diary, which shall record all events pertaining to the administration of the contract. Also responsible for assisting the Team Leader in reviewing and approving the construction zone safety plans and traffic management and safety plans prepared by the Contractor and ensure their strict compliance as per the relevant guidelines, Reviewing all temporary works / staging along with the structural / bridge engineer from the safety point of view; Guide the field supervision teams and the contractor's site officers in complying with adequate construction safety standards in worksites, plant sites and quarry locations.

Project: Construction supervision of four laning of National Highway NH-8 from Gurgaon to Haryana / Rajasthan border - Asian Development Bank funded. (Total Length: 47 Kms.)

Period: Nov 1997 - March 2001

Client: National Highways Authority of India

**Position: Resident Engineer** 

**Description:** The concerned National Highway (NH) - 8 starts from Gurgaon and extends up to Kotputli at the border of Haryana and Rajasthan (47 km. in length). The project involves widening and four laning of the existing National Highway and includes use of geotextiles for reinforcing high embankments.

As Resident Engineer, responsibilities include assisting the Team Leader in administering the civil contracts, approve materials and ensure that the quality of the works in accordance with contractual specification. Approve the contractors' works programme and the sources of materials. Approval of the work methodology submitted by the contractor. Issue monthly progress report & quarterly progress report to the Client. Inspection of the works during the construction concerning safety, quality & progress of work. Maintenance of a day-by day project diary, which shall record all events pertaining to the administration of the contract. Also responsible for assisting the Team Leader in reviewing and approving the construction zone safety plans and traffic management and safety plans prepared by the Contractor and ensure their strict compliance as per the relevant guidelines, Reviewing all temporary works / staging along with the structural / bridge engineer from the safety point of view; Guide the field supervision teams and the contractor's site officers in complying with adequate construction safety standards in worksites, plant sites and quarry locations.

Project: Construction supervision of four laning and strengthening of National Highway-1 in Haryana (WB aided) (Total Length: 79.50 Kms.)

Period: July 1994 - Oct 1997

Client: Ministry of Surface Transport, India, PWD Haryana

Position: Resident Engineer

Description: Construction supervision for the proposed four laning of 79.5 kms. Of NH-1 in the state of

Haryana. The Project cost was Rs. 350 Crores

As Resident Engineer, responsibilities include assisting the Team Leader in administering the civil contracts, approve materials and ensure that the quality of the works in accordance with contractual specification. Approve the contractors' works programme and the sources of materials. Approval of the work methodology submitted by the contractor. Issue monthly progress report & quarterly progress report to the Client. Inspection of the works during the construction concerning safety, quality & progress of work.

Chief Engineer Engineering Division M.M.R.D.A.

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Maintenance of a day-by day project diary, which shall record all events pertaining to the administration of the contract.

Project: 11 Bridges including barrage at Andhra Pradesh - World Bank Funded

Period: May 1992 – June 1994 Position Held: Bridge Engineer

**Description:** The World Bank aided project includes detailed survey, geotechnical investigations, detail engineering, preparation of technical specifications, tender documents and construction supervision of the bridges located of various locations in Andhra Pradesh. Review Contractors Quality Assurance & Control Systems.

As Bridge Engineer, has been responsible for the construction supervision of the construction activities on the 11 bridges, scheduling of all field, design and documentation activities, Time schedule and management of Team's resources. Preparation of reports, documents and drawings. Also responsible for co-ordination between various acting agencies involved in the project.

Project: Deo Aqueduct Project at Baroda, Gujarat.

Period: Feb 1991 - April 1992 Employer: Gammon India Ltd.

As Senior Engineer, responsible for construction activities, and carrying out Quantity Surveying and estimation of quantities.

Project: Rall cum Road Bridge, Assam - 2.5 Km long

Period: March 1990 - Jan 1991 Employer: Gammon India Ltd.

The project involves Sinking of well upto 72 m depth and plugging of wells. Bridge (Rail cum Road)

As a Bridge Engineer was responsible for checking reinforcement and foundation layout, checking and assisting in approving the mix designs, quality control of concrete, supervision of placement of concrete and shuttering. Expertise also includes, design review, review of geo-technical and material investigation reports, project management and construction supervision involving checking and controlling mix design, checking of formwork, laying/ compacting/ curing operations for concrete, preparation of progress reports and checking of work as per MORTH / IRC standards and contract specifications. Specialization in bridge foundations, River Training work, Cofferdams, Floating Caissons and Well Sinking including Pneumatic Sinking etc.

Project: Teesta Bridge, West Bengal.

Period: 1987 - 1990

Employer: Gammon India Ltd.

Description of duties:

This bridge is an arch bridge with open foundations.

As a Field Engineer (Bridges), has been responsible for the construction supervision of the bridge, including superstructure and approaches to the bridge

Project: Mahatma Gandhi Setu, Patna, Bihar.

Period: 1983 - 1987

Employer: Gammon India Ltd.

Description of duties:

Quality control, concrete, reinforcement, stressing of cantilever span and pier head stability cables. Bridge is cantilever type, 4 lane, well foundation, superstructure Box type (precast and cast-in-situ with prestress). Bridge length is 5575 metrs.

Languages:

Language

Speaking

Reading

Writing

English

Excellent

Excellent

Excellent

Hindi

VIMUN

Excellent

Excellent

Excellent



Certification:

- I am willing to work on the project and I will be available for entire duration of the project assignment and I will not engage himself in any other assignment during the currency of his assignment on the project.
- 2. I, the undersigned, certify that to the best of my knowledge and belief, this bio-data correctly describes me, my qualifications and my experience.

Signature of the Candidate:	<del></del>	
Place :	Navi Mumbai	
Date :	24.11.2020	
Signature of the Authorised Representative of the firm	And	
Place :	Navi Mumbat	
Date :	24.11,2020	







# BANGALORE UNIVERSITY

certifies that
Pradeep Lumar Jain
has been duly admitted to the Degree of
Backelor of Engineering
in recognition of the fulfilment of requirements
for the said degree as follows
Year of Examination Lugust 1982  Subjects Civil Engineering  Class Jurist
Subjects Civil Engineering
Elass Jerist
Given under the seal of the University

Bangalore



Thate Van Jas.

19th March 1984





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PRADEEP KUMAR JAIN

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FRIERY SIGNATURY

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## STUP Consultants Pvt. Ltd.



Sustainable Design of Infrastructure & Real Estate through Innovation

#### TO WHOMSOEVER IT MAY CONCERN

This is to certify that Mr. P K Jain is working with STUP Consultants Pvt. Ltd. since May 1992 to till date on the following assignments.

Name of the Assignment	Period	Position Held
Authority's Engineer for Construction and Development of 6 — Lane Hindon Elevated Road at Ghaziabad, U.P., India on T.O.D. (Transit Oriented Development) basis on Engineering Procurement and Construction (EPC) contract mode Client: Ghaziabad Development Authority	January 2015 In Progress	Team Leader
Consultancy Services for Detailed Engineering Design and PMC for construction of Eastern Freeway section from Panjarpole to Chembur Mankhurd Link Road Km.0/000 to 2/500  Client: MMRDA	October 2009 December 2014	Team Leader
Project Management Consultant for the 4-Lane Bhosari Flyover on Pune-Nashik Road (NH-50)  Client: Pimpri Chinchwad Municipal Corporation	August 2008 September 2009	Resident Engineer (Structures)
Preparation of DPR, Detailed Design & Project Management Consultancy Services for the construction of Underpass along West of Chord Road at the Intersection of Magadi Road - Chord Road, Bangalore  Client: Bangalore Development Authority	May 2006 July 2008	Senior Resident Engineer
Proof checking of design & Project Management Consultancy Services for Interchange at the Intersection at Airport Road -IRR, Bangalore Client: Bangalore Development Authority	June 2003 April 2006	Senior Resident Engineer
Design and Construction Supervision of NH-17B to Four Lane Standards from Verna Junction on NH-17 to Mormugao Port in Goa Client: National Highways Authority of India	April 2001 May 2003	Resident Engineer
Construction supervision of four laning of National Highway NH-8 from Gurgaon to Haryana / Rajasthan border - Asian Development Bank funded (Length: 47 Kms.)  Client: National Highways Authority of India	November 1997 March 2001	Resident Engineer
Construction supervision of four laning and strengthening of National Highway-1 in Haryana (WB aided)  Client: Ministry of Surface Transport, India, PWD Haryana	July 1994 October 1997	Asstt. Resident Engineer
Consultancy services for the construction of 11 Bridges including barrage at Andhra Pradesh - World Bank Funded	May 1992 June 1994	Senior Bridge Engineer

For STUP Consultants Pvt. Ltd

SECTOR-19-C

A Doshi Executive Vice Preside

Date: 11/04/2018

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Tel: 022-40887777, 41224328. Fax: 022-27836240 = mail: payimumbal@stupmall.com

DNV-GL

Regd. Office: 1004 & 5, Raheja Chambers, 213, Nariman Point, Mumbai-400 021, India. CIN: U74999MH1963PTC012649 Tel.: 022-40868686. Fax: 022-22048424. E-mail: mumbai@stupmail.com www.stupco.com



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1.	Proposed Position		K-2: Resident Engineer
2.	Name of Staff	:	Rajesh Jadhav
3.	Date of Birth	•	17 March, 1973
4.	Nationality	:	Indian
5.	Education Qualification	:	<ul> <li>M.E. (Construction Management); SPPU Pune; 2017</li> <li>B.E (Civil), Shivaji University Kolhapur, 1993</li> <li>PG Diploma in Business Management; Shivaji University; 1996</li> </ul>
	Contact Address with Phone and mobile numbers	:	C/o STUP Consultants Pvt. Ltd. Plot No. 22A, Sector 19C, Palm Beach Marg, Vashi, Navi Mumbai 022-40887777
6.	Membership of Professional Societies	:	Member; Institute of Engineers of India-(FIE), Member No. F 121780-8 (Chartered Engineer) Member; Indian Roads Congress-Member No.eLM-100509 Member; Indian Institution of Bridge Engineers, Member No. LF -1865
7.	Employment Record	:	
	From December 2018	:	Till Date
	Employer	:	Louis Berger Consulting Private Limited
	Position held	:	Resident Engineer
	From March 2016		December 2018
	Employer	:	Shrikhande Consultant Pvt. Ltd Mumbai
	Position held	:	Bridge / Structural Engineer
	From March 2004	1	March 2016
	Employer	:	-053)
	Position held		Resident Engineer cum Structural/bridge Specialist / Senio Bridge Structural Engineer
	From February 2003		: February 2004
	Employer		: J Kumar Infra Projects Ltd Mumbai
	Position held		: Senior Bridge Construction Engineer cum Resident Engineer.
HIS	96 8 8		A 1997 A
THO	From November 1997		: January 2003

Chief Eagineer Engineering Division M.M.R.D.A.

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Employer	:	Ameya Developers Pvt. Ltd. Pune	
Position held	ļ:	Senior Bridge Engineer	
From December 1995	1:	October 1997	
Employer	:	G D Chavan & Associates	
Position held	:	Assistant Engineer	
From November 1994	:	November 1995	-
Employer	:	Maharashtra State Electricity Board	
Position held	<b> </b> :	Junior Engineer	
From July 1993	1:	November 1994	
Employer	:	S D Lokhande	
Position held		Junior Engineer	
List of projects on which	46.0	Domestic de la constantina della constantina del	

Period from: December 2018	Period to: Till Date	
Name of Employer	Louis Berger Consulting Private Limited	
Name of the Project	Mumbai Coastal Road Project (South) Package I: Design and Construction Contract for Road, Bridges, Interchanges, Including Reclamation and Associated Works (Priyadarshini Park to Baroda Palace	
Client for the project	Municipal Corporation of Greater Mumbai	
Project Description	Length: 3.820 Kms. (8-lane); Project Cost: 3505.00 Crores Structures (Interchanges (3 lane) - 8.0 Km, Main Bridge (8 lane) - 1.40 Km	
Designation / Position held in Project	Resident Engineer	
Duties and responsibility of key-personnel in the project and the project related such as Reclamation, Seawall, Interchanges, Bridge, Highway, Drainage, project		

Period from: March 2016	Period to: December 2018			
Name of Employer	Shrikhande Consultant Pvt Ltd			
Name of the Project	Authority's Engineer For Construction of major bridges/ROB on NH-66 (old no. NH-17) from Ch.161.00 to 450.00			
Client for the project	MORTH			
Project Description	Cumulative Length of the Bridges: 1168.00 m (Maximum Individual Span of 43.00m) & (Maximum Length of Individual Bridge: 247.40m); Project Cost 145.00 Crores			
Designation / Position field in Project	Bridge / Structural Engineer			

Chief Engineer
Engineering Division
M.M.R.D.A.

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Duties and responsibility of keypersonnel in the project	As <b>Bridge / Structural Engineer</b> , he was responsible for construction of bridges & ROB in compliance with design provisions; Review of engineering design and drawings; Execution of all works as per the specifications and standards; Maintain quality control during execution of works; Monitoring of Project Schedule; To assess the adequacy of contractor's equipment for construction; To undertake project site visits and guide, supervise, coordinate and monitor the execution of work; Scrutiny & Approval of Working Drawings of Structures. Responsible for assisting TL in day-to-day work as well as policy matters, preparation of variation statements, MRP and approval of centering-shuttering, checking placement of reinforcement, BBS, stressing, grouting, measurement of work done, Scrutiny of COS proposals, etc.
--	--

Period from: December 2014	Period to: March 2016
Name of Employer	Consulting Engineering Services (India) Private Limited, (Jacobs - CES)
Name of the Project	Project Management Consultancy for Design and Construction of Eastern Freeway from Museum to Anik Junction (with Segmental technology superstructure).
Client for the project	MMRDA, Mumbai
Project Description	(Maximum Individual Span of 35.80m) & (Maximum Length of individual Bridge: 9210.00m); Lane: 4-lane; Project cost: INR 548.00 crores.
Designation / Position held in Project	Senior Bridge Engineer (Equivalent to Resident Engineer (Bridges)
Duties and responsibility of key-personnel in the project	As Senior Bridge Engineer, Responsible for proof checking of bridges /other structure; Reviewing the contractor's work programme, construction methodology, superintendence and personnel etc.; check and approve the setting out of the works; Checking bar bending schedule and form work for structures; checking cement concrete mixes to be used; Construction Supervision of bridge works; Verification of lines and levels, inspection of works, acceptance and rejection of the completed works; supervision of laying, compaction and curing of concrete including checking slump and compressive strength; Ensuring quality control of works during various phases of the execution; Monitoring progress of work using relating to innovative structural designs Modern Project Management Techniques viz. CPM / PERT; Checking of measurement of works completed; the activity includes the supervision of the execution of the flyover with segmental technology superstructure as per approved drawings.

Period from: November 2011	Period to: November 2014			
Name of Employer	Consulting Engineering Services (India) Private Limited, (Jacobs - CES)			
Name of the Project	Project Management Consultancy for four laning of Panvel Indapur Section of NH 17 from km 0+000 to 84+600 in the state of Maharashtra under NHDP Phase-III on BOT Basis			
Client for the project	National Highways Authority of India (NHAI)			
Project Description	Project Length: 84.60 km; Lane: 4-lane; Cumulative Length of the Bridges: 2367.00 m (Maximum Individual Span of 42.50m) & (Maximum Length of individual Bridge: 1120.00m); Project cost: INR 950 crore.			
Designation / Position held in Project	Resident Engineer cum Structural/bridge Specialist			
Duties and responsibility of keypersonnel in the project	As Resident Engineer cum Structural/bridge Specialist, Responsible for proof checking of bridges /other structure; Reviewing the contractors work programme, construction methodology, superintendence and personnel etc.; check and approve the setting out of the works; Checking bar bending schedule and form work for structures; checking cement concrete mixes to be used; Construction Supervision of bridge works; Verification of lines and levels, inspection of works, acceptance			

Chief Engineer
Engineering Division
M. M.R.D.A.

Page 3 of 9

INIMUME

and rejection of the completed works; supervision of layin of concrete including checking slump and compressive control of works during various phases of the execution work using relating to innovative structural designs Mod Techniques viz. CPM / PERT; Checking of measurement work undertaken as per technical specification and contractual agreement and adopting modern construction of COS proposals.	strength; Ensuring quality n; Monitoring progress of dern Project Management t of works completed. The quidelines stipulated in
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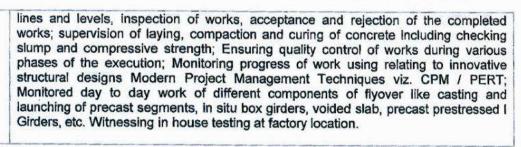
Period from: April 2009	Period to: November 2011	
Name of Employer	Consulting Engineering Services (India) Private Limited, (Jacobs - CES)	
Name of the Project	Project Management Consultancy for the Project of Construction of Flyover / Elevated Road opposite to Panvel Bus Depot on Old Mumbai Pune Highway (NH 4) (Precast Segmental with incremental launching method)	
Client for the project	MSRDC	
Project Description	Lane: 2-lane (divided); Cumulative Length of the Bridges: 2382.00 m (Maximum Individual Span of 40.00m) & (Maximum Length of Individual Bridge: 1508.00m); Project cost: INR 144 crore.	
Designation / Position held in Project	Senior Bridge Engineer (Equivalent to Resident Engineer (Bridges)	
Duties and responsibility of keypersonnel in the project	As Senior Bridge Engineer, Responsible for proof checking of bridges /other structure; Reviewing the contractors work programme, construction methodology, superintendence and personnel etc.; check and approve the setting out of the works; Checking bar bending schedule and form work for structures; checking cement concrete mixes to be used; Construction Supervision of bridge works; Verification of lines and levels, inspection of works, acceptance and rejection of the completed works; supervision of laying, compaction and curing of concrete including checking slump and compressive strength; Ensuring quality control of works during various phases of the execution; Monitoring progress of work using relating to innovative structural designs Modern Project Management Techniques viz. CPM / PERT; Checking of measurement of works completed; the activity includes the supervision of the execution of the flyover with segmental technology superstructure as per approved drawings	

Period from: December 2006	Period to: March 2009		
Name of Employer	Consulting Engineering Services (India) Private Limited, (Jacobs - CES)		
Name of the Project	Project Management Consultancy for the Project of Construction of Interchange at NH-7 and ROB across Central railway in MIHAN Project Area at NAGPUR (Precast Segmental, PSC In Situ Box Girder, Cast in situ voided slab)		
Client for the project MADC			
Project Description	Lane: 4-lane; (Maximum Individual Span of 36.40m) & (Maximum Length of Individual Bridge: 2409.00m); Project cost: INR 65.60 crore.		
Designation / Position held in Project	Senior Bridge Engineer (Equivalent to Resident Engineer (Bridges)		
Duties and responsibility of key-personnel in the project	As Senior Bridge Engineer, Responsible for proof checking of bridges /other structure; Reviewing the contractors work programme, construction methodology, superintendence and personnel etc.; check and approve the setting out of the works; Checking bar bending schedule and form work for structures; checking cement concrete mixes to be used; Construction Supervision of bridge works. Verification of		
1011. 887777 (2)	concrete mixes to be used; Construction Supervision of bridge works; Verification		

Chief Engineer
Engineering Division
M.M.R.D.A.

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VIMUN



Period from: October 2005	Period to: December 2006
Name of Employer	Consulting Engineering Services (India) Private Limited, (Jacobs - CES)
Name of the Project Management Consultancy for the Improvement to Nagpur Ad Sinner- Ghoti- Mumbai road to National Highway Standard road (P. Karanja Malegaon Section	
Client for the project	MSRDC
Project Description	Project Length: 66 km; Lane: 2-lane; Project cost: INR 64.00 crore.  Cumulative Length of the Bridges: 134.00 m (Maximum Individual Span of 8.00m) & (Maximum Length of Individual Bridge: 60.00m);
Designation / Position held in Project	Senior Bridge Engineer (Equivalent to Resident Engineer (Bridges)
Duties and responsibility of key-personnel in the project	As Senior Bridge Engineer, Responsible for proof checking & designs of bridges /other structure; Reviewing the contractors work programme, construction methodology, superintendence and personnel etc.; check and approve the setting out of the works; Checking bar bending schedule and form work for structures; checking cement concrete mixes to be used; Construction Supervision of bridge works; Verification of lines and levels, inspection of works, acceptance and rejection of the completed works; supervision of laying, compaction and curing of concrete including checking slump and compressive strength; Ensuring quality control of works during various phases of the execution; Monitoring progress of work using relating to innovative structural designs Modern Project Management Techniques; Inspection and approvals of various activities for construction of CD works, Minor and Major Bridges. Monitoring of the progress of work; Providing assistance to the Team Leader.

Period from: March 2004	Period to: October 2005		
Name of Employer	Consulting Engineering Services (India) Private Limited, (Jacobs - CES)		
Name of the Project	oject Management Consultancy for the Project of Design & Construction of vovers at Panchwati and Rajkamal square, Widening of Minor Bridges and dening & Strengthening of Roads under Integrated Road Development oject (IRDP) at Amravati, Maharashtra		
Client for the project	MSRDC		
Project Description	4-lane; Project cost: INR 60.00 crore  Cumulative Length of the Bridges: 2350.00 m (Maximum Individual Span of 40.00m) & (Maximum Length of Individual Bridge: 1325.00m);		
Designation / Position held in Project	Resident Engineer cum Structural/bridge Specialist		
Duties and responsibility of key- personnel in the project As Resident Engineer cum Structural/bridge Specialist, Responsibility of key- personnel in the programme, construction methodology, superintendence and person and approve the setting out of the works; Checking bar bending schework for structures; checking cement concrete mixes to be used.			

Chief Engineer Engineering Division M.M.R.D.A.

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## Curricula Vitae of Rajesh Jadhav

Supervision of bridge works; Verification of lines and levels, inspection of works, acceptance and rejection of the completed works; supervision of laying, compaction and curing of concrete including checking slump and compressive strength; Ensuring quality control of works during various phases of the execution; Monitoring progress of work using relating to innovative structural designs Modern Project Management Techniques viz. CPM / PERT; Monitored day to day work of different components of structures; involved in inspection and approvals of various activities such as soil investigation, preliminary survey, Road Furniture, etc..

Period from: February 2003	Period to: February 2004
Name of Employer	J Kumar Infra Projects Ltd Mumbai
Name of the Project	Construction of Flyover at Hadapsar, Pune on NH-9 & Construction of ROB at Udaybag, Pune
Client for the project	MSRDC
Project Description	4-lane; Project cost: INR 21.00 crore
	Cumulative Length of the Bridges: 2100.00 m (Maximum Individual Span of 38.00m) & (Maximum Length of individual Bridge: 1400.00m);
Designation / Position held in Project	Senior Bridge Construction Engineer cum Resident Engineer.
Duties and responsibility of key-personnel in the project	As Senior Bridge Construction Engineer cum Resident Engineer, is responsible for the execution of 4 lanes Flyover with Precast Pretensioned I â€" Girders and in situ Deck slab, Substructure by Aesthetically casted Circular Pier & Pier Cap rested on Open as well as Pile Foundation; Widening of one minor Bridge; Responsible for execution of work as per planned schedule; Procurement & Management of Labour, Material; Correspondence with Client and Contractor, Billing of works, etc.; Certifications of the payments of sub contractors, Preparation of R.A.Bills, follow up with Client for Bill certification. Also responsible for Preparation of Quality Management Plan; Setting out of works as per approved drawings; Checking alignment of the bridge, culverts and other CD structures; Preparation of Bar Bending Schedule for cutting, binding and fixing as per structural drawings; Preparation of schedule of shuttering work in conformity with sequence of concreting.

Period from: Dec. 2001	Period to: January 2003		
Name of Employer	Ameya Developers Pvt. Ltd		
Name of the Project	ening to four lane of NH-8A including rehabilitation of existing two lane on adabad Gandhidham highway at Gandhidham, Gujarat		
Client for the project	NHAI		
Project Description	4-Lane; Project length: 53.60 Km; Project cost: INR 24.00 crore  Cumulative Length of the Bridges: 985.00 m (Maximum Individual Span of 35.00m) & (Maximum Length of Individual Bridge: 730.00m);		
Designation / Position held in Project	Senior Bridge Engineer (Equivalent to Resident Engineer (Bridges)		
Duties and responsibility of keypersonnel in the project	Senior Bridge Engineer, was involved in Checking alignment of the bridge and er structures; Preparation of Bar Bending Schedule for cutting, binding and fixing per structural drawings; Preparation of schedule of shuttering work in conformit in sequence of concreting; Checking staging and formwork details; Supervising forcement cutting, binding, fixing and shuttering fixing as per drawing; Working on terial requirements; Execution of substructure, Superstructure by prestressed der, RE work at approach, Crash Barrier. Expansion Joint, etc.; Preparation of ality Management Plan; Setting out of works as per approved drawings tification of payments of sub contractors & quantity preasurements for clients.		

Chief Engineer
Engineering Division



Curricula Vitae of Rajesh Jadhav

certification.Recons bridges. Execution	truction of three ma	ajor bridges v	vith dismantling	of existing arch
structures due reconstruction. Prepare	to earthquake	such	as bearing	

Period from: November 2000	Period to: December 2001
Name of Employer	Ameya Developers Pvt Ltd
Name of the Project	Construction of Twin Flyovers at Ulubari junction, Guwahati, Assam
Client for the project	PWD Assam
Project Description (give details of 2/4/6 lane lengths involved, details of structures involved as required in evaluation criteria	4-Lane. Project cost: INR 12.50 crore.  Cumulative Length of the Bridges: 1440.00 m (Maximum Individual Span of 32.00m) & (Maximum Length of Individual Bridge: 720.00m);
Designation / Position held in Project	Senior Bridge Engineer (Equivalent to Resident Engineer (Bridges)
Duties and responsibility of key- personnel in the project	As Senior Bridge Engineer, was involved in execution of the Twin Flyovers at Ulubari junction; maintaining progress of work, scheduling of items, material requirements, quality control, safety of workplace, quantity measurements for client certification; Co-ordination with local agencies, subcontractors, etc. Also involved in construction of structures, Review of detailed project report including checking and review of design of structures; checking of layout of structures and approaches; supervising the implementation of Ground Improvement Techniques for the foundation work, assuring the quality of construction as per approved drawings and specifications, verifying day to day site activities and checking of working drawings and proposed methodology which are to be adopted for the execution of works.

Period from: April 1999	Period to: October 2000
Name of Employer Ameya Developers Pvt Ltd	
Name of the Project	Construction of Creek Bridge at Dharamtar Dist.Raigad (BOT basis)
Client for the project	Madhya Pradesh Road Development Corporation / Pan India Infrastructure Ltd.
Project Description	4-Lane; Project cost: INR 15.50 crore  Cumulative Length of the Bridges: 344.00 m (Maximum Individual Span of 27.00m) & (Maximum Length of individual Bridge: 320.00m);
Designation / Position held in Project	Senior Bridge Engineer (Equivalent to Resident Engineer (Bridges)
Duties and responsibility of keypersonnel in the project	As <b>Senior Bridge Engineer</b> , was involved in construction of structures, Review of detailed project report including checking and review of design of structures; checking of layout of structures and approaches; supervising the implementation of Ground Improvement Techniques for the foundation work, assuring the quality of construction as per approved drawings and specifications, verifying day to day site activities and checking of working drawings and proposed methodology which are to be adopted for the execution of works. Done Precast Prestressed Posttensioned Girders with in situ deck slab; Incremental Launching span by span; Also responsible for maintaining progress of work, material requirements, quantity measurements etc.

Period from: November 1997

Period to: April 1999

Ameya Developers Pvt Ltd

Chief Engineer
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M.M.R.D.A.

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## STUP Consultants Pvt. Ltd.

Name of the Project	Construction of Twin Flyovers at Konkan Bhavan Junction at CBD, Navi		
Client for the project	Maharashtra State Road Development Corporation Ltd.		
Project Description	4-Lane. Project cost: INR 20.00 crore.  Cumulative Length of the Bridges: 1220.00 m (Maximum Individual Span of 30.00m) & (Maximum Length of Individual Bridge: 610.00m);		
Designation / Position held in Project	Senior Bridge Engineer (Equivalent to Resident Engineer (Bridges)		
Duties and responsibility of key- personnel in the project	-		

Period from: December 1995	Period to: October 1997	
Name of Employer	G D Chavan & Associates	
Name of the Project	Construction of Multistoried Residential Apartment at Sangli and Pune	
Client for the project	Ownership	
Project Description	Project cost: INR 0.40 crore.	
Designation / Position held in Project	Assistant Engineer	
Duties and responsibility of keypersonnel in the project	As <b>Assistant Engineer</b> , Responsible for execution of multi-storeyed apartments, Licensing with local municipal office, architect, structural designer, etc	

Period from: November 1994 Period to: November 1995	
Name of Employer	Maharashtra State Electricity Board
Name of the Project	Construction of Substations and its access roads for Power distribution
Client for the project	Maharashtra State Electricity Board; Civil Division Sangli, Maharashtra
Project Description	Project cost: INR 0.10 crore.
Designation / Position held in Project	Junior Engineer
Duties and responsibility of key- personnel in the project	As <b>Junior Engineer</b> , responsible for the execution of the building for substation development of substation area as per approved drawing.

Period from: July	Period to: November 1994	PROTECTION IN A SECOND
Name of Employer	S D Lokhande	46 m. sam
Name of the Project	Construction of Industrial Buildings for Tollichalkaranji, Dist-Kolhapur	extile industry through LIC funding at

Client for the project	Industrial Co-Op Society Ltd	
Project Description	Project cost: INR 1.25 crore.	
Designation / Position held in Project	Junior Engineer	
Duties and responsibility of key- personnel in the project	As Junior Engineer, responsible for Monitoring of work progress, Scheduling of items surveying, preparation of estimates, tender process, measurement records execution of works as per the specification, certification of payments of contractors etc.	

Languages	:	Language	Speaking	Reading	Writing
		English	Excellent	Excellent	Excellent
		Marathi	Excellent	Excellent	Excellent
		Hindi	Excellent	Excellent	Excellent

### Certification:

- I am willing to work on the project and I will be available for entire duration of the project assignment and I will not engage himself in any other assignment during the currency of his assignment on the project.
- I, the undersigned, certify that to the best of my knowledge and belief, this bio-data correctly describes me, my qualifications and my experience.

Signature of the Candidate:	Ramer
Place :	Navi Mumbai
Date :	24.11.2020
Signature of the Authorised Representative of the firm	
Place :	Navi Mumbai
Date :	24.11.2020

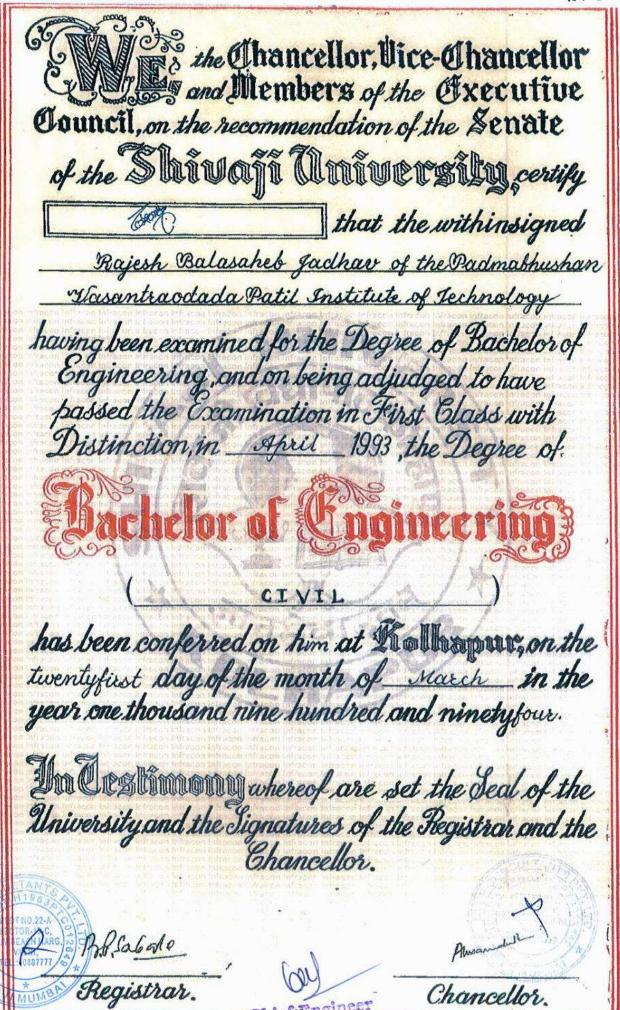


Chief Engineer

Chief Engineer

M. M. D.A.





M.M.R.D.A.

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Council,	on the	recommen	rdation of	the Act	idemic
Council	of the	Shivaji	Unive	rsitv.	
A Property	150			the within	rsigned
	Rafesh	Balasai	beb fad	hare	
*	-		100		

having been examined for the Diploma in Business
Management, and on being adjudged to have passed
the Examination in First Class with Distinction,

in April 1996 the

# Poloma in Lusinees Lamor ment

has been conferred on him at Kolhapur, on the twentyseventh day of the month of <u>January</u> in the year one thousand nine hundred and ninetyseven.

In Testimony whereof are set the Seal of the University and the Signatures of the Registrar and the Dice-Chancellor.

Profisal de Registrar.

8 or Demison

Vice-Chancellor





227 GOVT. OF INDIA TIKE TIKEDI RAJESH BALASAHEB JADHA ASAHEB RAMA JADHA AE TAX DEPARTMENT ( Cour

Chief Engineer Engineering Division



## **AMEYAS**

## INFRAPROJECT PRIVATE LIMITED

(Formerly: Ameya Developers Private Limited)

CIVIL ENGINEERS AND CONTRACTORS

Regd. Office: 2, Yashashree Apartment, Kohinoor Colony, Sahakamagar No. - 2, Pune 411 009. Tel.: (020) 24231378, 24231379, Fax: (020) 24225744 E-mail: ameyadevelopers@vsnl.com

February 06, 2018

## To Whomsoever It May Concerned

This is to certify that Mr. Rajesh Balasaheb Jadhav was working in our organization from 01/11/1997 to 31/01/2003 as Senior Engineer. Details as below,

- Construction of Twin Flyovers at Konkan Bhavan Junction at CBD on old Mumbai Pune Highway (NH-4), Navi Mumbai (Nov, 1997 - May, 1999)
- 2. Construction of Creek Bridge at Dharamtar Dist.Raigad (BOT basis)
  (June,1999 Oct,2000)
- 3. Construction of Twin Flyovers at Ulubari junction, Guwahati, Assam (Nov, 2000 Dec, 2001)
- Widening to four lane of NH-8A including rehabilitation of existing two lane on Ahmadabad Gandhidham highway at Gandhidham, Gujarat. (Jan,2002 - Jan,2003)

During the above tenure we found him sincere & hardworking. He left from our organization for better prospect.

For Ameyas Infraprojects Pvt. Ltd.

**Authorised Signatory** 

Chief Engineer
Engineering Division
M.M.R.D.A.

Tal - 150017



07.12.2018

### **Work Experience Certificate**

This is to certify that Mr. Rajesh Balasaheb Jadhav has worked as Senior Bridge Engineer in our organization since 14/03/2016 to 07/12/2018. During his tenure, he was involved in Project Management Consulting services for Major Bridges, ROB's of National Highway Project. Also he managed Pre-Tender Services (Retendering work) of same project. He was associated with following projects,

 Construction of 4 lane/ 2 lane major/miner bridges and Robs in the stretch from km. 161.000 (Kashedi) to 450.000 (Zarap) OF NH- 66(Erstwhile NH-17) in the state of Maharashtra under NHDP-IV on the EPC Mode, Package-I, II, III (4 Lane) (Length-289 Km) – Sr Bridge Engineer (March, 2016 – Dec, 2018)

Apart from above projectwork, he managed Pre-Tender Services, DPR projects works for below projects,

- Consultancy services for Preparation of Detailed Project Report for up gradation to Two lanes with paved shoulder/ Four Lane Configuration —Package I - Chandwad-Manmad-Chalisgaon-Bhadgaon-Jalgaon in the State of Maharashtra(2/4 Lane) (Length-289 Km) — Sr Bridge Engineer (Sept, 2016 — Oct, 2016)
- Detailed Project Report (DPR) for capacity Augmentation to 2 lanes with paved shoulders configuration for NH Corridors of NH 183 (Old NH 220) from km 0/000 to km 62/100 (Kollam to Anjilimoodu in the State of Kerala(2 Lane) (Length- 190.00 Km) - Sr Bridge Engineer (Mar, 2018 - May, 2018)

As per our record, his conduct and character during his service was good. We found him meticulously intelligent, hard worker in his duties. He was sincere, honest, and was working with full integrity. He has successfully managed his responsibilities.

We wish him all success in his future endeavors.

For Shrikhande Consultants Pvt. Ltd.

uthorized Signatory

PLOT NO 22-A CONTROL OF THE LAURS TITLE AND SECTION 19-C.
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Chief Engineer
Engineering Division
M.M.R.D.A.

E, scplvashi@gmail.com | W. www scplasia.com

## Consulting Engineering Services (India) Private Limited

2<sup>nd</sup> Floor, A Wing, Maestros, Building No. 2, Sector 2, Millenium Business Park, Mahape, Navi Mumbai. Maharashtra state, India. Tel: +91.22.6189 2700 Fax: +91.22 6189 2709

200

March 08, 2016

## TO WHOMSOEVER IT MAY CONCERN

This is to certify that Mr. Rajesh B. Jadhav has worked in our organization in different capacities as below for the period from 1st March 2004 to 7th March 2016.

During his tenure he was involved in Project Management Consultancy services for Major Bridges, Flyovers, National Highway Projects, Pre-Tender Services, etc. List of Projects are given here as below:

- 1) Project Management Consultancy for Construction of Eastern Freeway from Museum to Anik Junction (Start of APLR) (4 Lane) (Length 11.290 km) Sr Bridge Engineer (Dec, 2014 Feb, 2016)
  - 2) Project Management Consultancy for four laning of Panvel Indapur Section of NH 17 from km 0+000 to 84+600 in the state of Maharashtra under NHDP Phase-III on BOT Basis (Package No. NHDP-III/DL4/05) (4 Lane) (Length 84.600 km) Resident Engineer(Bridges) (Dec, 2011 Nov, 2014)
  - 3) Project Management Consultancy for the Project of Construction of Plyover / Elevated Road on Old Mumbai Pune Highway (NH 4) (MAHARASHTRA) (4 Lane) (Length 2.500 km) Sr Bridge Engineer (Apr,2009 Nov,2011)
- 4) Project Management Consultancy for the Project of Construction of Interchange at NH-7 and ROB across Central railway in MIHAN Project Area at NAGPUR (MAHARASHTRA) (6 Lane) (Length 3.300 km) - Sr Bridge Engineer (Jan, 2007 - Mar, 2009)
- 5) Project Management Consultancy for Improvement to Nagpur —Aurangabad- Sinner- Ghoti-Mumbai road to National Highway Standard road (Package-VII, Karanja — Malegaon Section (2 Lane) (Length 66 km) — Sr Bridge Engineer (Nov, 2005 — Dec, 2006)
- 6) Project Management Consultancy for the Project of Design & Construction of Flyovers at Panchwati on NH-6 and at Rajkamal square, Widening of Minor Bridges and Widening & Strengthening of Roads under Integrated Road Development Project (IRDP) at Amravati Maharashtra (4 Lane) (Length 24.000 km) - Resident Engineer(Bridges) (Mar,2004 – Oct,2005)

He has successfully handled his responsibilities and we found him sincere, dedicated, hard working and intelligent. He left the organization on his own accord.

We wish him all success in his future endeavors.

For Consulting Engineering Services (I) Pvt. Ltd.,

Milind M. Phatak Manager (S & SP)

A Subsidiary of Jacobs Engineering Group Inc.
Registered office: Consulting Engineering Services (India) Private Limited, ZndFjoor Ristinum Tower, Plot No.
184. UdyogVihar, Phase - 1, Gurgaon 122016 (Haryana), India.
CIN: U74899HR1969PTC053297Tel: +91.124.331 7000 Fax: +91.124.337 2999Website, www.Jacobs.com

M.M.R.D.A.



09 November 2018

Rajesh Balasaheb Jadhav 26/1, AP-Rendal, District - Kolhapur, Maharashtra - 416 203

SUBJECT: APPOINTMENT LETTER

Dear Rajesh,

Welcome to Louis Berger Consulting Private Limited

This has reference to your application and subsequent interviews with Louis Berger Consulting Private Limited, I am pleased to appoint you for the position of Resident Engineer for "Mumbai Coastal Road Package I Project" effective on or around 04th December 2018.

This appointment relates to your employment with LBC and following terms & conditions will be applicable:

1. Posting & Transfer:

You will be posted at Mumbai, India. However, your services are transferable to any other place or office of the Company or to any subsidiary or associate company, whether now existing or still to be formed. Such transfer / deputation will be in accordance with the company policy and can be temporary or permanent. Though you have been engaged for a specific position, the Company reserves the right to determine the responsibilities that you may be subsequently called upon to perform from time to time.

2. Compensation:

(a) Your monthly basic salary will be and your Total Annual Compensation would be per annum. This includes employer's contribution towards Provident fund.

- (b) The detailed breakup of your compensation is given in Annexure A.
- (c) You will be eligible for coverage under the company's hospitalization, life insurance and personal accident insurance benefits as per the company's policy.
- 3. Workweek:

The work week is Six days/week 9 am to 6 pm (with approved lunch break) OR as per work schedule as mandated by client. However, your duty hours and workweek may be regulated from time to time as per the direction of your Supervisor and/or the Management. Also, you may be required to work on weekend and holidays or beyond normal working hours for exigencies of business.

Reporting:

You shall report to the Project Manager - Mumbai Costal Road; LBC or his designee.

5. Scope of Work:

You shall perform the duties Resident Engineer. Job description will be provided to you once you join the organization.

5th Floor, Tower B | Surinder Jakhar Bhavan (IFFCO) | Plot No. 3, Sector 32 | Gurugram | Haryana | 122001

Tel +91.124.4578200 | Fax +91.124.4044750 | Email India@louisberger.com

Page 1 of 6

NO.: 16 - U3/5459

## SAVITRIBAI PHULE PUNE UNIVERSITY

(formerly University of Pune)

GANESHKHIND, PUNE 411 007.





## **Passing Certificate**

This is to certify that

Shri/Smt JADHAV RAJESH BALASAHEB Mother - VIMAL has appeared for the M. E. (CIVIL (CONSTRUCTION & MANAGEMENT)) 2013 Pattern examination held in 2017-May and declared to have passed the examination in FIRST GLASS WITH DISTINCTION.

This is further to certify that he/she is eligible for the eforesaid.

Degree Certificate, whenever he/she applies for the same at the

University Convocation.

Seat No. ...: 7189

P. R. No. ...; 73502370M

College code: 648

LOT NO.22-A ECCO-19-C, WASHI, FEL.:40887777

09-Nov-2017

DIRECTOR, BOARD

Prof. (Dr.) Ashok M. Chava

COLLEGITE EN ANIMALIENTEN \*\*

## G. D. Chavan

## ENGINEER, BUILDER, PROMOTER & DEVELOPER

Flat No 2, Vaijayanta Complex, Vishrambag Sangli 416415 • Phone 0233-2301180 • Pune 020-27216189

Ref No

Date 18/07/2015

#### To whomever it may concern

This is to certify that Mr. Rajesh Balasaheb Jadhav had been working with us as Assistant Engineer for the period from 01.12.1995 to 31.10.1997. During his stay with us we found him intellectual, hard worker, innovator and keen in his work.

We are feeling proud to say that he was one of the best employees. He always works for the best of our organization, and he has the ability to work as a team leader.

We wish him good luck for his brilliant future.

PLOT NO. 22-A CONTROL OF SECTION OF SECTION





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ENGINEERS, BUILDERS & CONTRACTORS ON APPROVED GOVT. LISTS

16-A, ANDHERI INDUSTRIAL ESTATE, VEERA DESAI ROAD, ANDHERI (W), MUMBAI - 400 058. E-mail: jknc@ysnl.net 🖀: 26730291, 26730848, 26730853, Fax: 022 - 26730814

Date: 12/12/2005

### TO WHOMSOEVER IT MAY CONCERN

THIS IS TO CERTIFY THAT, MR. R. B. JADHAV, WORKING AS A SENIOR ENGINEER IS HARD WORKING OBEDIENT, INTELEGANT AND HE HAD INCLINATION FOR WORK. HE HAD WORKED AS SENIOR SITE ENGINEER FROM JAN-2003 TO FEB-2004 ON THE FLYOVER WORKS AT HADAPASAR AND ROB AT UDAYBAUG SITE.

For J. KUMAR & COMPANY

ANAND SHAHAPUR (PROJECT MANAGER)





## महाराष्ट्र राज्य विद्युत मंडळ

स्थापत्य झांबकान व सुरुपबस्था विश्वाच, लांगली.

दुस्त्वनी : कार्यालय ७२७४७

निवास ७३५५६

मान : CIVILGRID

कार्यकारी विभिनेता (स्वा) गांचे कार्यालय

म. श. वि. मंडळ विश्रामयाग,

सांगळी - ४१६४१५.

बंबर्षः काब/स्वा/तांवली /अरस्यापनर/१५/ १६२९

दिनांक :

2 8 22 1995

सेवा पुमालपत्र :

१] नांव : श्री. राजेश बाळाताहेब जाधव

२) यदनाम : शिकाज अभियंता (तांत्रिक)

नोंदणी कृमांक : स्मर्थ-१४-१४८२

थ) कामाचे विकास : स. रा. वि. मंडक, स्थापत्थ विभाग,

: विश्रामवाग[सांगली].

४) नियुक्तीये कार्यांनधीन : एसइसी/पूर्व/जीएडी/५५/३१०७ आदेश कृ. व दिनांक : दिनांक १०/११/१९६५.

मंडकात छन् ज्ञालेली : २४/११/१६९४.
 तारीख.

७) कामाचे त्वरूप : कार्यालयीन त्थापत्य कामे.

 तेतेतून मुक्त केल्पाची : २३/११/१९९५ तारीक.

९) एकूष कालावधी : दि. २४/११/९४ ते २३/११/९५ : () एक वर्ष ()

१०] वेतन : स्पर्य ११२०/- दरमहर.

११] काम व वागपुकी वाबत : समाधानकारक

१२] नोकरी तोडण्याचे कारण : एक वर्षांचा कालावधी संपल्यावर

: कार्यमुक्त करण्यात आले आहे.

ार्यकारी अभियंता[स्थापत्य], साँगलीः

प्रति, श्री. राजेश बाजाताहेब जाधव मृ. पो. यजगुड, ता. टातंबर्यज्ञे, जि. कोल्टापूर, जाधव/-२११२६५



Chief Engineer Engineering Division





1.	Proposed Position	:	K-3: Structural design Engineer (PC)	
2.	Name of Staff	:	Amit Ralkar	
3.	Date of Birth	:	12.01.1977	
4.	Nationality	:	Indian	
5.	Education Qualification	:	<ul> <li>Master of Engineering (Structural Engineering) in 2001 from Pune University</li> <li>Bachelor of Engineering (Civil) in 1998 from Walchand college of Engineering, Sangli</li> </ul>	
	Contact Address with Phone and mobile numbers		C/o STUP Consultants Pvt. Ltd. Plot No. 22A, Sector 19C, Palm Beach Marg, Vashi, Navi Mumbai 022-40887777	
6.	Membership of Professional Societies	:	Member; Indian Institution of Bridge Engineers	
7.	Publications		<ul> <li>Journal on Cyclic Pile Load Test on large diameter pile - A case study.</li> <li>Co-author on paper presented at 3rd fib international congress – 2010 on "Long Elevated Road of 2.385 Km length over existing main road, crossing ten junctions at Lalbaug in Mumbai, India.</li> </ul>	
8.	Employment Record	:		
	August 1999	:	To till date	
	Employer	1:	: STUP Consultants Pvt. Ltd.	
	Position held	:	: Senior Consultant (Bridges)	

Name of Assignment / Project	Consultancy Services for Authority's Engineer for Supervise Rehabilitation and upgradation to 2 lane with paved shoulders standards of National Highway section (i) Satara — Koregaon — M section of NH-548C (Length - 85.686 km) & Section (ii) Mha Tembhurni section of NH-548 C (Length - 57.678 km) on EPG (Package 37)	4-lane haswad swad -
Period	August 2017 - Ongoing	
Name of Client	MoRTH / MSRDC	
Project Brief	Length: 143.364 Kms; Project Cost: 932.54 Crores	
Position Held	Bridge Design Specialist	*/
Activities performed	As a Bridge Design Specialist Shall be responsible for checking the debridges, ROBs, interchanges and any other structure to be constructed Project highway, Shall review the rehabilitation measures to be proposed Concessionaire for existing structures based on site condition and structures.	ed in the

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requirement basis, Develop QAP and implementation plan for all field studies related to bridges and structures, Review Finalize data formats and requirement of relevant studies, Review Collect, compile and develop bridge & structure related data bank, Review bridge inventory and condition survey, Review hydrological survey and data analysis, Review data analysis and select parameters for bridge design, Checking & approving of pre-camber calculations for casting yard, Review of design/ drawings for POT/PTFE bearings, strip seal expansion joints, temporary bar prestressing, bar bending schedules, Select rehabilitation and construction alternatives based on techno-economic consideration, Review GAD and interact with client / concerned authorities towards finalization, Review Design bridges, cross-drainage structures, retaining walls etc., Review Working drawings, documents and report related to structures, Review time schedule and manage resources

Name of Assignment / Project	Consultancy Services For Authority's Engineer For Supervision Of Rehabilitation And Up-Gradation To 2 Lane With Paved Shoulder / 4 Lane Standards Of National Highway Section Section (I) Pandhrpur To Sangola Section Of Nh-965c (Length - 34.358 Km) Section (Ii) Sangola To Kurudwadi Section Of Nh-965c (Length - 48.375 Km) Section (III) Mhaswad - Pilov - Pandarpur Section Of Nh-548e (Length - 53.08 Km) On EPC Basis (Package 39)	
Period	August 2017 - Ongoing	
Name of Client	MoRTH / MSRDC	
Project Brief	Length: 135.81 Kms; Project Cost: 713.171 Crores	
Position Held	Bridge Design Specialist	
Activities performed	As a Bridge Design Specialist Shall be responsible for checking the designs of bridges, ROBs, interchanges and any other structure to be constructed in the Project highway, Shall review the rehabilitation measures to be proposed by the Concessionaire for existing structures based on site condition and structural requirement basis, Develop QAP and implementation plan for all field studies related to bridges and structures, Review Finalize data formats and requirement of relevant studies, Review Collect, compile and develop bridge & structure related data bank, Review bridge inventory and condition survey, Review hydrological survey and data analysis, Review data analysis and select parameters for bridge design, Checking & approving of pre-camber calculations for casting yard, Review of design/ drawings for POT/PTFE bearings, strip seal expansion joints, temporary bar prestressing, bar bending schedules, Select rehabilitation and construction alternatives based on techno-economic consideration, Review GAD and interact with client / concerned authorities towards finalization, Review Design bridges, cross-drainage structures, retaining walls etc., Review Working drawings, documents and report related to structures, Review time schedule and manage resources	

Name of Assignment / Project	Project Management Consultancy Service preparation of Detailed Project Report for across Thane Creek (TCB III) on Sion-I Maharashtra under EPC.	Construction of Major Bridge	
Period	March 2016 - November 2018		
Name of Client	MSRDC Ltd.		
Project Brief	Construction of Major Bridge across Thane Cree Road; Project length: Approx. 2.000 kms; Pro The Span arrangement proposed for the bridge Type 1:= 4 units of (53.5+107+107+ 53.5) m Type 2 = 1 unit of (55.43+103.3+107.1+80.8)	piect cost: INR 355 crore. is as under:- Balance Cantiliver	
Position Held	Sr. Bridge Structural Engineer	PALM SEAGH PLANE TO	



	As a Sr. Bridge Structural Engineer has been responsible for the monitoring of
Activities performed	the field surveys & geotechnical investigations; detailed engineering design of
	foundations, sub structure & super structure of the bridge.

Name of Assignment / Project	Post - Tender Consultancy services for the work of "Design and Construction of bridge connecting Keri to Tiracol including approaches."	
Period	March 2014 - 2015	
Name of Client	MVR Infra (GSIDC)	
Project Brief	The project pertains to the detailed engineering design for a cable stayed bridge at an estimated cost of Rs.76.77 crore between Tiracol and Kerim, effectively ending Tiracol's independence from mainland Goa for centuries.  The proposed span arrangement for the bridge is as under:- Type 1= 5 x33m ( Curved PSC BOX Girder) Type 2= 30 m ( PSC BOX Girder) Type 3= 70m+210m+70m (cable stayed bridge)	
Position Held	Sr. Bridge Structural Engineer	
Activities performed	As a Sr. Bridge Structural Engineer has been responsible for the monitoring of the field surveys & geotechnical investigations; detailed engineering design of foundations, sub structure & super structure of the bridge.	

Name of Assignment / Project	Post – Tender Consultancy services for the work of "Widening and Improvement of Naigaon – Juichandra – Bopane Road SH-41 from NH-8 to Naigaon Railway Station and Construction of creek Bridge and ROB along with approaches at Naigaon Railway Station.	
Period	March 2013 - December 2014	
Name of Client	Simplex Infrastructures Ltd.	
	The project pertains to the detailed engineering design for "Widening and Improvement of Naigaon — Juichandra — Bopane Road SH-41 from NH-8 to Naigaon Railway Station and Construction of creek Bridge and ROB along with approaches at Naigaon Railway Station.	
Project Brief	The proposed span arrangement for the bridge is as under:  Type 1= 8 x35m (PSC I Girder)  Type 2= 2 x35 m (PSC BOX Girder)  Type 3= 1 x16.3 m (PSC I Girder)  Type 4= 2 x37.2 m (Steel Composite Girder)  Type 5= 15.3 m (Solid Slab)  Type 6= 5 x35 m (PSC I Girder)  Type 7= 20 m (Solid Slab)  Type 8= 5 x35 m (PSC I Girder)  The estimated cost of the project is Rs. 85.12 Crores.	
Position Held	Sr. Bridge Structural Engineer	
Activities performed	As a Sr. Bridge Structural Engineer has been responsible for the Detailed Engineering Design for all the components of the project and getting approval for the GADs from the concerned relevant authorities.	

Name of Assignment / Project

AVIMUN

Detailed Engineering Design & Project Management Services for the work of Construction of Eastern Freeway section from Panjarpole to Chembur Mankhurd Link Road Km. 0/000 to 2/500.

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Period	October 2010 – September 2013		
Name of Client	MMRDA		
	The project pertains to the detailed engineering design for 4 lane divided carriageway for the Eastern Freeway from Panjarpole junction to CMLR admeasuring an approx. length of 2.109 kms. The total length of the structural ramps is 1.602 kms and the total length of the solid ramps is about 0.35 Kms. Project Cost: Rs. 319.89 Crores		
Project Brief	The Types of Foundation for the project is 119 nos. pile foundations & 12 nos. open foundations. The type of sub structure is RCC Solid pier and Pier cap with M60 grade of concrete. The types of superstructure is Segmental construction (M60) for a length of 1510 m; T girder (M60) for a length of 981 m; & Steel composite superstructure for a length of 198 m & cast in situ integral super structure for a length of 160 m.		
	The span arrangement for the elevated corridor is as under:- Type 1 = Typical 30m x3 (Continuous Segmental Box Girder), 25m (PSC Box Girder)  Type 2 = 44m ,40m & 38m ( Steel composite girder)		
Position Held	Sr. Bridge Structural Engineer		
As a Sr. Bridge Structural Engineer has been responsible for the des various structures, scheduling of all field, design and documentation activities performed  Activities performed  Activities performed  Time schedule and management of Team's resources. Preparation of redocuments and drawings. Also responsible for co-ordination between acting agencies involved in the project.			

Name of Assignment / Project	Detailed Engineering Design for the Construction of Eastern Freeway from Prince of Wales Museum to Anik Junction (start of APLR) in Mumbai		
Period	July 2009 – December 2010		
Name of Client	Simplex Infrastructure Ltd.		
Project Brief  The project envisages the detailed engineering design for New Four elevated corridor of approx. 9 Kms and Improvement of Existing road of 2.2Kms. Project Cost: Rs. 585.00 Crores  The project comprises of PSC segmental standard spans of 26 m; & observations of 35 m.			
Position Held	Sr. Bridge Structural Engineer		
Activitles performed	As a Sr. Bridge Structural Engineer has been responsible for the design of various structures, scheduling of all field, design and documentation activities. Time schedule and management of Team's resources. Preparation of reports documents and drawings. Also responsible for co-ordination between various acting agencies involved in the project.		

Name of Assignment Project	Feasibility Study, Detailed Project Report a Integrated Road Development Project in C 59 kms) (project to be implemented on PPP	handrapur City (2 lane to 4 lane,
Period	February 2009 – October 2009	A PROPERTY OF
Name of Client	MUIDC, Chandrapur	The state of the s
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Project Brief	The Chandrapur Municipal Council, Chandrapur, Maharashtra is contemplating Integrated Road Development Project in the city of Chandrapur in PPP Mode on BOOT basis. The Maharashtra Urban Infrastructure Development Company Ltd has been entrusted with Project Management of the project. The project involves construction of and improvements to total of 71 road stretches amounting to about 59 Kms. This includes preparation of Feasibility Study, Detailed Project Report including and Environmental Impact study and Bid Process Management.
Position Held	Sr. Bridge Structural Engineer
Activities performed	As a Sr. Bridge Structural Engineer has been responsible for the design of various structures, scheduling of all field, design and documentation activities, Time schedule and management of Team's resources. Preparation of reports documents and drawings. Also responsible for co-ordination between various acting agencies involved in the project.

Name of Assignment / Project	Part Design & Construction of Viaduct (Ch. KM 13.391 to KM Ch. 20.0696) excluding viaducts at stations namely Jasola, Mohan Estate, Tughlakabad and Badarpur each of length 135m, including Entry and Exit connection to Depot & Including Sarita Vihar Metro station on Central Secretariat — Badarpur Corridor of Delhi MRTS-Contract No: — BC-26. Project Cost Rs. 158.477 Crores		
Period	February 2008 – March 2009  DMRC-IDEB-SUCGJV – Joint Venture, New Delhi		
Name of Client			
Name of Client Project Brief	The Central Secretariat - Badarpur corridor of Delhi MRTS is an elevated viaduct of length 6.679km with one elevated station at Sarita Vihar and Entry & Exit connection to Sarita Vihar Depot. There are as many as 188 spans of different lengths arranged all through the viaduct with the span length ranging from 19m to 37m.  The superstructure system in the viaduct is of prescast prestressed type and cast-in-situ prestressed types at depot. The piers supporting the superstructures are either circular or elliptical and owning to the eccentricity of the centre line of alignment with the centre line of piers, the piers are categorized as concentric, cantilever and portal piers. The maximum eccentricity is constrained to 2m for cantilever piers. The type of foundation adopted in viaduct portion is pile foundation (Bored cast-in-situ piles of diameter 1000) and open foundation.  The elevated station is located at Sarita Vihar. At this station there are two floor levels, namely the Concourse level and the Platform level. The spans are RCC cast –in-situ. The columns supporting the structure are circular, rectangular of half elliptical. The foundation adopted is open foundation type.		
Position Held	Sr. Bridge Structural Engineer		
Activities performed	Involved in detailed engineering design of the substructure. This includes design of pier for various heights. Also responsible for design of piles and pile caps fo various combinations. The superstructure was also checked for erection loads as well as for rail loads. Involved in detailed quantity calculations, preparations of BOQ, preparation of Design methodology as well as development of construction scheme.		

Name of Assignment Project

ANIMUMI

Preparation of Detailed Project Reports and Engineering Design Consultancy for Improvement, Operation and Maintenance including Strengthening and Widening of Existing 2-Lane Road to 4-Lane Dual Carriageway from Km 50.000 to Km 100.000 of NH-6 (Kondhall-Talegaon Section) in the State of Maharashtra on Build, Operate and Transfer (BOT) basis.

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Period	September 2006 – March 2008				
Name of Client	Oriental Structural Engineers P. Ltd.				
Project Brief	The project road starts at Km.50.000 after Kondhali Town and ends at Km.100.000 after Talegaon Town. In this stretch of 50 Kms., there are 15 Minor Bridges, 17 Slab Culverts and some 47 nos. of Pipe Culverts are existing on the present 2 lane highway. All these structures are to be suitably widened to 4 lanes to 6 lanes facilities. In addition, the following new structures have been proposed on the highway:- Flyovers at Km. 98.300, 5 Nos. of cattle crossings. (Culverts converted to Drainage cum Cattle crossings), 2 no.s of pedestrian underpasses (Locations to be fixed in consultation with IC).				
Position Held	Sr. Bridge Structural Engineer				
Activities performed	As a Sr. Bridge Structural Engineer has been responsible for the design of various structures, scheduling of all field, design and documentation activities, Time schedule and management of Team's resources. Preparation of reports, documents and drawings. Also responsible for co-ordination between various acting agencies involved in the project.				

Name of Assignment / Project	Proposed six lanes cable stayed bridge at Nagpur Railway station near Santra Market. Project Cost Rs. 46.00 Crores			
Period	January 2007 - February 2008			
Name of Client	AFCONS			
Project Brief	The project work comprises of construction of Cable Stayed bridge with span arrangement of 111.8m + 88.2m and viaduct with spans 28 + 28 on Jaystambh end and 15.121 + 15.121 + 30 + 6 x 25 on Bhandara end. The total length of bridge including approaches is 606.742m. The superstructure proposed for cable stayed portion is concrete deck with edge girders and that for viaduct spans is PSC/RCC box girders. The substructure for cable stayed portion is solid diamond shaped pylon with piles and for viaduct portion hollow circular piers with open foundation.			
Position Held	Senior Design Engineer			
Activities performed	As Senior Design Engineer, responsible for design review including design philosophy and arithmetic check for simply supported PSC and RCC Box girders, open foundations, pier and pier cap.			

Name of Assignment / Project	Consultancy Services for Detailed Engineering Design for Highway Package: Thrissur – Angamali – Edapalli Section of NH-47 (Km.270 – 342) in Kerala State on BOT Basis.			
Period	December 2005 – December 2006			
Name of Client	Guruvayoor Infrastructure Private Limited			
Project Brief	This project consists of widening of existing 2/4 lane highway to 4/6 lane divided carriageway commencing from km.270.000, (starting at 1.6km. Bypass Road) at Thrissur and extend upto 316.000Km near Angamali on NH-47. Project length as measured is 40km. In addition to this, service roads have been proposed along the project road for about 27km. of length of the corridor. In project corridor, there are numerous structures, cross-drainage structures etc., 41 nos. of slab culverts, 50 nos. of box culverts and 9 nos. of pipe culverts exist. There are 6 nos. of bridges, 3 major and 3 minor bridges (Out of which 2 nos. are skew bridges with more than 15 degrees), which are required to be repaired and rehabilitated & widened. The proposal also contains new structures like 5 flyovers and 2 nos. of underpasses and all these flyovers and underpasses have to be designed for 6			

Chief Engineer
Engineering Division
M.M.R.D.A.

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	lane carriageway. The proposal contains 1 no. of Toll Plaza with 6 + 6 lane at km.278.000. Apart from this, the proposal consists of a flyover at Aluva Junction (km.330.450 — km.331.305), Junction Improvements at Cochin Airport (km.324.245 — 324.716) and Curve improvements near Marthandavarma bridge (km.329.200 — 330.070). An ROB has already been constructed for which approach has to be provided (km.320.090) on NH-47.			
Position Held	Sr. Bridge Structural Engineer			
Activities performed	As a Sr. Bridge Structural Engineer has been responsible for the design of various structures, scheduling of all field, design and documentation activities, Time schedule and management of Team's resources. Preparation of reports, documents and drawings. Also responsible for co-ordination between various acting agencies involved in the project.			

Name of Assignment / Project	Consultancy services for Flyover at Ananda Rao Circle, Bangalore		
Period	June 2004 November 2005		
Name of Client	Bangalore Development Authority		
Project Brief	Total length of the flyover is about 805m. Width of flyover is 17.5m (5 - lane) at Khoday's circle end and diverges into one 7.5m width 2 lane arm towards racecourse road and one 14m width 4 lane arm towards Maharani College intersection at Ananda Rao circle. It has obligatory spans, one at Ananda Rao circle with a span length of 40m and two nos. at Subbanna circle with a span length of 24.5m other spans are about 33m span x 15 Nos. (Standard span) superstructures proposed to be of precast post-tensioned box with segmental construction. Other spans are with post tensioned box with cast-in-situ construction. Substructure consists of single aesthetically treated piers with pile foundations with a pile of 1m diameter. Approaches are provided reinforced earth structure. Instrumentation has been done for this flyover to measure deflections, pile settlement, earth pressure on RE wall, inclinations of RE walls, Expansions/contraction of superstructure, beam loads, pre-stressed force, temperature variation across the depth, stress in superstructure, etc.		
Position Held	Bridge Structural Engineer		
Activities performed	As a Bridge Structural Engineer has been responsible for the design of various structures, scheduling of all field, design and documentation activities, Time schedule and management of Team's resources. Preparation of reports, documents and drawings. Also responsible for co-ordination between various acting agencies involved in the project.		

Name of Assignment / Project	Cable stayed Bridge across Aldona river, Goa - (2 Laned Cable Stayed Bridge); Project Cost Rs. 23.77 Crores		
Period	February 2003 - September 2004		
Name of Client	AFCONS Infrastructure Ltd. Mumbai / GSIDC, Goa		
Project Brief	The project involves detailed engineering design for 235 m long 2 lane cable stayed bridge with main span 105m and single pylon of 34 m high (from deck) designed for class 70 R loading with seismic and aerodynamic effects. The pylons are in concrete and the stiffening girder is in composite with Steel I – girders and concrete deck.		
Position Held	Bridge Structural Engineer		
Activities performed	As a Bridge Structural Engineer has been responsible for the design of various structures, scheduling of all field, design and documentation activities, Time schedule and management of Team's resources. Preparation of reports, documents and drawings. Also responsible for co-ordination between various		

Chief Engineer
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M.M.R.D.A.

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	acting agencies involved in the project.			
Name of Assignment / Project	Consultancy Services for Flyover on Varachha Road			
Period	March 2001 - January 2003			
Name of Client	Surat Municipal Corporation			
Project Brief	The project involves the detailed engineering design for the Varachha flyover over existing road with clearance of 5.0m below pier cap for most of the length. The total length of flyover is 2725m including 211m long approaches. The decking consists of 2 nos. single cell RCC box girders, each carrying 2-lane traffic. The sub structure comprises of single column pier with cantilevering pier cap supporting both the girders. The foundations are of open type resting on soil with SBC of 20 t/m2 (net) at an average depth of 4.0m. Two carriage-ways are separated by 0.5 m wide central verge and have 0.5m wide anti crash barriers at outer edges.			
Position Held	Bridge Structural Engineer			
Activities performed	As a Bridge Structural Engineer has been responsible for the design of various structures, scheduling of all field, design and documentation activities, Time schedule and management of Team's resources. Preparation of reports, documents and drawings. Also responsible for co-ordination between various acting agencies involved in the project.			

Name of Assignment / Project	Preparation of detailed project report for the rehabilitation and reconstruction of 16 nos. RCC bridges at different locations on existing road network in Tripura.	
Period	September 2000 – October 2001	
Name of Client	Public Works Department, Tripura	
Project Brief	The Public Works Department, Govt. of Tripura has taken up the work of developing a good road network to meet the infrastructure needs of the state and to establish a good communication. A good road network implicitly needs good bridges. At present a major part of the river crossings in the road network are either semi permanent timber bridges or non-motorable, and to be crossed by foot or by small boats. Tripura PWD has undertaken the work of construction of permanent bridges at different part of the state in phase wise manner and for this they have engaged M/s STUP Consultants P. Ltd. for the reparation of preliminary as well as the detailed project report of the bridges prior to the construction of the same. The span of the bridges varies from 25m to 45m (Out of which 4 nos. are skew bridges with more than 15 degrees) and the types of the bridges are RCC T girder, RCC box girder, PSC T girder and PSC box girder bridges. The foundations of the bridges are either well foundation 0f 6m to 8m diameter and pile foundation of 1.2m diameter.	
Position Held	Bridge Structural Engineer	
Activities performed	As a Bridge Structural Engineer has been responsible for the design of various structures, scheduling of all field, design and documentation activities, Time schedule and management of Team's resources. Preparation of reports, documents and drawings. Also responsible for co-ordination between various acting agencies involved in the project.	

Name of Assignment

Construction of Major Bridge across Patalganga River and R.O.B. near village Kharpada on NH 17 on BOT basis (with toll rights).

Period August 1999 - October 2000

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Name of Client	M/s.Ideal Road Builders Limited			
Project Brief	The project comprises of Two lane wide high level bridge with 1.5 m. wide footpaths on either side to cross Patalganga river - 194.50 m. Two lane wide R.O.B. and subway 80.0 m. A viaduct on either side 538.50 m. Earthen approaches on both sides including new link for Kharpada Savarali Road - 1057.0 m. The project also includes a toll plaza and construction of toll booths for collection of tolls on one side, where the road will be wider and six booths shall be provided for toll collection.			
Position Held	Bridge Structural Engineer			
Activities performed	As a Bridge Structural Engineer has been responsible for the design of various structures, scheduling of all field, design and documentation activities, Time schedule and management of Team's resources. Preparation of reports, documents and drawings. Also responsible for co-ordination between various acting agencies involved in the project.			

	Language	Speaking	Reading	Writing
Languages	English	Excellent	Excellent	Excellent Excellent
33	Marathi	Excellent	Excellent	
	Hindi			
	Timor	Excellent	Excellent	Excellent

## Certification:

- 1. I am willing to work on the project and I will be available for entire duration of the project assignment and I will not engage himself in any other assignment during the currency of his
- 2. I, the undersigned, certify that to the best of my knowledge and belief, this bio-data correctly describes me, my qualifications and my experience.

gnature of the Candidate:	A. D. Ralbab
Place:	
Date :	Navi Mumbai
	24.11.2020
nature of the Authorised Representative of t	he firm
pnature of the Authorised Representative of the Place :	he firm Navi Mumbai

Chief Engineer Engineering Division M.M.R.D.A.

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26 APRIL 2002 Date

College 6.C.D.E.P., PUNE 5

This is to certify that

9120000011

Permanent Reg. No.:

31

Seaf No.

RALKAR AMIT DATTATRAY Shri/Smt.

STRUCTURAL ENGINEERING DECEMBER MASTER OF ENGINEERING Passed the

examination held by

FIRST CLASS WITH DISTINCTION and was placed in

CONTROLLER OF EXAMINATIONS

0177553





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GANESHKHIND, PUNE 411 007.

001

NO.: 02- 0001029

STATEMENT OF MARKS FOR MASTER OF ENGINEERING (by papers) (Revised 1994) BRANCH : A01 CIVIL (STRUCTURAL ENGINEERING)

SEAT NO. 31

CENTRE

PERM REG. NO. 9120000011

NAME

RALKAR AMIT DATTATRAY

COLLEGE 001 G.C.O.E.P., PUNE 5

YEAR : DECEMBER 2001

L	OLLEGE			*****	-	-		
SEMESTE		COURSE NAME			MARKS MAX. MIN. OBT.			
					WAA. IVI	HV.	OBT.	
1	101	ENGINEERING MATHEMATICS		100	40	P	41	
	102	STRUCTURAL MECHANICS		100	40	P	67	
	103	REINFORCED & PRESTRESSED CONCRETE	Ē					
		STRUCTURE		100	40	P	58	
	104	THEORY OF PLATES AND SHELLS		100	40	P	68	
	1.05	LAB.PRACTICE - I (T.W.)		50	20	P	35	
			TOTAL	450	225		269	
2	201	FINITE ELEMENT METHOD		100	40	p	67	
	202	STRUCTURAL DYNAMICS		100	40	P	76	
	203	METAL STRUCTURES & COMPOSITES		100	40	P	48	
	213 #	BRIDGE ENGINEERING		100	40	P	67	
	223 #	EARTHQUAKE ENGINEERING		100	40	P	79	
	231	LAB. PRACTICE II (T.W.)		50	20	P	42	
	232	SEMINAR I (T.W.)		50	20	P	38	
			TOTAL	600	300		417	
3	301	SEMINAR II (T.W.)		50	20	*	41	
	302	DISSERTATION (T.W.)		200	80	冰	175	
	303	DISSERTATION (ORAL)		100	40	冰	79	
		*	TOTAL	350	175		295	
		GRAND	TOTAL	1400	700		981	
		No. of the Control of						

\* CONGRATULATIONS \* \*

Elective NA- Not appeared

P - Previous \$ - Ordinance Appearing

DATE 26 APRIL 2002

MASS MAXIMUM MARKS, MIN - MINIMUM FOR PASS, OBT - MARKS OB TAINED, AA ABSENT
TPP PAPER TW - TERMWORK, OR - ORAL, P - PASS, F - FAIL, C - PREVIOUS CARRY OVER
AWARD OF CLASS, FIRST CLASS WITH DISTINCTION - 70% FIRST CLASS - 50 HIGHER SECOND CLASS - 55% SECOND CLASS - 50%
Chief Engineer

FIRST CLASS WITH DISTINCTION

M.M.R.D

CONTROLLER OF EXAMINATIONS

STATEMENT NO.

Chancellor, Vice-Chancellor
and Members of the Management
Council, on the recommendation of the Academic
Council of the Shivaji University,
certify that the withinsigned
Amit Datlatease Ralkas, of the Malchand College of Engineering
having been examined for the Degree of Bachelor of
Engineering, and on being adjudged to have passed the
Examination in First Class with Distinction,
in <u>April</u> 1998, the Degree of
Wachelor of Engineering
$(\underline{CIVIL})$
has been conferred on him at Rollhapur, on the
sixth day of the month of Gebruary in the
year one thousand nine hundred and ninetynine.
In Testimony whereof are set the Seal of the
University and the Signatures of the Registrar and the
Mice Chancellor.
Just of the state
Registrar. Chief Engineer Mice Chancellor





भारत सरकार Unique Identification Authority of India

नोंदविण्याचा क्रमांक / Enrollment No 1218/16019/03256

To, असित बचावन राळकर Amit Dattatray Raikar 105, Chhadva Park, plot no. 32 Sector 14, Navi Mumbal Kopar Khairne S.O Thane Maharashtra 400709 9223533864

Ref: 454 / 01C / 737398 / 737938 / P



UE118782835IN



आपला आधार क्रमांक / Your Aadhaar No. :

8821 8303 5729

आधार — सामान्य माणसाचा अधिकार





अमित वत्तात्रय राळकर **Amit Dattatray Ralkar** जन्म वर्ष / Year of Birth: 1977 पुरुष / Male



8821 8303 5729

आधार — सामान्य माणसाचा अधिकार







## STUP Consultants Pvt. Ltd.



Sustainable Design of Infrastructure & Real Estate through Innovation

Date: 05.02.2020

#### TO WHOMSOEVER IT MAY CONCERN

This is to certify that Mr. Amit Ralkar is working with STUP Consultants Pvt. Ltd. from August 1999 till date. Further to the earlier experience certificate issued to him dated 20.04.2017, he has further rendered services on the following assignments:

Name of Assignment	Period	Position Held
Authority's Engineer on EPC Mode for Package - 15 from km. 636.479 to km. 664.479 (Section: Village Vashala Bk. to Village Birwadi) of Nagpur Mumbai Super Communication Expressway Client: Maharashtra State Road Development Corporation Ltd	1 <sup>st</sup> January 2019 - In Progress	Bridge/Structural Design Engineer
Authority's Engineer for Consultancy services for Authority's Engineer for Supervision of Rehabilitation and upgradation to 2 lane with paved shoulder/ 4-lane standards of National Highway section (i) Satara — Koregaon — Mhaswad section of NH-548C (Length - 85.686 km) & Section (ii) Mhaswad - Tembhumi section of NH-548 C (Length - 57.678 km) on EPC Mode Client: MSRDC / MORTH	September 2017 - 15 <sup>th</sup> January 2020	Bridge Design Specialist
Authority's Engineer For Supervision of rehabilitation and up- gradation to 2 lane with paved shoulder / 4 lane standards of National Highway section (i) Pandhrpur to Sangola section of NH- 965C (Length - 34.358 km) section (ii) Sangola to Kurudwadi section of NH-965C (Length - 48.375 km) section (iii) Mhaswad - Pilov - Pandarpur section of NH-548E (Length - 53.08 km) On EPC Basis Client: MSRDC / MORTH	September 2017 - 15 <sup>th</sup> January 2020	Bridge Design Specialist

For STUP Consultants Pvt. Ltd

MANAGER-HRD

CONSULTANTS PVT. LTD.

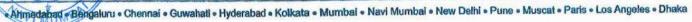
PLOT NO. 22-A, SECTOR-19-C, TSNIIPA PAWAR) PALM BEACH MARG, VASHI.

Manager (Human Resources)

Issued for uploading on Infracon

Plot No. 22-A, Sector 19-C, Palm Beach Marg, Vashi, Navi Mumbai - 400 705, India. Tel: 022-40887777, 41224328. Fax: 022-27836240. E-mall: navimumbal@stupmail.com

Regd: Office: 1004 & 5, Raheja Chambers, 213, Nariman Point, Mumbai-400 021, India. CIN: U74999MH1963PTC012649





## STUP Consultants Pvt. Ltd.



Sustainable Design of Infrastructure & Real Estate through Innovation

20th April 2017

Contd...2

NIMUMB

#### TO WHOMSOEVER IT MAY CONCERN

This is to certify that Mr. Amit Ralkar is working with this organization as Senior Bridge Design Engineer from August 1999 to till date on various highways / bridge projects. Some of the important projects undertaken by him are:

- Project Management Consultancy Services for Feasibility Study and preparation of Detailed Project Report for Construction of Major Bridge across Thane Creek (TCB III) on Sion-Panvel Road in the State of Maharashtra under EPC. Client: MSRDC Ltd.
- Post Tender Consultancy services for the work of "Design and Construction of bridge connecting Keri to Tiracol including approaches." Client: MVR Infra (GSIDC).
- Post Tender Consultancy services for the work of "Widening and Improvement of Nalgaon –
  Juichandra Bopane Road SH-41 from NH-8 to Nalgaon Railway Station and Construction of
  creek Bridge and ROB along with approaches at Nalgaon Railway Station. Client: Simplex
  Infrastructures Ltd.
- Detailed Engineering Design & Project Management Services for the work of Construction of Eastern Freeway section from Panjarpole to Chembur Mankhurd Link Road Km. 0/000 to 2/500. Client: MMRDA
- Detailed Engineering Design for the Construction of Eastern Freeway from Prince of Wales Museum to Anik Junction (start of API.R) in Mumbai. Client: Simplex Infrastructure Ltd.
- Feasibility study, Detailed Project Report and Bid Process Management for Integrated Road Development Project in Chandrapur City (2 Iane to 4 Iane, 59 kms)(project to be implemented on PPP mode on BOOT basis. Client: MUIDC, Chandrapur
- Part Design & Construction of Viaduct (Ch. KM 13.391 to KM Ch. 20.0696) excluding viaducts at stations namely Jasola, Mohan Estate, Tughlakabad and Badarpur each of length 135m, including Entry and Exit connection to Depot & including Sarita Vihar Metro station on Central Secretariat Badarpur Corridor of Delhi MRTS-Contract No: BC-26. Client: DMRC-IDEB-SUCGJV—Joint Venture, New Delhi.
- Preparation of Detailed Project Reports and Engineering Design Consultancy for Improvement, Operation and Maintenance including Strengthening and Widening of Existing 2-Lane Road to 4-Lane Dual Carriageway from Km 50.000 to Km 100.000 of NH-6 (Kondhali-Talegaon Section) in the State of Maharashtra on Build, Operate and Transfer (BOT) basis. Client: Oriental Structural Engineers P. Ltd.
- Proposed six lanes cable stayed bridge at Nagpur Railway station near Santra Market. Client: AFCONS Infrestructure Ltd. Mumbai.

Chief Engineer

Plot No. 22-A, Sector 19-C, Palm Beach Marg. Vashi, Navi Mumbai - 400 705, India. 7eh 022-40887777, 41224328. Fax: 022-27636240. E-mail: navimumbai@stupmail.com

Regd. Office: 1004 & 5, Raheja Chambers, 213, Nariman Point, Mumbai-400 021, India. CIN: U74999MH1963PTC012649 Tel.: 022-40868686. Fax: 022-22048424. E-mail: mumbai@stupmail.com www.stupco.com

-2-

- Consultancy Services for Detailed Engineering Design for Highway Package: Thrissur Angamali – Edapalli Section of NH-47 (Km.270 – 342) in Kerala State on BOT Basis. Client: Guruvayoor Infrastructure Private Limited.
- Consultancy services for Flyover at Ananda Rao Circle, Bangalore. Client: Bangalore
   Development Authority
- Cable stayed Bridge across Aldona river, Goa (2 Laned Cable Stayed Bridge). Client: AFCONS Infrastructure Ltd. Mumbai / GSIDC, Goa.
- Consultancy Services for Flyover on Varachha Road. Client: Surat Municipal Corporation
- Preparation of detailed project report for the rehabilitation and reconstruction of 16 nos. RCC bridges at different locations on existing road network in Tripura. Client: Public Works Department, Tripura.
- Construction of Major Bridge across Patalganga River and R.O.B. near village Kharpada on NH 17 on BOT basis (with toll rights). Client: M/s. Ideal Road Builders Limited.

This experience certificate is issued on the request of various clients.

PLOT NO.22

For STUP Consultants Pvt. Ltd.

A D Joshi Executive Vice President

Chief Engineer
Engineering Division
M.M.R.D.A.



PLOT NO 22-A CONTROL SECTION OF A CONTROL SECTION O





١.	Proposed Position	:	K-4: Structural Design Engineer (Steel)
2.	Name of Staff	:	Devdatta Chandarshekar Athavale
3.	Date of Birth	:	22.02.1976
4.	Nationality	:	Indian
5.	Education Qualification		<ul> <li>M. Tech (Structures), Vevesvaraya National Institute of Technology - 2003</li> <li>B.E. (Civil) - Nagpur University - 1998</li> </ul>
	Contact Address with Phone and mobile numbers		C/o STUP Consultants Pvt. Ltd. Plot No. 22A, Sector 19C, Palm Beach Marg, Vashi, Navi Mumbai 022-4088 7777
6.	Employment Record	:	
	From May 2012		To till date
-	Employer	:	STUP Consultants Pvt. Ltd.
	Position held	:	Senior Consultant
	From April 2012	:	May 2012
	Employer	1	Gammon India Ltd.
	Position held		Senior Manager (Design)
	From December 1999	1	April 2012
	Employer		STUP Consultants Pvt. Ltd.
-	Position held		: Senior Consultant

Name of Assignment / Project

Detailed Design for Civil, Architectural and Building Services Including E&M Works for Elevated Metro Rail Stations - 6 Nos. Including Viaduct Portion within the Station and Transition Spans on either side of the Stations (Thaltej Gam, Thaltej, Doordarshan Kendra, Gurukul road, Gujarat University, Commerce Six Road, Stadium) on East - West Corridor on Reach-2 (Western Reach)

Period Name of Client

**Project Brief** 

Jan 2016 - Till date

Metro-Link Express for Gandhinagar & Ahmadabad (MEGA) Company Ltd. Out of 20.536 Km of East - West Corridor of Ahmedabad Metro Rail, this project involves the Detailed Design of 4 Nos. Elevated Metro Stations namely

1. Thaltej Gam

Thaltej

Doordarshan Kendra 3.

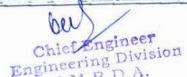
Gurukul Road

The project comprises of PSC segmental standard spans of 31 m; & other spans in multiple of 3 m, of maximum span length/of/37 m & minimum span length of 22 m with various curved / skew spans.

Structural Design Engineer

Involved in for the Detail Design of Viaduct and Station Building; Preparation

Page 1 of 5



Position Held Activities performed

VIMUM



	of Bar Bending Schedule; Preparation of Launching Scheme; and Assisting the Team Leader in the finalization of construction methodology and Quality Assurance aspects of the work during construction				
Name of Assignment / Project Period	Contract CC-24 of DMRC: Design & Construction of Tunnel by STBM, Tunnels, Stations and Ramp by Cut & Cover method bet Lajpat Nagar and Hazrat Nizamuddin Stations (both including underground works on Mukundpur - Yamuna Vihar corridor of MRTS Project of Phase-III by the Delhi Metro Rail Corporation Limit : Sep 12- Jun 15				
Part Name Water	J. Kumar - CRTG (JV). New Delhi				
Name of Client	Employer: Delhi Metro Rail Corporation Ltd. (DMRCL)				
Project Brief	The contract comprises of the design and construction of 5.556 kms. of underground stretch for Delhi MRTS project of phase III. The stretch involves the construction of 4 underground tunnels as under:-  1) Lajpat Nagar Station (Length: 265.00 m)  2) Srinivaspuri Station (Length: 243.10 m)  3) Ashram Station (Length: 265.00 m)  4) Hazrat Nizamuddin Station (Length: 265.00 m)  The project also involves the construction of cut & cover tunnel of length of 858.10 m and ramp of length 240.00 m				
Position Held	: Structural Design Engineer				
Position rield	Involved in for the Detail Design of CCT Tunnel and Station Building;				
Activities performed	Preparation of Bar Bending Schedule; Assisting the Team Leader in the finalization of construction methodology and Quality Assurance aspects of the work during construction				
Name of Assignment / Project	Detailed Engineering Design for the Construction of Eastern Freeway : from Prince of Wales Museum to Anik Junction (start of APLR) in Mumbai				
Period	: NOV 07 to APR 12				
Name of Client Project Brief	<ul> <li>Simplex Infrastructure Ltd.</li> <li>The project envisages the detailed engineering design for New Four Landelevated corridor of approx. 9 Kms and Improvement of Existing road of about 2.2Kms.</li> <li>The project comprises of PSC segmental standard spans of 26 m; 8 obligatory span length of 35 m</li> </ul>				
Position Held	: Sr. Bridge Structural Engineer				
Activities performed	As a Sr. Bridge Structural Engineer has been responsible for the design of various structures, scheduling of all field, design and documentation: activities, Time schedule and management of Team's resources Preparation of reports, documents and drawings. Also responsible for coordination between various acting agencies involved in the project.				
Name of Assignment	Contract BC-7 of DMRC: Design of elevated viaduct 5.202 Km. Inderlo: to Mundka Corridor Phase – 2 and 5 Nos. Elevated Station Building a Inderlok, Ashok Park, Punjabi Bagh, Shivaji Park and Madipur				
Period	: July 2006 – June 2011				
Name of Client	IDEB-SUCG JV – Joint Venture, New Delhi Employer: Delhi Metro Rail Corporation Ltd. (DMRCL)				
TNO.22-A COLUMN TNO.22-A COLUM	The Inderlok –Mundka corridor of Delhi MRTS is an elevated viaduct or length 5.225km with five elevated stations. There are as many as 148 spans of different lengths arranged all through the viaduct is comprised of PSC segmental construction with the span length ranging from 16m to 37m with various curved / skew spans. Also there is a 75m long structural steel superstructure continuous span placed over an existing railway track alongwith two side spans of length 62m. The superstructure system in the viaduct is of prescast prestressed type. The piers supporting the superstructures are either circular or elliptical and owning to the eccentricity of the centre line of alignment with the centre line of piers, the				

Chief Engineer
Engineering Division

Page 2 of 5



STUP Consultants P	vt.	Ltd. Y Curricula Vitae of D C Athavale
		piers are categorized as concentric, cantilever and portal piers. The maximum eccentricity is constrained to 2m for cantilever piers. The type of foundation adopted in viaduct portion is pile foundation with pile diameter fixed to 1.2m. The five elevated stations are located at Inderlok, Ashok Park, Punjabi Bagh East, Shivaji Park & Madipur. At each station there are two floor levels, namely the Concourse level and the Platform level. The spans placed side by side to the platforms are RCC cast—in-situ whereas the ones placed on either sides of the RCC cast-in-situ spans are Precast prestressed. The columns supporting the structure are circular, rectangular or half elliptical. The foundation adopted is pile foundation type and piles used are either of diameters 0.8m or 1.2m.
Position Held	:	Structural Design Engineer
Activities performed	:	Involved in for the Detail Design of Viaduct and Station Building; Preparation of Bar Bending Schedule; Preparation of Launching Scheme; and Assisting the Team Leader in the finalization of construction methodology and Quality Assurance aspects of the work during construction
Name of Assignment / Project		Design Consultancy Services for Bridge Over River Mhadei between Usgaon – Pale in Goa, for GIDC
Period	:	JAN 06 to NOV 06
Name of Client	:	Afcons Infrastructure Limited
Project Brief		Owner: GIDC Total Length: 901.5m incl approached Deck width: 21.0m Carriageway width: 2x 7.25m Span arrangement: 25.2+2*62.4+30m Type of superstructure: 3 nos of Continuous 4 span Steel trusses Foundation: Pile foundation Bearings: POT / PTFE Launching: Push launching Appx Steel quantity: 1350 Mt Appx concrete quantity: 3368 cum
Position Held	7.83	Structural Design Engineer
Activities performed	•	Responsible for the detailed engineering design of the bridge, various structures, scheduling of all field, design and documentation activities, Time
Name of Assignment / Project		Detailed Project Report including Detailed Engineering Design consultancy services for the MSRDC project pertaining to "Design & Construction of proposed six lane cable stayed bridge along with approaches in Nagpur railway station yard near Santra Market, Nagpur, in Maharashtra"
Period	:	NOV 05 to DEC 06
Name of Client	:	Afcons Infrastructure Limited
Project Brief	:	The project work comprises of construction of Cable Stayed bridge with span arrangement of 111.8m + 88.2m and viaduct with spans 28 to 28 on Jaystambh end and 15.121 + 15.121 + 30 + 6 x 25 on Bhandara end. The total length of bridge including approaches is 606.742m. The
Position Held		Structural Design Engineer
Activities performed	:	Responsible for the detailed engineering design of the bridge, various structures, scheduling of all field, design and documentation activities, Time
Name of Assignment	1:	
1111/0/4/1	-	Page 3 of 5

Chief Engineer
Engineering Division

Page 3 of 5



Project Period	: JAN 05 to MAR 05
School Control of Control Cont	
Name of Client	: MMRDA . It was a elevated road connecting Western express high way and
Project Brief	International Airport Mumbai
Position Held	: Design Engineer
Activities performed	: Preliminary design of Box girder, pier cap and pier. Working out Quantities
Name of Assignment / Project	Design and construction of Suspension bridge at Omkareshwar, Madhya Pradesh
Period	: Feb 04 to Apr 04
Name of Client	: NNDC
Project Brief	: It was a suspension bridge near Omkareshwar in Madhya Pradesh.
Position Held	: Design Engineer
Activities performed	: Proof checking of Truss, Pylons and foundation.
Name of Assignment / Project	Cable stayed Bridge across Aldona river, Goa - (2 Laned Cable Stayed Bridge)
Period	: Feb 03 – Oct 04
Name of Client	: AFCONS Infrastructure Limited
	The project involves detailed engineering design for 235 m long 2 lane
	cable stayed bridge with main span 105m and single pylon of 34 m high
Project Brief	: (from deck) designed for class 70 R loading with seismic and aerodynamic effects. The pylons are in concrete and the stiffening girder is in composite with Steel I – girders and concrete deck.
Position Held	: Structural Design Engineer
	Responsible for the detailed engineering design of the bridge, various
Activities performed	structures, scheduling of all field, design and documentation activities, Time schedule and management of Team's resources. Preparation of reports, documents and drawings. Also responsible for co-ordination between various acting agencies involved in the project.
Name of Assignment / Project	Design and Construction ROB at Vengali, Vengalam, Chengattukau and Nandi Bazar
Period	: Jan 01 to Jul 01
Name of Client	: Bhageeratha Engg Ltd, Kochi, Kerala
	ROB at Vengali consists of three spans over railway tracks of 22.4, 32.4 and 22.4 m respectively. The viaduct on left side is with 3 spans of 22.772 m and on right side with 5 spans of 20.430 m.
	The viaduct on either side are connected with spans of 20.87 m on either side of railway span. In addition to this viaduct on left side have 3, 22.772 m spans while viaduct on right side have 5, 20.430 m spans
Project Brief	ROB at Vengalam also has three railway spans of 17.4, 27.4 and 17.4 m while viaduct on left side have 4 nos. 21.675 m spans and same on right side: have 5 nos. 18.882 m spans. The connecting spans are 20.87 m each. The railway spans are with PSC box girders and viaduct spans are with RCC box
	girders. The RCC substructure, with single column is supported on very lon- piles terminated in hard rock.
	The viaduct on either side are connected with spans of 20.87 m on either side of railway span. In addition to this viaduct on left side have 4, 21.675 m spans while viaduct on right side have 5, 18.882 m spans.
	The approaches are retained with reinforced soil structures with maximur height of 4.5 m at abutment piers.
Position Held	: Assistant Design Engineer
	10 mg
Activities performed	: Design of Box girder, pile cap, piles and piers

Chief Engineer
Engineering Division

Page 4 of 5

### Curricula Vitae of D C Athavale



Project	
Period	: Dec 99 to Oct 00
Name of Client	: Public Works Department, Government of Maharashtra
Project Brief	The routine maintenance of the building is entrusted to P.W.D., Maharashtra. During a recent inspection, a number of distresses were observed, such as severe leakage in the main entrance dome, leakage through waterproofing of the terrace, leakages in four rooms located over terrace level, deterioration of joints in the parapet walls and stone masonry blocks of the entrance steps, severe spalling of concrete and corrosion of steel in the R.C.C. chhajjas of the building.
Position Held	: Junior Engineer
Activities performed	: It was PMC job and site activities were supervised.

### Certification:

- I am willing to work on the project and I will be available for entire duration of the project assignment and I will not engage himself in any other assignment during the currency of his assignment on the project.
- I, the undersigned, certify that to the best of my knowledge and belief, this bio-data correctly describes me, my qualifications and my experience.

Signature of the Candidate:	Lunie
Place :	Navi Mumbai
Date :	24.11.2020
Signature of the Authorised Representative of the firm	AA
Place :	Navi Mumbai
Date :	24.11.2020

PLOT NO. 22-A OF SECTION 19-C, SECTION 19-C,

Owl





# VISVESVARAYA NATIONAL INSTITUTE OF TECHNOLOGY

(DEEMED UNIVERSITY)
NAGPUR 440 011 (INDIA)

Upon recommendation of the Senate hereby confers degree of Master of Technology in Structural Engineering

on

Deodatta Chandrashekhar Athavale

who has successfully completed the course of study as prescribed under the regulations in November 2002 in First Division with Distinction Given this day under the seal of Visvesvaraya National Institute of Technology at Nagpur in the Republic of India.

# विश्वेश्वरच्या राष्ट्रीय प्रौद्योगिकी संस्थान

(अभिमत विद्यापीठ) नागपूर - ४४० ०११ (भारत)

देवदत्त चंद्रशेखर आठवले

को एतद्वारा

संरचनात्मक अभियांत्रिकी में प्रौद्योगिकी निष्णात

की उपाधि प्रदान करता है। अभिषद की अनुशंसा पर संस्थान की मुद्रांकित यह उपाधि, विभियमों में विहित पाठ्यक्रमों को वयम्बर 2002 में प्राचीण्य के साथ प्रथम श्रेणी

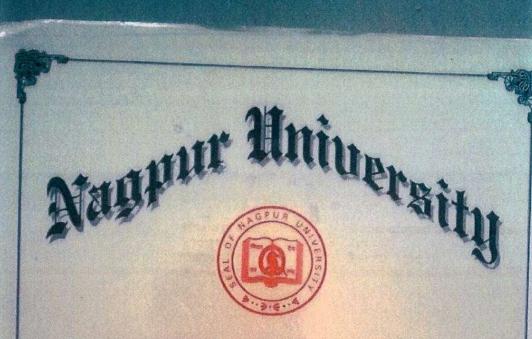
में सफलता पूर्वक पूर्ण कर लेने पर, नागपूर (भारत) में आज दी गई है।

Milandarifords

STREET, STIVIT IN THE STREET, STREET,

Appur 9, 2003

Chief Engineer
Engineering Division
M.M.R.D.A



# Bachelor of Engineering

(Faculty of Engineering & Technology)

This degree of

Bachelor of Engineering is awarded

to Devdatta Chandrashekhar Athavale

on having passed the examination for

the said Degree in Summer 1998 and was

placed in the First Division in

Civil Engineering.

Nagpur October 28, 1959 Jssahana Mice-Chancellar

MAVIMUS

THE PARTY OF PARTY

Chief Engineer
Engineering Division
M.M.R.D.A.





Chief Bagineer Engineering Division M.M.RcD.A.





# STUP Consultants Pvt. Ltd.



Sustainable Design of Infrastructure & Real Estate through Innovation

10<sup>th</sup> April 2017

### TO WHOMSOEVER IT MAY CONCERN

This is to certify that Mr. D C Athavale is working with STUP Consultants Pvt. Ltd. as "Senior Design Bridge Engineer" from 2012 to till date on various projects. Some of the important projects undertaken by him are:

- Contract CC-24 of DMRC: Design & Construction of Tunnel by shield TBM, Tunnels, Stations and Ramp by Cut & Cover method between Lajpat Nagar and Hazrat Nizamuddin Stations (both including) for underground works on Mukundpur - Yamuna Vihar corridor of Delhi MRTS Project of Client: Delhi Metro Rail Corporation Ltd
- Detailed Engineering Design for the Construction of Eastern Freeway from Prince of Wales Museum to Anik Junction (start of APLR) in Mumbai Client: Delhi Metro Rall Corporation Ltd
- Contract BC-7 of DMRC: Design of elevated viaduct 5.202 Km. Inderlok to Mundka Corridor Phase –
  2 and 5 Nos. Elevated Station Building at Inderlok, Ashok Park, Punjabi Bagh, Shivaji Park and
  Client: Delhi Metro Rall Corporation Ltd
- Design Consultancy Services for Bridge Over River Mhadel between Usgaon Pale in Goa, for GIDC Client: Afcons Infrastructure Limited
- Design & Construction of proposed six lane cable stayed bridge along with approaches in Nagpur railway station yard near Santra Market, Nagpur, in Maharashtra"
   Client: Afcons Infrastructure Limited
- Design and construction of Suspension bridge at Omkareshwar, Madhya Pradesh
   Client: NNDC
- Cable stayed Bridge across Aldona river, Goa (2 Laned Cable Stayed Bridge)
   Client: AFCONS Infrastructure Limited
- Design and Construction ROB at Vengali, Vengalam, Chengattukau and Nandi Bazar
   Client: Bhageeratha Engg Ltd, Kochi, Kerala
- Structural Assessment and Repairs to High Court Building at Nagpur Client: Bhageeratha Engg Ltd, Kochi, Kerala

This experience certificate is issued on the request of various clients.

For STUP Consultants Pvt. Ltd

Sunil Dutt

PLOT NO.22-A SECTOR-19-C, PALM BEACH MARG, VASHI, VEL:40887777

MUM

Chief Engineer

Plot No. 22-A, Sector 19-C, Palm Beach Marg, Vashi, Navi Mumbei - 400 705, India. Tel: 022-40887777, 41224328. Fax: 022-27836240. E-mail: navimumbai@stupmail.com DNV-GL

Regd. Office: 1004 & 5, Raheja Chambers, 213, Nariman Point, Mumbal-400 021, India. CIN: U74999MH1963PTC012649
Tel.: 022-40868686. Fax: 022-22048424. E-mail: mumbai@stupmail.com www.stupco.com

1.	Proposed Position	:	K-5: Quality Control / Quality Assurance Engineer
2.	Name of Staff	:	H T Wagh
3.	Date of Birth	1:	19th May, 1965
4.	Nationality	:	Indian
5.	Education Qualification	:	Bachelor of Engineering (Civil) 1991 from Pune University
	Contact Address with Phone and mobile numbers	•	C/o STUP Consultants Pvt. Ltd. Plot No. 22A, Sector 19C, Palm Beach Marg, Vashi, Navi Mumbai 022-40887777
6.	Membership of Professional Societies	:	<ul> <li>Member - Indian Road Congress, Delhi</li> <li>Member: Indian Institute of Engineers</li> </ul>
7.	Employment Record	:	The state of Engineers
	March 1998	:	To till date
	Employer	1:	STUP Consultants Pvt. Ltd.
	Position held	:	Senior Quality cum Material Expert
	July 1996	:	February 1998
	Employer	:	Maharashtra State P.W.D
	Position held	:	Assistant Engineer (II)
	October 1991	:	June 1996
	Employer	:	M/s. Atlanta Construction Co. (India) Ltd
-	Position held	100	Assistant Engineer
1.	List of projects on which the		

Period from: August 2017	Ongoing
Name of Employer	STUP Consultants Pvt. Ltd
Name of the Project	Consultancy Services For Authority's Engineer For Supervision Of Rehabilitation And Up-Gradation To 2 Lane With Paved Shoulder / 4 Lane Standards Of National Highway Section Section (i) Pandhrpur To Sangola Section Of Nh-965c (Length - 34.358 km) Section (ii) Sangola To Kurudwadi Section Of Nh-965c (Length - 48.375 km) Section (iii) Mhaswad - Pilov - Pandarpur Section Of Nh-548e (Length - 53.08 km) On EPC Basis (Package 39)
	MoRTH / MSRDC
Project Description	Length: 135.81 Kms; Project Cost: 713.171 Crores The project includes the construction of 4 Major Bridges, 35 Minor Bridges
10887777/6/1	(Nam)



Designation / Position held in Project	Material Engineer
Duties and responsibility of keypersonnel in the project	Responsible for supervising all the tests to be done in different stages of construction, besides ensuring that specified tests are done as per codal stipulations and as per the specifications laid down in the contract for all the different stages of construction, Review Set up of field laboratories and training of Field Engineers and the technicians in the testing and reporting procedures; Review Finalized of data formats and requirements for field studies for exploration and selection of construction materials, Review of Collection, compilation and development of data bank for materials and pavements, Scheduling of all field and laboratory testing activities and finalisation of formats, Specifications for pavement materials; Time schedule and management of Material and Pavement Engineering Team's resources, Review and acceptance of Quarry sites for aggregates, quarry spall, sand, borrow material, Review of Precasting yard, rock crushers & bituminous hot mixing plant etc., Review and acceptance of test results for manufactured materials required for road and structure works such as steel, cement, bitumen etc., Maintaining record of all materials at site and review the Contractors' procurement schedule and assist the Team Leader in issuance of Instructions to the Contractors for correcting the same, if deemed necessary; Assist the Team Leader in issuance of Site Instructions for the approval and rejection of materials at source and at site; Review and acceptance of mix design proposals for sub-base, base, and concrete mixes; Maintaining records of all test results and approvals or rejection of completed works; Quality control testing of all materials and completed works are as per the technical specifications; Verify manufacturers' certificates; Assisting the Team Leader with Final Inspections of works

Period from: January 2015	July 2017		
Name of Employer	STUP Consultants Pvt. Ltd		
Name of the Project	Authority's Engineer' for Construction and Development of 6 – Lane Hindon Elevated Road at Ghaziabad, U.P., India on T.O.D. (Transit Oriented Development) basis on Engineering Procurement And Construction (EPC) Contract mode (Length 10.300 Km).		
Client for the project	Ghaziabad Development Authority		
Project Description	Ghaziabad Development Authority (GDA) has undertaken the Construction and Development of 6 – Lane Hindon Elevated Road at Ghaziabad, U.P., India on T.O.D.(Transit Oriented Development) basis on (EPC) contract mode.  Elevated Road/Flyover - Length 10.30 Kms (Pre-cast segmental construction)  Maximum Span Length: 50.047m (Steel Composite) / 46.00m (PSC)  Estimated project cost is Rs. 916.92 Crores.		
Designation / Position held in Project	Senior Quality cum Material Expert		
Duties and responsibility of keypersonnel in the project	Responsible for assisting the Team Leader in reviewing Contractor's Work Program, construction methods and adherence to environmental norms and performance of plant, equipment and machinery; Carrying out tests of soil from borrow areas, aggregate from quarry sites, sand, bitumen etc. to ascertain their strength and suitability for use on the project; Inspect Contractor's field laboratories to ensure adequacy of their equipment and capability to perform all the specified testing requirements; Review the Quality Assurance Program of Contractor considering the latest and modern technology and recommend changes considered necessary; Review of test results for manufactured materials required for road and structural works such as bitumen, cement, steel, etc. Review the Contractor's procurement schedule		

Chief Engineer Engineering Division M.M.R.D.A.



and assist the TL in issuance of instructions to the contractor for correcting the same, if deemed necessary; Check the setting up of rock crushers and bituminous plants of the Contractor to ensure that the specified requirements for such equipments are fully met; Review and acceptance of mix design proposals for sub-base, base asphalt and cement concrete mixes; Review Quality control testing of all materials and completed works and ensure that all materials and completed works are as per the technical specifications; Assisting the Team Leader in acceptance and rejection of materials and of completed works; keeping record of results of various tests in a systematic manner; Preparation of reports.

Period from: Jan 2011	December 2014	
Name of Employer	STUP Consultants Pvt. Ltd	
Name of the Project	Proof Checking & Project Management Consultancy services for the project of "Improvement of Sion – Panvel special State Highway from KM 115+800 TO KM 140+690 (Kalamboli Junction to B.A.R.C Junction)" Project Cost: Rs. Rs 1,705.67 Crore	
Client for the project	PWD / Sion Panvel Tollways Ltd.	
Project Description	The main scope of the project is to supervise on behalf of the concessionaire as Project Management Consultant. The project involved construction of approximate design length for main carriageway – 23.090 kms including Service Roads – 4.09 Kms.; Proposed Flyovers (3 + 3 lanes) – 3 Nos.; Proposed Flyovers (3 lanes) – 2 Nos.; Proposed ROBs (2 laned) – 2 Nos.; Widening of Major Creek Bridges – 2 Nos.; Widening of existing Minor Bridges – 8 Nos.; Proposed VUPs – 2 Nos.; Widening of existing VUPs – 8 Nos.; Proposed PUPs – 17 Nos.; Widening of existing PUPs – 1 Nos.; Repairs of existing Underpasses – 8 Nos.; Proposed FOBs – 10 Nos.; Proposed Box Culverts – 61 Nos.; Proposed Pipe Culverts – 5 Nos.; Proposed Toll Plazas – 1 No.; Widening of existing Box Culverts – 5 Nos.; Remodelling of existing drains to Box Culverts – 61 Nos.	
Designation / Position held in Project	Material Engineer	
Duties and responsibility of keypersonnel in the project	Responsible for assisting the Team Leader in reviewing Concessionaire's Work Program, construction methods and adherence to environmental norms and performance of plant, equipment and machinery; Carrying out tests of soil from borrow areas, aggregate from quarry sites, sand, bitumen etc. to ascertain their strength and suitability for use on the project; Inspect Concessionaire's field laboratories to ensure adequacy of their equipment and capability to perform all the specified testing requirements; Review the Quality Assurance Program of Concessionaire considering the latest and modern technology and recommend changes considered necessary; Review of test results for manufactured materials required for road and structural works such as bitumen, cement, steel, etc. Review the Concessionaire's procurement schedule and assist the TL in issuance of instructions to the Concessionaire for correcting the same, if deemed necessary; Check the setting up of rock crushers and bituminous plants of the concessioners to ensure that the specified requirements for such equipments are fully met; Review and acceptance of mix design proposals for sub-base, base asphalt and cement concrete mixes; Review Quality control testing of all materials and completed works and ensure that all materials and completed works are as per the technical specifications; Assisting the Team Leader in acceptance and rejection of materials and of completed works; keeping record of results of various tests in a systematic manner; Preparation of reports.	

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Name of Employer	STUP Consultants Pvt. Ltd
Name of the Project	Project Management Consultancy including construction supervision for the NHAI project pertaining to "Six Lanning of Surat – Dahisar section of NH-8 from Km. 381.600 to Km. 502.000 (length: 120.400 Kms.) in the state of Maharashtra to be executed as BOT (Toll) basis on DBFO pattern under NHDP Phase – V"; Project Cost: Rs. 1,693.00 Crores
Client for the project	IRB Infrastructure Developers Ltd (Owner Client: NHAI)
Project Description	Modern Road Makers Pvt. Ltd. have been awarded the project of development of Six Laning of Surat — Dahisar section of NH-8 from km. 263.00 to km. 502.00 (length: 239.00 kms.) in the state of Gujarat / Maharashtra to be executed as BOT (Toll) basis. STUP was entrusted with the consultancy assignment of Project Management including construction supervision for the Maharashtra section, i.e. (Km. 381/600 to Km. 502/000); Length: 120.400 Kms.  The major bridges / structures along the project corridor are as under:  ➤ Vadoli Nala Bridge (1x15.90+4x18 = 87.90 m on LHS & 3x15.10 = 45.3 m on RHS for which foundation is proposed on piles in river with marine conditions.  ➤ Gulzari Nala Bridge (3x21 = 63.0 m on LHS & 3x21 = 63.0 m on RHS (Total length: 126.0 m) for which foundation is proposed on piles in river with marine conditions.  ➤ Surya River Bridge with span arrangement of (1x19.889+1x20.46+1x20.63+2x20.56+1x20.51+1x20.54+1x20.57+1x19 .864 = 183.583 m on LHS & 1x19.889+1x20.46+1x20.63+2x20.56+1x20.51+1x20.54+1x20.57+1x19.864 = 183.583 m on RHS (Total Length: 367.166 m for which foundation is proposed on piles in river with marine conditions.  ➤ Valtarna River Bridge (2x12.2+6x22.86+3x27.43 = 243.85 m on LHS & 2x12.2+6x22.86+3x27.43 = 243.85 m on RHS (Total length: 487.70 m) for which foundation is proposed on piles in river with marine conditions.  ➤ Vandri River Bridge (11x10.67 = 117.37 m on LHS and 11x10.67 = 117.37 m on RHS (Total length: 234.74 m) for which foundation is proposed on piles in river with marine conditions.  ➤ Tansa River Bridge (12x14.14 = 169.68 on LHS & 12x14.14 = 169.68 on RHS (Total length: 339.36 m) for which foundation is proposed on piles in river with marine conditions.  ➤ Karman Creek Bridge (2x26+1x32.81 = 84.81 m on LHS & 2x26+1x32.81 = 84.81 m on RHS (Total length: 169.62 m) for which foundation is proposed on 6 nos. piles of 1.200 m dia. in creek with marine conditions.
Designation / Position held in Project	Material Engineer
Duties and responsibility of keypersonnel in the project  PLOT NO 22-A CONTROL OF THE SECTION OF	Program, construction methods and adherence to environmental norms and

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requirements for such equipments are fully met; Review and acceptance of mix design proposals for sub-base, base asphalt and cement concrete mixes; Review Quality control testing of all materials and completed works and ensure that all materials and completed works are as per the technical specifications; Assisting the Team Leader in acceptance and rejection of materials and of completed works; keeping record of results of various tests in a systematic manner; Preparation of reports.

Period from: Dec 2009	Sept 2010		
Name of Employer	STUP Consultants Pvt. Ltd		
Name of the Project	Consultancy Services for 4/ of NH-12 (Km 18.700 to Km Phase III on Design, Build, Project Cost Rs. 1183.60 Cm	Finance, Operate and T	
Client for the project	NHAI / IRB Infrastructure Dev		
Project Description	The main scope of the project Project Management Consults of 146.300 km of Jaipur to De the State of Rajasthan under and Transfer (DBFOT) Basis	oli Section of NH-12 (Km NHDP Phase III on Design	onstruction of 4 / 6 laning
	The components of the propos	sed project were:-	
	Description	Total Scope	
	4 lane Highway	146.300 Kms.	
	Grade Separators	2 Nos.	
	Major Bridges	1 No.	
	Minor Bridges	26 Nos.	
	Vehicular Underpasses	11 Nos.	
	Cattle / Pedestrian Underpasses	9 Nos.	
	Culverts	143 Nos.	
Designation / Position held in Project	Senior Quality-cum-Material		
Duties and	Responsible for assisting the	Toom Landari .	
responsibility of key- personnel in the project	Responsible for assisting the Program, construction method performance of plant, equipment borrow areas, aggregate from strength and suitability for usuaboratories to ensure adeperform all the specified Assurance Program of Contechnology and recommend results for manufactured material bitumen, cement steel at a Positiva Program of Program	ent and machinery; Carryi quarry sites, sand, bitume on the project; Inspect quacy of their equipm testing requirements; cessionaire considering changes considered nece ials required for road and	vironmental norms and ng out tests of soil from en etc. to ascertain their Concessionaire's field ent and capability to Review the Quality the latest and modern assary; Review of test structural works such as

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Chief Engineer Engineering Division M.M.R.D.A.

manner; Preparation of reports.

bitumen, cement, steel, etc. Review the Concessionaire's procurement schedule and assist the TL in issuance of instructions to the Concessionaire for correcting the same, if deemed necessary; Check the setting up of rock crushers and bituminous plants of the concessioners to ensure that the specified requirements for such equipments are fully met; Review and acceptance of mix design proposals for sub-base, base asphalt and cement concrete mixes; Review Quality control testing of all materials and completed works and ensure that all materials and completed works are as per the technical specifications; Assisting the Team Leader in acceptance and rejection of materials and of completed works; keeping record of results of various tests in a systematic

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Period from: March 2007	November 2009
Name of Employer	STUP Consultants Pvt. Ltd
Name of the Project	Independent Consultancy Services for six laning of Bharuch to Surat from km. 198.000 to km. 263.000 of NH-8 in Gujarat on BOT basis - (Package BOT-2)
Client for the project	NHAI
Project Description	NHAI proposes to widen the existing NH-8 stretch from 4 lane to 6 lane from Km 198 to Km 263 ie. from Bharuch to Surat in Gujarat on BOT basis. The BOT project basically comprises of up-gradation of the existing 4 lane carriageway to 6 lane divided carriageway facility with geometric improvements and rehabilitation of existing 4 lane road, construction of Service Roads, 6 flyovers and widening of 2 Rail Over Bridges and existing bridges.
Designation / Position held in Project	Material Engineer
Duties and responsibility of keypersonnel in the project	Responsible for assisting the Team Leader in reviewing Concessionaire's Work Program, construction methods and adherence to environmental norms and performance of plant, equipment and machinery; Carrying out tests of soil from borrow areas, aggregate from quarry sites, sand, bitumen etc. to ascertain their strength and suitability for use on the project; Inspect Concessionaire's field laboratories to ensure adequacy of their equipment and capability to perform all the specified testing requirements; Review the Quality Assurance Program of Concessionaire considering the latest and modern technology and recommend changes considered necessary; Review of test results for manufactured materials required for road and structural works such as bitumen, cement, steel, etc. Review the Concessionaire's procurement schedule and assist the TL in issuance of instructions to the Concessionaire for correcting the same, if deemed necessary; Check the setting up of rock crushers and bituminous plants of the concessioners to ensure that the specified requirements for such equipments are fully met; Review and acceptance of mix design proposals for sub-base, base asphalt and cement concrete mixes; Review Quality control testing of all materials and completed works and ensure that all materials and completed works are as per the technical specifications; Assisting the Team Leader in acceptance and rejection of materials and of completed works; keeping record of results of various tests in a systematic manner; Preparation of reports.

Period from: Feb 2006	Feb 2007
Name of Employer	STUP Consultants Pvt. Ltd
Name of the Project	Independent Engineers Services for the "Improvement of Thane-Ghodbunder Road, (10 Laning) Joining NH â€" 8 & NH-3 Km 0/000 to Km 14/900"
Client for the project	MSRDC
Project Description	10 Lane; Project length 14.9 Kms. (Project Cost: Rs. 100.00 Crores)
Designation / Position held in Project	Material Engineer
Duties and responsibility of keypersonnel in the project A PLOT NO 32-A SECTIVA-11-C, PALM BIO MARRG NO TEL. 40887777	The Project Brief & Responsibilities: The project comprises km 0/000 to 4/400 â€" 4 Lane Asphalt km 4/400 to 10/400 â€" 4 Lane conc. + 2 Lane Asphalt. km 10/400 to 14/900 â€" 6 Lane conc. + 2 Lane BT + 2 Lane Paver Block. It also includes construction of box culverts, retaining walls, provision of utility ducts, junction improvement, drainage improvement, Bus byes & lay byes improvement, landscaping & beautification. Responsibilities includes design & documentation of concrete and bitumen mixes, field sampling and testing of material, calibration of hot mix plant, concrete batching plant & other equipments. Preparation of quality assurance plan (QAP) to confirm that

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Engineering Division
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finished product should meet the specification requirement. Examination of test certificates & compare the same with specification.

Period from: Sept. 2002	Jan 2006
Name of Employer	STUP Consultants Pvt. Ltd
Name of the Project	4 Laning of Satara Kolhpur upto MS Border Section of NH-4, From Km 725/00 to Km 697/000 (Pakage - V)
Client for the project	NHAI & MSRDC
Project Description	4 Lane; 28.00 Kms
Designation / Position held in Project	Highway Engineer
Duties and responsibility of keypersonnel in the project	Responsibilities include scheduling of all field, design and documentation activities, identification of available alignment options and finalization of alignment. Finalization of reports, documents and drawings, geometric design of alignments and design of pavements, supervision of site clearing, GSB, WMM, DLC, pavement quality concrete, BM, DBM,BC, drainage work, portal culverts and pedestrian crossing as per IRC / IS / British standards and most specification with the state of the art technology. Planning and scheduling of construction activities, review of progress reports and construction procedures. Liaison with client and contractor. Preparation of (QAP) covering all field, design and documentation activities and implementing the same, design standards for the project. Finalization of data formats and requirements of field investigations, finalization of old structures, material approvals. Sampling and testing of all materials required for road work.

Period from: Feb 2002	Aug 2002
Name of Employer	STUP Consultants Pvt. Ltd
Name of the Project	4 Laning of National Highway (NH) 4 & 4B Leading to JNPT Package - I
Client for the project	NHAI
Project Description	4 Lane; 26.00 Kms.
Designation / Position held in Project	Material Engineer
Duties and responsibility of key-personnel in the project	Responsible as a material and quality control engineer for developing the quality assurance plan and establishing the three laboratories at different locations on site. Developing methodology of the each activity, work finalizing quarries for aggregate, sand & borrow area for embankment, subgrade etc. on basis of testing carried on various samples as per the IS/IRC/British/ American codes and MORTH. Monitoring of testing carried out in site laboratory as well as outside laboratory of all construction material like soil, bitumen, cement, steel hume pipes as per frequency mentioned in MORTH, relevant IS/IRC/British codes. Calibration of Batching plants, Hot mix plant and other equipment in laboratory.

Period from: Jan 2001	Jan 2002		
Name of Employer	STUP Consultants Pvt. Ltd		
Name of the Project	Construction of Stadiums & Infrastructure Development for National Games " 2002 at Hyderabad in Andhra Pradesh		
Client for the project	AP Industrial Infrastructure Corporation Ltd.		
Project Description	Project Cost - 100 Crores		
Designation / Position held in Project	Material Engineer		

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Curricula Vitae of H T Wagh

Duties and responsibility of keypersonnel in the project	Testing of material for subgrade, GSB, WMM, BT, Aggregate, Bricks, Cement
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Period from: March 1998	Dec 2000
Name of Employer	STUP Consultants Pvt. Ltd
Name of the Project	Consultancy Services for Mumbai-Pune Expressway – Section 'A': Kon to Chowk (Six Lanes Road with Rigid Pavement) on BOT basis
Client for the project	MSRDC
Project Description	6 Lane
Designation / Position held in Project	Material Engineer
Duties and responsibility of key-personnel in the project	Responsibilities include quality control & quality assurance. It includes issuing quality certificate with every R.A. Bill after checking the quality of the work, testing of materials as per the contract specification, MOST & relevant IS, IRC, BIS, and ASTM Codes. Testing of material includes soil for embankment, sub grade, aggregates for bituminous & non bituminous bases & subases, concrete work etc. I am also responsible for formulation of design mixes for GSB, WMM, DLC, PQC & Concrete grades upto M-45 for structures and PSC girders, to check the foundation strata for SBC for underpasses overpasses, retaining walls, rockfill embankment. Testing and approval of miscellaneous materials like crash barriers for galvanized thickness, admixtures, sealants, etc. Inspection of batching plant, HMP, Crushers and checking the product to meet the specification requirements.

Period from: July 1996	Feb 1998
Name of Employer	Public Works Department Maharashtra
Name of the Project	Widening of Kurla-Mankhurd Road & Railway over bridge at Chembur, Mumbai
Client for the project	PWD Maharashtra
Project Description	4 Lane
Designation / Position held in Project	Assistant Engineer II
Duties and responsibility of key-personnel in the project	The Project Brief & Responsibilities: Length of the road is 8 km. Rail over bridge is having span of 10mtr & it carries traffic from Ghatkopar and Mulund to Sion - Panvel road (Chembur Naka). Responsibility includes surveying, determination of existing soil strata & crust thickness. Testing of aggregate & bituminous material, testing of concrete, keeping day to day record on the quality and quantity of the material for various activities of the project. Estimation and costing of various items in the project

1000	SULTA SOMH15 PLOTNO	Period	from: October	June 1996	16/5/1101 pt
10	PALM PALM	Name	of Employer	M/s. Atlanta Construction Co. (India) L	td (F) Seach MARG
*	TEL.:408	Name	of the Project	Construction of two laning of 64 k	m of Manor – Wada – Bhiwandi road
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	on SH-34 & SH-35 in the state of Maharashtra
Client for the project	PWD, Maharashtra
Project Description	2 Lane; 70 Kms. Project Cost: Rs. 17.00 Crores
Designation / Position held in Project	Asstt. Highway Engineer
Duties and responsibility of key- personnel in the project	Responsible for review and Modification in design; Execution of work; Implementation of Quality Assurance Plan and Quality Control; Monitoring physical and financial progress of work; Monitoring rehabilitation/maintenance activities carried out along the existing carriageway; Ensured that the EMP was adhered to and adequate safety measures at site were in place during construction; Maintain proper records of the activities; Measurement of work and preparation of Interim Payment Bills and assistance in preparation of various reports.

Languages		Language	Speaking	Reading	Writing
		English	Excellent	Excellent	Excellent
	:	Marathi	Excellent	Excellent	Excellent
		Hindi	Excellent	Excellent	Excellent

### Certification:

- I am willing to work on the project and I will be available for entire duration of the project assignment and I will not engage himself in any other assignment during the currency of his assignment on the project.
- I, the undersigned, certify that to the best of my knowledge and belief, this bio-data correctly describes me, my qualifications and my experience.

Sign	nature of the Candidate:	+*
	Place:	Navi Mumbai
	Date :	24.11.2020
Sign	nature of the Authorised Representative of the firm	
	Place :	Navi Mumbai
	Date :	24.11.2020



Chief Engineer Engineering Division M.M.R.D.A.



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Maharashtra State Board of Secondary and Higher Secondary Toucation



This is to certify that the within signed

WASH HARTSHEHADDRA TUKARAH.

DIVIDIDILAL BOARD	SEAT NO.	CENTRE NO.	SCHOOL NO.	SAL NO OF
RUNE	216791	200	130060	DESSE

of MARCH-1982 in the Grade DESTENCTION with subjects shown below:

CORE SUBJECTS	MARKS OF	OTHER SUBJECTS	GRADES
MARAYES	54/100	CORTIONAL SUBJECTED	
HINDX	68/100	DRAWING & PAINTING	A
SHOFISH	85/100		
MATHEMATICS	124/150	E SCHOOL SUBJECTS 3	
SCIENCE	122/150	PHYSICAL EDUCATION	80
SOCIAL SCIENCES	85/100	SCOUTING	84-
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Engineering Division M.M.R.D.A.

Chief Engineer

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Chief Engineer Engineering Division M.M.R.D.A.



## STUP Consultants Pvt. Ltd.



Sustainable Design of Infrastructure & Real Estate through Innovation

10th April 2017

### TO WHOMSOEVER IT MAY CONCERN

This is to certify that Mr. H.T. Wagh is working with this organization as Senior Quality cum Material Expert from March 1998 - till date on various highway/ bridge projects. Some of the important project undertaken by him are:

- > Authority's Engineer' for Construction and Development of 6 Lane Hindon Elevated Road at Ghaziabad, U.P., India on T.O.D. (Transit Oriented Development) basis on Engineering Procurement And Construction (EPC) Contract mode (Length 10.300 Km). Client: Ghaziabad Development Authority
- > Proof Checking & Project Management Consultancy services for the project of "Improvement of Sion - Panvel special State Highway from KM 115+800 TO KM 140+690 (Kalamboli Junction to B.A.R.C Junction)". Client: PWD / Sion Penvel Tollways Ltd.
- > Project Management Consultancy including construction supervision for the NHAI project pertaining to "Six Lanning of Surat - Dahlsar section of NH-8 from Km. 381.600 to Km. 502.000 (length: 120.400 Kms.) in the state of Maharashtra to be executed as BOT (Toll) basis on DBFO pattern under NHDP Phase - V". Client: IRB Infrastructure Developers Ltd.
- Consultancy Services for 4/6 laning of 146.300 km of Jalpur to Deoli Section of NH-12 (Km 18.700 to Km 165.000) in the State of Rajasthan under NHDP Phase III on Design, Build, Finance, Operate and Transfer (DBFOT) Basis. Client: IRB Infrastructure Developers Ltd.
- Independent Consultancy Services for six laning of Bharuch to Surat from km. 198,000 to km. 263,000 of NH-8 in Gujarat on BOT basis - (Package BOT-2), Client: National Highways Authority of India.
- Consultancy Services as Independent Engineer for Improvement, Toll collection & Operation, Maintenance of Thane Ghodbunder Road, BOT Basis. Client: Maharashtra State Road Development Corporation.
- Independent Engineer of Four Laning of 111 km of Mumbai Pune Section on NH-4 (km 131/200 to 20/400) on BOT basis, Client: Maharashtra State Road Development Corporation.

This experience certificate is issued on the request of various clients.

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PLOT NO.22-A SECTOR-19-C. PALM BEACH MARG

TEL:4088777

VIMUM

For STUP Consultants Pvt. Ltd

Joint Vice President

Chief Engineer

Engineering Division

Flot No. 22-A, Sector 19-C, Palm Beach Marg, Vashi Nave Murbal - 400 705, India.
Tel: 022-40887777, 41224328. Fax: 022-27836240. E-mail: navimumbal@stupmail.com

Regd. Office: 1004 & 5, Raheja Chambers, 213, Nariman Point, Mumbai-400 021, India. CIN; U74999MH1963PTC012649 Tel.: 022-40868686. Fax: 022-22048424. E-mail: mumbai@stupmail.com www.stupco.com



	Curri	<u>culu</u>	m Vitae (CV) for Proposed Key Staff
1.	Proposed Position	:	K-6: Contract Specialist
2.	Name of Staff		A S Bokil
3.	Date of Birth	1:	22 July, 1964
4.	Nationality	:	Indian
5.	Education Qualification	:	B.E (Civil ), University of Pune, 1989
	Contact Address with Phone and mobile numbers		C/o STUP Consultants Pvt. Ltd. Plot No. 22A, Sector 19C, Palm Beach Marg, Vashi, Navi Mumbai 022-40887777
6.	Membership of Professional Societies	:	Life Member, Institution of Engineers (India)
7.	Employment Record	:	
	December 1993	:	Till date
	Employer	:	STUP Consultants Pvt. Ltd
	Position held	:	Senior Contract Specialist
	From 1989	:	1992
	Employer	:	AFCONS Infrastructure Pvt. Ltd
	Position held	:	Construction Engineer
8.	List of projects on which	the	Personnel has worked:

Period from: September 2017	Period to: Till Date	
Name of Employer	STUP Consultants Pvt. Ltd., New Delhi	
Name of the Project	Authority's Engineer for Consultancy services for Authority's Engineer for Supervision of Rehabilitation and upgradation to 2 lane with paver shoulder/ 4-lane standards of National Highway section (i) Satara - Koregaon - Mhaswad section of NH-548C (Length - 85.686 km) & Section (ii) Mhaswad - Tembhurni section of NH-548 C (Length - 57.678 km) or EPC Mode	
Client for the project	MSRDC/MORTH Length: 143.364 Kms; Project Cost: 932.54 Crores	
Project Description		
Designation / Position held in Project	Senior Contract Specialist	
Duties and responsibility of key-personnel in the project	As Senior Contract Specialist he shall be deployed in working season in stages for cumulative duration of the consultancy contract period for obtaining his expert opinion on emerging contractual issues, Key responsibilities will be to guide and assist Team Leader/Employer in all aspects of contract management in proper implementation of contract provisions including controlling the project cost of the construction package, Shall offer his advice	

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Curricula Vitae of A S Bokil

on contractual complications arising during the implementation as per the request of the employer, Shall be required to prepare manuals/schedules for the consultants team/employer based on the provisions of the contract document, Shall be responsible for giving appropriate suggestions in handling claims of the contractors and any dispute arising thereof

Period from: September 2017	Period to: Till Date		
Name of Employer	STUP Consultants Pvt. Ltd., New Delhi		
Name of the Project	Authority's Engineer For Supervision of rehabilitation and up-gradation to 2 lane with paved shoulder / 4 lane standards of National Highway section (i) Pandhrpur to Sangola section of NH-965C (Length - 34.358 km) section (ii) Sangola to Kurudwadi section of NH-965C (Length - 48.375 km) section (iii) Mhaswad - Pilov - Pandarpur section of NH-548E (Length - 53.08 km) On EPC Basis		
Client for the project	MSRDC/MORTH		
Project Description	Length: 135.81 Kms; Project Cost: 713.171 Crores		
Designation / Position held in Project	Senior Contract Specialist		
Duties and responsibility of key-personnel in the project	As Senior Contract Specialist he shall be deployed in working season in stages for cumulative duration of the consultancy contract period for obtaining his expert opinion on emerging contractual issues, Key responsibilities will be to guide and assist Team Leader/Employer in all aspects of contract management in proper implementation of contract provisions including controlling the project cost of the construction package, Shall offer his advice on contractual complications arising during the implementation as per the request of the employer, Shall be required to prepare manuals/schedules for the consultants team/employer based on the provisions of the contract document, Shall be responsible for giving appropriate suggestions in handling claims of the contractors and any dispute arising thereof		

Period from: Oct. 2015	Period to: August 2017		
Name of Employer	STUP Consultants Pvt. Ltd., New Delhi		
Name of the Project	Consultancy Services for Authority's Engineer for Supervision of Project of Construction of Four Laning of UP/Haryana Border-Yamunanagar-Saha-Barwala-Panchkula Section of NH-73 from Km 70.830 to Km 115.400 in the State of Haryana on Engineering Procurement and Construction (EPC) Basis (Package-1).		
Client for the project	National Highways Authority of India (NHAI)		
Project Description	Project Length: 44.57 km; Lane: 4-lane; Project cost: INR 481.45 crore.		
Designation / Position held in Project	Senior Contract Specialist		
Duties and responsibility of keypersonnel in the project	As Senior Contract Specialist, Responsible to advice the project authorities regarding contract administration, contract management, contract planning, resource planning and financial documentation related to legal matters, checking of Concessionaire's Monthly Statement of Works and preparation of Interim Payment Certificate, Preparation of different types of reports like Quarterly Progress Reports, Monthly Progress Reports & status reports, preparation of variation order, Rate Analysis for new items, finalization of extension of time, monitoring of claims, checking & preparation of consultancy services, preparation of revised bill of quantities, preparation of documents for recommendation for custom/excise duty exemption certificates,		

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monitoring & checking of Concessionaire's Work Programme. Also involved in resolving contractual disputes by correctly interpreting various clauses of agreement.

Period from: Dec. 2012	Period to: Jun. 2015 [07 months intermittent input]	
Name of Employer	STUP Consultants Pvt. Ltd., New Delhi	
Name of the Project	Independent Engineer services for Four Laning of Lucknow-Raebareli Section of NH–24 A from Km 12.700 to Km 82.700 on From km. 12.700 to km. 82.700 (project length: 70 km.) on BOT (Annuity) under NHDP Phase IV A in the State of Uttar Pradesh.	
Client for the project	National Highways Authority of India (NHAI)	
Project Description	Project Length: 70 km; Lane: 4-lane; Project cost: INR 836 crore.	
Designation / Position held in Project	Senior Contract Specialist	
Duties and responsibility of key-personnel in the project	As Senior Contract Specialist, Responsible to advice the project authorities regarding contract administration, contract management, contract planning, resource planning and financial documentation related to legal matters, checking of Concessionaire's Monthly Statement of Works and preparation of Interim Payment Certificate, Preparation of different types of reports like Quarterly Progress Reports, Monthly Progress Reports & status reports, preparation of variation order, Rate Analysis for new items, finalization of extension of time, monitoring of claims, checking & preparation of consultancy services, preparation of revised bill of quantities, preparation of documents for recommendation for custom/excise duty exemption certificates, monitoring & checking of Concessionaire's Work Programme. Also involved in resolving contractual disputes by correctly interpreting various clauses of agreement.	

Period from: Jan. 2012	Period to: Mar. 2013 [08 months intermittent input]  STUP Consultants Pvt. Ltd., New Delhi		
Name of Employer			
Name of the Project	Independent Engineer (IE) services for Six/Four laning of Km. 198/00 to Km. 263/00, Bharuch-Surat Section of NH-8 during Operation & Maintenance period in Gujarat on BOT basis, package-II on DBFOT Basis under NHDP Phase-V		
Client for the project	National Highways Authority of India (NHAI)		
Project Description	Project Length: 65 km; Lane: 6-lane; Project cost: INR 636 crore.  The BOT project basically comprises of upgradation of the existing 4-lane carriageway to 6-lane divided carriageway facility with geometric improvements and rehabilitation of existing 4-lane road, construction of service roads, 7 major bridges, 6 flyovers and widening of 2 Rail Over bridges (ROBs) and existing bridges.		
LTANTS NAMIDESSO LOT NO 22-A COT NO 22-A C	<ul> <li>Bridge at Chainage 205.885 on NH-8 (Span 3x35+1x35+2x135 = 410 m) Superstructure: Prestressed Concrete Girder.</li> <li>Amla Khadi Bridge @ ch. 209.324 (Total Length: 91.00 m with span arrangement of 1 x 5.0 + 1 x 24.226 + 1 x 32.89 + 1 x 23.75 + 1 x 5.0)</li> <li>Kim Tributary River Bridge @ Ch. 231.344m (Total Length: 85.40 m with span arrangement of 7 x 12.20)</li> <li>Kim River Bridge @ Ch. 233.669 (Total Length: 118.35 m with span arrangement of 1 x 14.65 + 2 x 32.9 + 1 x 5.0)</li> <li>Panjar Khadi bridge @ Ch. 244.757 (Total Length: 56.59 m with span</li> </ul>		

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	<ul> <li>arrangement of 1 x 13.70 + 1 x 28.95 + 1 x 13.70)</li> <li>➤ Kadodara Khadi bridge @ Ch. 260.393 (Total Length: 56.25 m with span arrangement of 1 x 13.65 + 1 x 28.95 + 1 x 13.65)</li> <li>➤ ROB at Chainage 206.406 on NH-8 between Bharuch-Surat section (Span 1X48+2X165 = 378 m) Superstructure: Prestressed Concrete Girder.</li> <li>➤ ROB at Chainage 228.077 on NH-8 between Bharuch-Surat section (Span 1X35+2X165 = 365 m) Superstructure: Prestressed Concrete Girder.</li> </ul>	
Designation / Position held in Project	Senior Contract Specialist	
Duties and responsibility of keypersonnel in the project	As Senior Contract Specialist, Responsible to advice the project authorities regarding contract administration, contract management, contract planning, resource planning and financial documentation related to legal matters, checking of Concessionaire's Monthly Statement of Works and preparation of Interim Payment Certificate, Preparation of different types of reports like Quarterly Progress Reports, Monthly Progress Reports & status reports, preparation of variation order, Rate Analysis for new items, finalization of extension of time, monitoring of claims, checking & preparation of consultancy services, preparation of revised bill of quantities, preparation of documents for recommendation for custom/excise duty exemption certificates, monitoring & checking of Concessionaire's Work Programme. Also involved in resolving contractual disputes by correctly interpreting various	

Period from: Jan. 2011	Period to: May 2013 [06 months intermittent input]
Name of Employer	STUP Consultants Pvt. Ltd., New Delhi
Name of the Project	Project Management Consultancy services for Manor-Wada-Bhiwandi Road on SH-34 in the State of Maharashtra. The project involves widening of Manor-Wada (24.25 kms) and Wada Bhiwandi Road (40.07 Kms) on SH-34 and SH-35 respectively, and to convert it into a 4-lane highway on Built Operate Toll (BOT) basis.
Client for the project	Supreme Infrastructure Ltd
Project Description	Project Length: 64 km; Lane: 4-lane; Project cost: INR 340 crore.
Designation / Position held in Project	Senior Contract Specialist
Duties and responsibility of keypersonnel in the project	As Contract Specialist, responsible for the implementing concession agreement finalizing details / formats / schedules to be followed during the project implementation stage, guiding and assist Team Leader in all aspects of contract management as per agreement; expert opinion on emerging contractual issues between contractor. Responsible for proper implementation of contract provisions including controlling cost of the construction packages Offer advice on contractual complications arising during implementation as per request of employer, prepare manuals / schedules for consultant team / employer based on the provisions of contract agreement suggestions in handing claims of contractor and disputes arising thereof. Assist the employer in Arbitration and / or litigation, examinations and variation orders. Contract Management of the project and checking of contractor's monthly statement of works and preparation of interim Payment Certificate, Preparation of different types of reports like quarterly progress reports, monthly progress reports and status reports preparation of variation order, rate analysis for new items, finalization of

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extension of time, monitoring of claims, checking and preparation of consultancy services, preparation of revised bill of quantities, preparation of documents for recommendation of custom / excise duty exemption certificates, monitoring and checking of contractors work programme.

Period to: Jan. 2013 [08 months Intermittent input]
STUP Consultants Pvt. Ltd., New Delhi
Consultancy services for Detailed Engineering and Project Management consultancy services for 4-lane Elevated Road (4.0 kms.) on Sahar Road (upto Chattrapati Shivaji International Airport)- Category 'C').
Mumbai Metropolitan Road Development Authority (MMRDA)
Project Length: 4 km; Lane: 4-lane (Elevated); Project cost: INR 271 crore.  The elevated road consists of 30 spans of 35-metre-long (115 ft) precast concrete segments erected using a specially fabricated launching girder and strand jack. The pillars measure 2.5 by 2.8 metres (8.2 ft × 9.2 ft) at the base. The 27.6-metre (91 ft) deck superstructure is composed of a 9-metre-wide (30 ft) precast central spine and two 9.3-metre (31 ft) cantilever wings on either side connected to the central spine by concrete stitching and transverse pre-stressing methods. A 98-metre-long (322 ft) tunnel constructed at the junction of the corridor with the WEH using the cut and cover method with concrete contiguous piles.
Senior Contract Specialist
As Contract Specialist, responsible for liaison with the Client & other associated agencies and providing support to the project team members as and when required. His involvement also includes advising on technica aspects of different project roads and bridges as well as contractual variations, extra claims and on disputes arising during execution of contracts. He is also advising on the contractual complication hindering the progress during the project implementation. Also involved in contributing expertises on legal matters of contract and MIS for contract handling. Also involved dealing with ABD / Arbitration aspects etc.

Period from: Sep. 2009	Period to: Dec. 2013 [10 months intermittent input]
Name of Employer	STUP Consultants Pvt. Ltd., New Delhi
Name of the Project	Detailed Engineering Design & Project Management Services for the work of Construction of 2.50 Km. Elevated 4-lane Eastern Freeway section from Panjarpole to Chembur Mankhurd Link Road Km. 0/000 to 2/500.
Client for the project	Mumbai Metropolitan Road Development Authority (MMRDA)
Project Description	4-lane; Project cost: INR 163 crore
NTS 96300	The freeway was built in three phases - a 9.29 km elevated road, a 4.3 km road-tunnel-flyover and an elevated 2.5 km flyover.

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Designation / Position held in Project	Senior Contract Specialist
Duties and responsibility of key-personnel in the project	As Contract Specialist, responsible for liaison with the Client & other associated agencies and providing support to the project team members as and when required. His involvement also includes advising on technical aspects of different project roads and bridges as well as contractual variations, extra claims and on disputes arising during execution of contracts. He is also advising on the contractual complication hindering the progress during the project implementation. Also involved in contributing expertise on legal matters of contract and MIS for contract handling. Also involve dealing with ABD / Arbitration aspects etc.

Period from: Aug. 2008	Period to: Nov. 2011 [6 months intermittent input]
Name of Employer	STUP Consultants Pvt. Ltd., New Delhi
Name of the Project	Consultancy services for Detailed Engineering Designs, Bid Documents and Project Management services for the connector between Bandra Kurla Complex 'G' Block to Eastern & Western Express Highways including all structures and at grade roads.
Client for the project	Mumbai Metropolitan Road Development Authority (MMRDA)
Project Description	4-lane; Project cost: INR 185 crore
Designation / Position held in Project	Senior Contract Specialist
Duties and responsibility of key-personnel in the project	As Senior Contract Specialist is responsible for Contract Management of the Project and checking of Contractor's Monthly Statement of Works and preparation of Interim Payment Certificate, Preparation of different types of reports like Quarterly Progress Reports, Monthly Progress Reports & status reports, preparation of variation order, Rate Analysis for new items, finalization of Extension of Time, Monitoring of Claims, checking & preparation of Consultancy Services, Preparation of Revised Bill of Quantities, Preparation of documents for recommendation for Custom/Excise Duty Exemption Certificates, Monitoring & Checking of Contractor's Work Programme.

Period to: Mar. 2012 [8 months intermittent input]
STUP Consultants Pvt. Ltd., New Delhi
Project Management Consultancy including construction supervision for the NHAI project pertaining to "Six Lanning of Surat – Dahisar section of NH-8 from Km. 381.600 to Km. 502.000 (length: 120.400 Kms.) in the state of Maharashtra to be executed as BOT (Toll) basis on DBFO pattern under NHDP Phase – V.
Modern Road Makers Pvt. Ltd.
6-Lane; Project length: 120.4 Km; Project cost: INR 1434.0 crore  Details of structures:  Vadoli Nala Bridge, 1x15.90+4x18 = 87.90 m (LHS); 3x15.10 = 45.3 m (RHS) Gulzari Nala Bridge. 3x21 = 63.0 m (LHS), 3x21 = 63.0 m (RHS) Surya River Bridge, 1x19.889+1x20.46+1x20.63+2x20.56+1x

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ANIMUMBL

	20.51+1x20.54+1x20.57+1x19.864 = 183.583 m Vaitarna Bridge, 2x12.2+6x22.86+3x27.43 = 243.85 m (LHS), 2x12.2+6x22.86+3x27.43 = 243.85 m (RHS) Vandri Bridge, 11x10.67 = 117.37 m (LHS), 11x10.67 = 117.37 m (RHS) Tansa Bridge, 12x14.14 = 169.68 (LHS), 12x14.14 = 169.68 (RHS) Kaman Creek Bridge, 2x26+1x32.81 = 84.81 m (LHS), 2x26+1x32.81 = 84.81 m (RHS)
Designation / Position held in Project	Senior Contract Specialist
Duties and responsibility of key- personnel in the project	As Contract Specialist, responsible for liaison with the Client & other associated agencies and providing support to the project team members as and when required. His involvement also includes advising on technical aspects of different project roads and bridges as well as contractual variations, extra claims and on disputes arising during execution of contracts. He is also advising on the contractual complication hindering the progress during the project implementation. Also involved in contributing expertise on legal matters of contract and MIS for contract handling.

Period to: Mar. 2011 [6 months intermittent input]
STUP Consultants Pvt. Ltd., New Delhi
Project Management Consultant for the 1535 m long Bhosari Flyover on Pune – Nashik Road (NH- 50) in the State of Maharashtra.
Pimpri Chinchwad Municipal Corporation
4-Lane. Project cost: INR 87 crore.  Total Length of Flyover is 1535 Mtr. including solid approaches on both end and super structure is precast segmental Box Girder Type. Top width of Box Girder is 19.5 Mtr. (4 Lane with 1.2 Mtr. Median). Superstructure is resting on single pier span of 40 Mtr. Length. Reinforcement Earth Work for approaches at both ends has been provided.
Contract Specialist
As Contract Specialist, responsible for liaison with the Client & other associated agencies and providing support to the project team members as and when required. His involvement also includes advising on technical aspects of different project roads and bridges as well as contractual variations, extra claims and on disputes arising during execution of contracts. He is also advising on the contractual complication hindering the progress during the project implementation. Also involved in contributing expertise on legal matters of contract and MIS for contract handling.

Period from: Oct. 2007	Period to: Jun. 2011 [7 months intermittent Input]	
Name of Employer	STUP Consultants Pvt. Ltd., New Delhi	
Name of the Project	Detailed Engineering and Project Management services for 4-Lanin Lebad-Jaora Section of SH- 31 between Ch. 0.00 to Ch. 125 (pro length: 125 kms.) on BOT Basis in the State of Madhya Pradesh	g of oject
Client for the project	Madhya Pradesh Road Development Corporation / Pan India Infrastructur Ltd.	е
Project Description	(10)	
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	4-Lane; Project cost: INR 682.51 crore
	The project involved <u>Design/Construction of Road Over Bridge (650 m)</u> on Ratlam By-Pass on <u>Main Line of Western Railway</u> Substructure: Pile Foundation; Super structure: Composite Steel Girder Section & RCC Slab; <u>Design/Construction of Road Over Bridge (450 m)</u> on Ratlam By-Pass on <u>Ujiain Line of Western Railway</u> ; Substructure: Pile Foundation; Super structure: Composite Steel Girder Section & RCC Slab. <u>Design/Construction of Road Over Bridge (450 m)</u> on Ratlam By-Pass on <u>Ajmer Line of Western Railway</u> ; Substructure: Pile Foundation; Super structure: Composite Steel Girder Section & RCC Slab.
Designation / Position held in Project	Senior Contract Specialist
Duties and responsibility of keypersonnel in the project	As Senior Contract Specialist, responsible for preparation of tender documents with BOQ, cost estimates, verification and certification of work and bills of EPC contractors, liaison with the Client & other associated agencies and providing support to the project team members as and when required. His involvement also includes advising on technical aspects of different project roads and bridges as well as contractual variations, extra claims and on disputes arising during execution of contracts. He is also advising on the contractual complication hindering the progress during the project implementation. Also involved in contributing expertise on legal matters of contract and MIS for contract handling.

Period from: Jul. 2006	Period to: Sep. 2007 [ 6 months intermittent input]
Name of Employer	STUP Consultants Pvt. Ltd., New Delhi
Name of the Project	Independent Engineer for the work of 4-laning and Improvement to Mumbai – Pune Section of NH-4 (km 131/200 to 20/400) (total length of project: 241 kms) with self finance alongwith award of O & M and to rights on NH-4 and existing Mumbai – Pune Expressway.
Client for the project	Maharashtra State Road Development Corporation Ltd.
Project Description	4-Lane. Project cost: INR 914 crore.
	NH–4 with part additional link by Sion-Panvel highway starts from Shilphata (km 131/200) and ends at Nigadi (km 20/400) and is 241 km long. The existing road is minimum two lane (7.0m wide) with paved shoulders. It has 164 C D works, 17 minor bridges, 4 major bridges and one ROB. The existing ROW is 30m to 60m wide. The road itself connects numbers of villages/townships viz. Taloja, Kalamboli, Panvel, Khopoli, Khandala, Lonawala, Kamshet, Talegaon, Wadgaon, Dehu Road Etc
Designation / Position held in Project	Senior Contract Specialist
Duties and responsibility of keypersonnel in the project	As Senior Contract Specialist, responsible for preparation of tender documents with BOQ, cost estimates, verification and certification of work and bills of EPC contractors, liaison with the Client & other associated agencies and providing support to the project team members as and when required. His involvement also includes advising on technical aspects of different project roads and bridges as well as contractual variations, extra claims and on disputes arising during execution of contracts. He is also advising on the contractual complication hindering the progress during the project implementation. Also involved in contributing expertise on legal matters of contract and MIS for contract handling.

Period from: 2005

Jan.

Period to: Jun. 2006 [ 4 months intermittent input]

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Name of Employer	STUP Consultants Pvt. Ltd., New Delhi
Name of the Project	Consultancy Services for widening and construction of 4-lane 33 kms. LBS Marg from Sion to Mulund funded by World Bank.
Client for the project	Mumbai Metropolitan Region Development Authority
Project Description	Project Length: 33 km; Lane: 4-lane; Project cost: INR 110.0 crore.
Designation / Position held in Project	Senior Contract Specialist
Duties and responsibility of key-personnel in the project	As Senior Contract Specialist, responsible for preparation of tender documents with BOQ, cost estimates, verification and certification of work and bills of EPC contractors, liaison with the Client & other associated agencies and providing support to the project team members as and when required. His involvement also includes advising on technical aspects of different project roads and bridges as well as contractual variations, extra claims and on disputes arising during execution of contracts. He is also advising on the contractual complication hindering the progress during the project implementation. Also involved in contributing expertise on legal matters of contract and MIS for contract handling.

Period to: Dec. 2004 [ 8 months intermittent input]
STUP Consultants Pvt. Ltd., New Delhi
Design and Project Management Consultancy Services for 4-laning of Satara – Kolhapur State Border Section of NH-4 from Km 725 to Km 592/240 (project length: 28 km.) under Package V
Maharashtra State Road Development Corporation Ltd
Project Length: 28 km; Lane: 4-lane; Project cost: INR 97.0 crore.  The project comprises of 4-laning the existing 2 lane NH-4 between Satara to Shivade Package V (28 Km). It is planned to have concrete pavement for the new carriageway. There are 3 major bridges in Package V and an elevated road structure in Umbarj town. The road will be semi access controlled.
Senior Contract Specialist & Quantity Surveyor
As Contract Specialist and Quantity Surveyor, responsible for preparation of tender documents with BOQ, cost estimates, verification and certification of work and bills of EPC contractors, liaison with the Client & other associated agencies and providing support to the project team members as and when required. His involvement also includes advising on technical aspects of different project roads and bridges as well as contractual variations, extra claims and on disputes arising during execution of contracts. He is also advising on the contractual complication hindering the progress during the project implementation. Also involved in contributing expertise on legal matters of contract and MIS for contract handling.

Period from: Aug. 2004	Period to: Dec. 2005 [ 10 months intermittent input]
Name of Employer	STUP Consultants Pvt. Ltd., New Delhi

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TVIMUMB

Name of the Project	Mumbai-Pune Expressway – Section 'A': Kon to Chowk (Six Lanes Road with Rigid Pavement) on BOT basis in the State of Maharashra.	
Client for the project	Maharashtra State Road Development Corporation Ltd	
Project Description	Project Length: 111 km; Lane: 4-lane; Project cost: INR 291.0 crore.	
Designation / Position held in Project	Resident Engineer (Equivalent to Contract Specialist)	
Duties and responsibility of keypersonnel in the project	As Resident Engineer cum Safety Engineer ,Responsible for developing Quality Assurance Plan (QAP), Methodology of the activity/work, finalizing data formats for materials investigation, monitoring extensive testing carried out in lab of all construction material (Soil, Cement, and concrete. Also responsible for Study and comment on safety audit report prepared by Concessionaire, review cost variation and determine the additional cost; Review the safety measures implemented; Ensure execution of works at site as per specification and standards, various accident and other insurance coverages; Advice / assist MSRDC on issues like dispute resolution, court proceedings, Arbitration; Assist MSRDC in submission for Technical Audit carried out by NHAI during construction/post construction phase; Progress monitoring and preparation of progress reports; Its documentation as per frequency test of MoRTH, Calibration of Batching plant, for hot mix designs and concrete designs and site testing for D.L.C. & P.Q.C., asphalt work. Visits progress monitoring, preparation of progress reports and testing of crushing plant, Bitumen.	

Period from: Nov. 2001	Period to: May 2004 [ 10 months Intermittent input]	
Name of Employer	STUP Consultants Pvt. Ltd., New Delhi	
Name of the Project	Construction Supervision of 4-laning and strengthening of existing two lane stretches from Ratanpur to Gandhinagar (km 388.4 to km 495) on NH8 in the state of Gujarat (Contract Packages UG/3 & UG/4).	
Client for the project	National Highways Authority of India (NHAI)	
Project Description	Project Length: 107 km; Lane: 4-lane; Project cost: INR 280.0 crore.	
Designation / Position held in Project	Senior Quantity Engineer & Contract Specialist	
Duties and responsibility of key-personnel in the project	As Senior Quantity Engineer & Contract Specialist is responsible for Contract Management of the Project and checking of Contractor's Monthly Statement of Works and preparation of Interim Payment Certificate, Preparation of different types of reports like Quarterly Progress Reports, Monthly Progress Reports & status reports, preparation of variation order, Rate Analysis for new items, finalization of Extension of Time, Monitoring of Claims, checking & preparation of Consultancy Services, Preparation of Revised Bill of Quantities, Preparation of documents for recommendation for Custom/Excise Duty Exemption Certificates, Monitoring & Checking of Contractor's Work Programme. Also involve dealing with ABD / Arbitration aspects etc	

Period from: Dec. 1998	Period to: Feb. 2002 [ 5 months Intermittent input]	
Name of Employer	STUP Consultants Pvt. Ltd., New Delhi	
Name of the Project	Project Management Consultancy Services for Construction of new lane bridge across Kasheli Creek on BOT Basis	
Client for the project	Ideal Road Builders Ltd.	
WIND MARGINO		

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Project Description	Project Length: 817 5 m Langu 4 January David
	Project Length: 817.5 m Lane: 4-lane; Project cost: INR 70.0 crore.
	The span arrangement consisting of <b>15 spans of 54.5 m PSC girders</b> . The central three spans will have a navigational clearance of 9.2 m above the high tide level. The span shall be same as the existing bridge or in multiples of that so that the piers of the proposed bridge are in line with the existing bridge. The bridge shall have 7.5 m carriageway with 1.5 m for footpaths on either sides. The C/L of proposed bridge shall be about 11.25 m from the C/L of existing bridge. The bridge is on well foundation.
Designation / Position held in Project	Project Manager-cum-Contract Specialist
Duties and responsibility of key-personnel in the project	As Project Manager-cum-Contract Specialist, responsible for Planning and Monitoring of Execution of Works; Implementation of Quality Control Program of Various activities such as Earthwork, GSBC, WMM, Bituminous works, Dry Lean Concrete and Pavement Quality Concrete; Ensuring that the mixing, transportation, placing and paving operation of concrete are carried out as per sound engineering practices and as required by specifications; Mix Adjustment to improve the quality of PQC; Inspecting the finished pavement surface of PQC; Implementation of Quality Control Procedure, Sampling & Material Testing; Organizing and Supervising field Surveys, with modern Survey Equipments viz. Total Stations, Distomat, Auto levels; Identification of Borrow Material & Aggregate Sources; Carrying out all activities of Projects including Construction of Culverts, Minor and Major Bridges; Mobilization and Demobilization of Resources, day to day progress monitoring and preparation of Monthly and other project progress reports; Contract Management, measurement and preparation of Interim Payment Bills; Procurement of Store Materials; Interaction with Client; Review of Quantities Measured by Sub-Contractors, Issuing the Variation orders & Certificate; Imparting training to the Contractor's personnel in various aspects of construction.

Period from: Dec. 1998	Period to: Feb. 2002 [ 6 months intermittent input]	
Name of Employer	STUP Consultants Pvt. Ltd., New Delhi	
Name of the Project	MTP Project, Mankhurd Belapur Railway bridge over Thane Creek the total length of bridge above 1850 mtrs., superstructure Pre stressed concrete precast box girders of 53.5 m length.	
Client for the project	Govt. of Maharashtra	
Project Description	The total length of bridge above 1850 mtrs., superstructure Pre stressed concrete precast box girders of 53.5 m length.	
Designation / Position held in Project	Project Manager	
Duties and responsibility of key- personnel in the project	As Project Manager, responsible for shifting of reinforcement cage alongwith cables; Shutter alignment; Concrete; Prestressing in 3 stages with mutijack system; Lifting and shifting of box girder(app.800 mrts) from casting bed to launching Jetty.— lateral & longitudinal by100 mtrs.; Grouting of Cables; launching by barge mounted hydraulic crane to suit – tidal variation; Casting site ballast retaining walls on launched girders, in final location, placing of precast ducts to facilitate the service; Review the safety measures implemented; Ensure execution of works at site as per specification and standards, various accident and other insurance coverages.	

	Period from: 1989	Period to: 1994	
1	Name of Employer	M/s Afcons Infrastructure Pvt. Ltd.	CULTANTO
188	Name of the Project	Konkan Railway Projects, Mangalore I Mulki Bridges.	Jdipi Section - Pavanji Bridge and
ELP.	VASIN A	C- O-2-21	To a second

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Client for the project	South Central Railway
Project Description  Konkan Railway Projects, Mangalore Udipi Section - Pavanji Brandship Mulki Bridges. Match cast Casting through 3.5 mtrs high which for casting unit as well as reaction structure for pretension systems, & to as stream curing container (steaming period of app.15-17 hours)	
Designation / Position held in Project Construction Engineer	
Duties and responsibility of keypersonnel in the project	As Construction Engineer, responsible for reinforcement checking/cutting, bending, anti-corrosions treatment, cage tying; Pre-stressed wire introduction as per design requirement along with debonding arrangement; Placing of prefabricated cage in the casting bed, pre-tensioning of tendons with coupler system (i.e with two different tendons type I engaged with coupler pre-stressing assembly end and permanent tenderers for girder in Reinforcement cage, 3 stage pre-stressing; Shutter alignment, concreting with high grade concrete; Steam curing with steaming arrangement i.e covering through unit with temporary roof element covering with tarpaulins, boiler unit, pipelines to control steam at different location; Water curing for normalization of girder/unit; Prestress transfer to girder unit by sequential method from either end simultaneously to have safe transfer of prestress and avoid any shifting girder unit in either direction during the transfer of prestress girder; Shifting of girder from casting bed by gantry transfer of girder to stacking bed; Review the safety measures implemented; Ensure execution of works at site as per specification and standards, various accident and other insurance coverages.

Period from: 1989	Period to: 1994	
Name of Employer	M/s Afcons Infrastructure Pvt. Ltd.	
Name of the Project	Konkan Railway Project: Savitri Bridge, Vinhere Bridge, Kawale Bridge 15 spans of 22.8 m each. Vinhere bridge 45 spans of 22.8 m each and Kawale bridge 4 spans of 22.8 mtrs. each. Superstructure consists of pre stressed concrete I Girder & RCC slab.	
Client for the project	South Central Railway	
Project Description	Konkan Railway Project: Savitri Bridge, Vinhere Bridge, Kawale Bridge 15 spans of 22.8 m each. Vinhere bridge 45 spans of 22.8 m each and Kawale bridge 4 spans of 22.8 mtrs. each. Superstructure consists of pre stressed concrete I Girder & RCC slab.	
Designation / Position held in Project	Construction Engineer	
Duties and responsibility of keypersonnel in the project	Responsibilities includes: Lifting of girder from stacking yard, placing on the transfer trollies, transportation of girder from stacking yard to launching girder lifting and shifting girder with monorails, in the launching girder, lowering to span, side shifting to desired location on sliding track, lowering on Elastomeric Bearing; Diagphram steel, tying, form fixing, concreting insitu; Expansion joint fixing; Deck slab wearing coat casting; Span Load Test, Pile load testing, lifting; Shifting of girder from casting bed by gantry transfer of girder to stacking bed; Review the safety measures implemented; Ensure execution of works at site as per specification and standards, various accident and other insurance coverages.	

Languages
PLOT NO. 22-A
SECTOR 19-C, PALM BOOK PARK DE
* STEL 40887777 6
AVI MUMBAS

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Language	Speaking	Reading	Writing
English	Excellent	Excellent	Excellent
Marathi	Excellent	Excellent //	Excellent
Hindi	Excellent	Excellent	Excellent

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### Certification:

- I am willing to work on the project and I will be available for entire duration of the project assignment and I will not engage himself in any other assignment during the currency of his assignment on the project.
- 2. I, the undersigned, certify that to the best of my knowledge and belief, this bio-data correctly describes me, my qualifications and my experience.

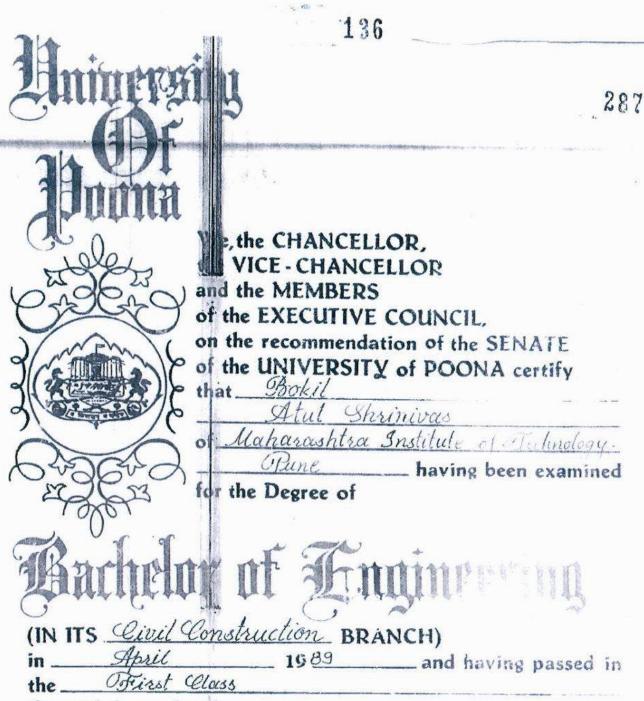
Signature of the Candidate:	Bokil
Place:	Navi Mumbai
Date :	24.11.2020
Signature of the Authorised Representative of the firm	- tun
Place :	Navi Mumbai
Date :	24.11.2020



Chief Engineer
Engineering Division
M.M.R.D.A.



Page 13 of 13



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CHANCELLOR.

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भाई लेखा शंका /PERMANENT ACCOUNT NUMBER

AEQPB0653J

ATUL SHRINIVAS BOKIL

PATHER'S NAME **SHRINIWAS RAGHUNATH BOKIL** 

जन्म तिथि /DATE OF BIRTH

BENEFY /SIGNATURE

Commissioner of Income-tax I Pune

To MY Lourense

From A.s. Bokil.

17-JUN-2005 17:18

1234

P.01







### STUP Consultants Pvt. Ltd.



Five Decades of Sustainable Design of Infrastructure & Real Estate through Innovation

16 June, 2014

### TO WHOMSOEVER IT MAY CONCERN

This is to certify that Mr. A.S. Bokil is working with this organization as Contract Specialist / Senior Quantity Surveyor from 1994 – till date on various highways/ bridge and other infrastructure projects. Some of the important projects undertaken by him are:

- Independent Engineer services for 4-laning of Lucknow Raebareli Section of NH 24 A from Km 12.700 to Km 82.700 on from km. 12.700 to km. 82.700 (project length: 70 km.) on BOT (Annuity) under NHDP Phase IV A in the State of Uttar Pradesh. Client: National Highways Authority of India (NHAI)
- Independent Engineer (IE) services for 6/4-laning of Km. 198/00 to Km. 263/00, Bharuch-Surat Section of NH-8 during Operation & Maintenance period in Gujarat on BOT basis, package-li on DBFOT Basis under NHDP Phase-V. Client: National Highways Authority of India (NHAI)
- Project Management Consultancy services for Manor- Wada- Bhiwandi Road on SH-34 in the State of Maharashtra. The project involves widening of Manor Wada (24.25 kms) and Wada Bhiwandi Road (40.07 Kms) on SH-34 and SH-35 respectively, and to convert it into a 4 lane highway on Built Operate Toll (BOT) basis. Client: Supreme Infrastructure Ltd.
- Consultancy services for Detailed Engineering and Project Management consultancy services
  for 4-lane Elevated Road (4.0 kms.) on Sahar Road (upto Chattrapati Shivaji International
  Airport) Category 'C'). Client: Mumbai Metropolitan Road Development Authority (MMRDA).
- Detailed Engineering Design & Project Management Services for the work of Construction of 2.50 Km. Elevated 4-lane Eastern Freeway section from Panjarpole to Chembur Mankhurd Link Road Km. 0/000 to 2/500. Client: Mumbai Metropolitan Road Development Authority (MMRDA).
- Consultancy services for Detailed Engineering Designs, Bid Documents and Project Management services for the connector between Bandra Kurla Complex 'G' Block to Eastern & Western Express Highways including all structures and at grade roads. Client: Mumbai Metropolitan Road Development Authority (MMRDA)
- Project Management Consultancy including construction supervision for the NHAI project pertaining to "Six Lanning of Surat - Dahisar section of NH-8 from Km. 381.600 to Km. 502.000 (length: 120.400 Kms.) in the state of Maharashtra to be executed as BOT (Toll) basis on DBFO pattern under NHDP Phase - V. Client: Modern Road Makers Pvt. Ltd.
- Project Management Consultant for the 1535 m long Bhosari Flyover on Pune Nashik Road (NH- 50) in the State of Maharashtra. Client: Pimpri Chinchwad Municipal Corporation.

Contd....2

1112, Vishal Tower, District Centre, Janakpuri, New Delhi - 110 058, India

Tel: 011-45616200/300, 25614196, 25536108 Fax: 011-25507017, E-mail: delhi@stlemail.com

Regd Office: 1004 & 5, Raheja Chambers, 213, Nariman Point, Mumabi - 400 021, India. CIN: U74999Mir1963PTC012649

ages - Paris - Ahmedabad - Bengaluru - Chennai - Guwahati - Hyderabad - Kolkata - Mumbai - Navi Mumbai - New Delhi - Pune - Port Louis - Muscat

- Detailed Engineering and Project Management services for 4-Laning of Lebad-Jaora Section of SH- 31 between Ch. 0.00 to Ch. 125 (project length: 125 kms.) on BOT Basis in the State of Madhya Pradesh. Client: Madhya Pradesh Road Development Corporation / Pan India Infrastructure Ltd.
- Independent Engineer for the work of 4-laning and Improvement to Mumbai Pune Section of NH-4 (km 131/200 to 20/400) (total length of project: 241 kms) with self finance alongwith award of O & M and to rights on NH-4 and existing Mumbai – Pune Expressway. Client: Maharashtra State Road Development Corporation Ltd.
- Consultancy Services for widening and construction of 4-lane 33 kms. LBS Marg from Sion to Mulund funded by World Bank. Client: Mumbai Metropolitan Region Development Authority.
- Design and Project Management Consultancy Services for 4-laning of Satara Kolhapur State Border Section of NH-4 from Km 725 to Km 592/240 (project length: 28 km.) under Package V. Client: Maharashtra State Road Development Corporation Ltd.
- Mumbai-Pune Expressway Section 'A': Kon to Chowk (Six Lanes Road with Rigid Pavement)
   on BOT basis in the State of Maharashra. Client: Maharashtra State Road Development
   Corporation Ltd.
- Construction Supervision of 4-laning and strengthening of existing two lane stretches from Ratanpur to Gandhinagar (km 388.4 to km 495) on NH8 in the state of Gujarat (Contract Packages UG/3 & UG/4). Client: National Highways Authority of India (NHAI).
- Project Management Consultancy Services for Construction of new 2 lane bridge across Kasheli Creek on BOT Basis. Client: Ideal Road Builders Ltd.

This experience certificate is issued on the request of various clients.

For STUP Consultants Py

(N. Bandyopadhya) Director.





# STUP Consultants Pvt. Ltd.

1.	Proposed Position	:	K-7: Safety Engineer	
2.	Name of Staff	:	Shirish Narayan Pote	
3.	Date of Birth	:	14/03/1965	
4.	Nationality	1:	Indian	
5.	Education Qualification	:	<ul> <li>Diploma in Civil and Rural Engineering (DCRE) in 1984</li> <li>Graduate in Civil Engineering from J.R.N Rajasthan Vidyapeeth University 2015</li> </ul>	
	Contact Address with Phone and mobile numbers		C/o STUP Consultants Pvt. Ltd. Plot No. 22A, Sector 19C, Palm Beach Marg, Vashi, Navi Mumbai 022-4088 7777	
6.	Key Qualification		Have more than 35 Years of experience in Civil Engineering Supervised/ carried out various activities such as foundation (well open & pile foundations,) RCC substructure, RC superstructure including integrated superstructure, PSC girder, T girder ,Box girder and segmental) steel composition superstructure for ROB, launching of PSC I girders, T girder & steel superstructure for ROB. Construction of Road work NH standard. Fixing of barrier, View cutter etc. Preparation of estimates, Tenders & quantity surveying. Also contracted and Client Billing, contract monitoring and administration Experience in Fabrication & laying of 1200/1600 midiameter M.S pipe Lines. Client correspondence etc. Preparation & Implementation of Safety Management Pladuring project implementation period. Approval for the Traff safety features including traffic control during construction approposed by the EPC.	
7.	Employment Record	:		
	From March 1998	:	To till date	
	Employer	:	STUP Consultants Pvt. Ltd.	
	Position held	•	Senior Resident Engineer (Bridges) / Resident Engineer (Bridges)	
	From April 1987	:	February 1998	
	Employer	:	M/S V.M. Jog Engineering Ltd.	
	Position held	:	Project Engineer	
	From October 1984	:	March 1987	
	Employer	:	Executive Engineer, P.W.D Amravati	
	Position held	1	Engineer (Temporary Basis)	

Chief Engineer
Engineering Division
M.M.R.D.A.

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Page 1 of 5

# STUP Consultants Pvt. Ltd.

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Name of Assignment / Project	Detailed Engineering and Project Management consultancy for the connector between Bandra-Kurla Complex (BKC)'G' block and Eastern
Employer	Express Highway (EEH)  : M/s. STUP Consultants Pvt. Ltd.
Period	: April 2015 - To till date
Name of Client	: Mumbai Metropolitan Region Development Authority
Project Description	Project Cost - Rs 155.70 Crores 2+2 Lane bridge with Median; Length of project including ROBs & Approaches ->1622 m; No. of ROBs -2 Nos. having length 52.677m & 60.00m each; Bridge Length in Mithi River - Pile bent 2200mm diameter: with picr cap; Pile foundation for rest of flyover - 1200 mm diameter; RCC substructure & 3 portal piers; Steel (plate girders) composite superstructures for both ROB; Noise barrier wherever required; Segmental superstructure with overhead launching girder; Facade Lighting on Mithi river spans and spans on EEH.
Position Held	: Resident Engineer (Bridges)
Activities performed	Overall monitoring/supervision of the project. Contract monitoring & administration. Client/contractor's correspondence etc. Follow up with various local & Govt Authorities for various permission.  Also responsible for monitoring the comprehensive Health and safety program as proposed by the contractor which would help to avoid and reduce the accidents; establishing the safety programmes, identification of safety hazard which would be made by contractor prior to the construction; Carry out monthly safety audits on site during construction and operation through safety Engineer; Ensure that the contractors provide sufficient safety devices and sign boards for own safety as well as safety of genera traffic and pedestrians through the review of the method statement and periodical site patrol; Ensure that the contractors provide sufficient safety devices to the construction Engineers, subordinate staff & labour working on the site; Ensure adherence to the safety norms prescribed in the relevant codes / specifications in the bid documents.
Name of Assignment / Project	Project Management Consultancy services for construction of Eastern Freeway section 3 from Panjarpole Junction to Mankhurd Link Road
Employer	: M/s. STUP Consultants Pvt. Ltd.
Period Name of Client	: December 2009 to April 2015
Project Description	<ul> <li>Mumbai Metropolitan Region Development Authority Project Cost - Rs.315 Crores 2+2 Lane bridge with Median and 2 lane for structural ramp; Length of 2 lane bridge - 3 Ramps -1.77Km.; Type of foundations - 1200 mm diameter piles &amp; open foundation; RCC substructure for main freeway &amp; ramp * Integrated structure for one ramp; Segmental box superstructure for main freeway structure with overhead launching girder and steel composite structure for 2 spans; T girder superstructure for all 3 nos. 2 lane ramps except 160 m of integrated superstructure of one ramp; Fixing Noise Barrier; 2+2 lanes rigid pavement from tunnel end to panjarpole and construction of 6 m wide service road; Assisting MMRDA in R&amp;R and dismantaling of 486 nos. hutments.</li> </ul>
Position Held	: Senior Resident Engineer (Bridges)
Activities performed	Overall monitoring / supervision of the project. Contract monitoring & administration. Client/contractor's correspondence. Follow up with various agencies, local bodies & Govt. Dept for various permission.  Also responsible for monitoring the comprehensive Health and safety program as proposed by the contractor which would help to avoid and reduce the accidents; establishing the safety programmes, identification of safety hazard which would be made by contractor prior to the construction; Carry out monthly safety audits on site during construction and operation through safety Engineer; Ensure that the contractors provide sufficient safety devices and sign boards for own safety as well as safety of genera traffic and pedestrians through the review of the method statement and periodical site
/I MUMBA	Chief Engineer Engineering Division
	M.M.R.D.A.



AVI MUMB

	patrol; Ensure that the contractors provide sufficient safety devices to the construction Engineers, subordinate staff & labour working on the site Ensure adherence to the safety norms prescribed in the relevant codes specifications in the bid documents.
Name of Assignment / Project	Four Laning of SH 54 from km 6.4 to km 14.55 and construction of new four lane Aamara Marg including 6 lane major bridge across Panye Creek
Employer	: M/s. STUP Consultants Pvt. Ltd.
Period	: March 2008 to November 2009
Name of Client	: National Highway Authority of India (NHAI) & JNPT-Mumbai
Project Description	Project Cost - Rs. 127.50 Crores; Four Laning of 8.15 Km of SH 54 with flexible pavement; Groun improvement of Km 6.4 to 8.4 of SH 54 With Band drains; Construction of new four lane Aamra Marg with rigid pavement; Construction of six lan major bridge across Panvel Creek; Well Foundation with RCC substructure and superstructure is PSC box.
Position Held	: Quantity Surveyor
Activities performed	As a quantity surveyor billing, progress monitoring, contracts managemer and administration. Client & Contractor's correspondence. Follow up wit various agencies, local bodies & Govt. Authorities for work permission.
Name of Assignment / Project	Widening of LBS Marg section from Sion to Kanjurmarg (Gandhinaga
Employer	: M/s. STUP Consultants Pvt. Ltd.
Period	: November 2004 to February 2008
Name of Client	: Mumbai Metropolitan Region Development Authority
Project Description	Widening of LBS Marg sion to Kanjurmarg Section to 30 m D.P width; On lane of Rigid Pavement & one lane of flexible pavement on either side of Median; Modification of SWD system as per recommendations of Il' Mumbai.
Position Held	: Resident Engineer
Activities performed	As a Resident Engineer of the section overall monitoring of the Project progress/ Supervision, quality control, contract monitoring & administration. Follow up with various agencies, local & Gov Authorities and client / Contractor's correspondence.
Name of Assignment / Project	Four laning of NH-17B from Verna Junction to Marmugaon Port (Por connectivity project)
Employer	: M/s. STUP Consultants Pvt. Ltd.
Period	: March 2002 to October 2004
Name of Client	<ul> <li>National Highway Authority of India ) / Marmugaon Port Road Company Ltd.</li> <li>Project Cost – Rs. 50.00 Crores;</li> <li>Construction of 4 lane NH-17B from Verna Junction in Goa (a part of port)</li> </ul>
Project Description	upto Varnapuri Junction; Construction CD works, minor bridges, underpas and Subways etc.
Position Held	: Road Engineer
Activities performed	As a Road Engineer responsible for construction of highway, Carrying out field tests etc.
Name of Assignment / Project	Preparation of estimates, BOQS, Quantity, Surveying for various project preparation of Tender documents, checking of construction execution drawings "As building Drawings" etc.
Employer	: M/s. STUP Consultants Pvt. Ltd.
Period	: January 2001 to February 2002
Name of Client	: Various Clients
Position Held	: Sr. Construction Engineer
Activities performed	Preparation of estimates, BOQS, Quantity, Surveying for various project preparation of Tender documents, checking of construction / execution drawings "As building Drawings" etc.

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Name of Assignment / Project	Construction of Varthur underpass of size 40m x 27m; Construction of RCC Retaining Walls on both sides of underpass i.e. 1000m x 4 = 4000m.
Employer	: M/s. STUP Consultants Pvt. Ltd.
Period	: March 2000 to December 2000
Name of Client	: Bangalore Development Authority
Name of Cheff	Project Cost - Rs. 6.00 Crores;
Project Description	<ul> <li>Construction of Varthur underpass of size 40m x 27m; Construction of RCC Retaining Walls on both sides of underpass i.e. 1000m x 4 = 4000m.</li> </ul>
Position Held	: Sr. Construction Engineer
Activities performed	Overall incharge of site overall supervision of site overall supervision of site from foundation to superstructure quantity control & contract administration.
Name of Assignment / Project	Construction of Major Bridge across Patalganga river and ROB near village Kharpada on Panvel-Mahad-Panji Road on NH-17 on B.O.T. basis.
Employer	: M/s. STUP Consultants Pvt. Ltd.
Period	: March 1998 to February 2000
Name of Client	: MORT & H Govt of India, PWD, Govt. of Maharashtra
Project Description	Project Cost - Rs. 43.00 Crores; First B.O.T project in Maharashtra; The project was completed in 19 months well ahead of scheduled completion of 24 months; A bridge project in which river bridge, viaduct and ROB is included; Length of bridge including ROB is 813.7 m; Approach road on either side of bridge-586.3 m; 3 types of
Position Held	foundations i.e. open, pile and well; Superstructure - RCC & PSC I girders.
rosition neig	: Project Manager (Sr. Construction Engineer)
Activities performed	Worked as a project Manager of PMC. Overall Project Monitoring & Supervision. Quality Control, Contrac management and administration.
Name of Assignment / Project	Construction of Major Bridges CD-01, CD-02 and CD-10 or Palm Beach Marg, Navi Mumbai
Employer	: M/s. M Jog Engineering Ltd
Period	: November 1995 to February 1998
Name of Client	: CIDCO of Maharashtra Ltd
Position Held	: Project Engineer
Activities performed	Overall supervision of the project including quantity survey, client billing contract monitoring &administration.
Name of Assignment / Project	: Construction of Kalwa Creek , Bridge near Thane, Maharashtra
Employer	: M/s. M Jog Engineering Ltd
Period	: November 1994 to October 1995
Name of Client	: Public works Department, Govt. of Maharashtra
Name of Client	: Project Engineer
Activities performed	Worked for overall execution of open foundation, RCC substructure & PSC superstructure (Box girders) contract monitoring & administration.
Name of Assignment / Project	Construction of viaducts at Km 178 & 179 for Konkan Railway project near Ratnagiri
Employer	: M/s. M Jog Engineering Ltd
Period	: July 1993 to October 1994
Name of Client	: Konkan Railway Corporation Ltd
Position Held	: Senior Engineer
Activities performed	Worked for execution of pile & open foundation, substructure pier with slip form technique, PSC PSC 'I' girderses etc, for both viaduots of 200 m length each.
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Name of Assignment /

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pipeline for TPS from Providing & Laying 1600 mm (ID) M.S supply to 2 x 210vMW Khaperkheda water Pench Irrigation Project at Kanhan in Nagpur District

> Chief Engineer Engineering Division M.M.R.D.A.

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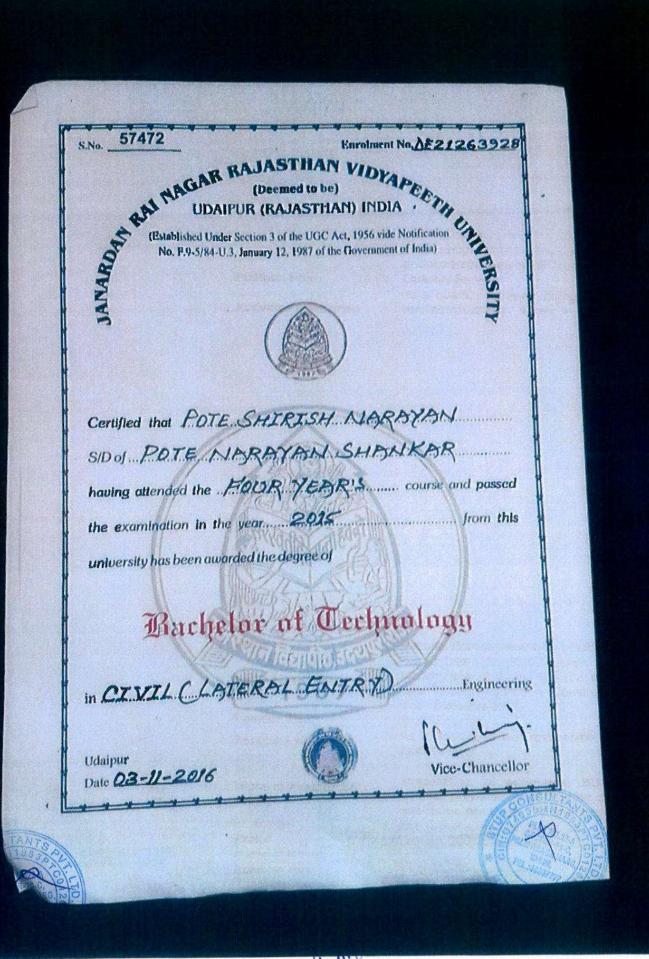
Employer	: M/s. M Jog Engineering Ltd.		
Period	January 1990 to June 1993		
Name of Client	: Irrigation Dept. Govt. of Maharashtra		
Position Held	: Engineer		
Activities performed	Worked for civil work of pipeline laying & concreting points, quality control, quantity survey, client billing, points to monitoring & administration.		
Name of Assignment / Project	Providing & Laying 2 rows of 1200 mm dia (ID) MS Pipeline including maintenance road, major bridges (2 bridges-one for road & one for pipeline having 250 m length each ) etc for 2 x 210 Mw Khaperkheda Thermal Power in Nagpur District		
Employer	: M/s. M Jog Engineering Ltd		
Period	: April 1987 to December 1990		
Name of Client	: Maharashtra State Electricity Board		
Position Held	: Jr. Engineer / Asst. Engineer		
Activities performed	Supervision of pile foundation & substructure, Road work. Also carried out quality control for the project and quantity survey/ billing of the project. Civil work for pipeline work.		
Name of Assignment / Project	Preparation of Estimates and Supervision of following works: (1) Construction of Talegaon-Donad Road (Missing Link of SH) including construction of minor bridges, Culverts in Amravati District. (2) Construction Of Samaj Mandir - 3 nos. under Chandur Rly Sub Division. (3) Maintenance of State Highways & Govt. Office buildings under PWD Sub Divison Chandur Rly, Dist:-Amravat		
Employer	: Executive Engineer, P.W.D Amravati		
Period	: October 1984 to March 1987		
Name of Client	: Executive Engineer, P.W.D Amravati		
Position Held Activities performed	: Engineer (Temporary Basis)		
	: Construction Supervision of the project		

### Certification:

- I am willing to work on the project and I will be available for entire duration of the project assignment and I will not engage himself in any other assignment during the currency of his assignment on the project.
- I, the undersigned, certify that to the best of my knowledge and belief, this bio-data correctly describes me, my qualifications and my experience.

Signature of the Candidate:	Sm° of ef
Place:	Navi Mumbai
Date :	24.11.2020
Signature of the Authorised Representative of the firm	Navi Mumbai
OR H M RG N Date :	24.11.2020
Chief Engineering D	neer Page 5 of

M.M.R.D.A.

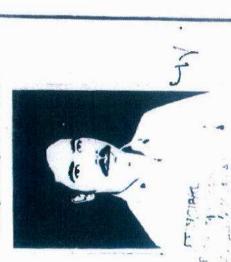


Cechnical Examinations Board of

Maharashtra Stafe







Thirish Maragan

. The withinsigned, having been examined

adjudged to have passed in the First Class, has been awarded, the for the Differna in Civil and Rural Engineering and having been

# DIPLOMA IN CIVIL AND RURAL ENGINEERING

October in the year One thousand nine hundred and eighty four. by the Board of Technical Examinations, on behalf of the Government of Maharashba, on the fifth day of the month of Istober in the year on In testimony whereof is set the vignature of the Chairman.

Chairman

No. <u>230</u>	Date 20/10/84
CERTIFIED THAT	shirish pele
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His Conduct as far as kn	
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His Conduct as far as kn He paid all charges due from Date of Birth (in words)	thin to this institute up to klor. 1983
His Conduct as far as kn He paid all charges due from Date of Birth (in words)	own to the Principal was Good







### Curriculum Vitae (CV) for Proposed Key Staff

Proposed Position	:	K-8: Geo-Technical / Foundation Engineer
Name of Firm	:	STUP Consultants Pvt. Ltd.
Name of Staff	:	Dr. Sandeep Bhosle
Profession	:	Geotechnical Engineering
Date of Birth	1	6th January 1972
Years with Firm/Entity	:	Available for the Assignment
Nationality		Indian
Membership in Professional Societies	:	Member of Indian Geotechnical Society (MIGS): LM - 3983
Key Qualifications	:	Total Professional Experience 23 Years in Highways, Ports, Railways infra, Factories and buildings
Education		<ul> <li>Ph. D. (Geotech. Engineering), Mumbai</li> <li>M. Tech. (Geotechnical Engineering) IIT Bombay in Jan 1996</li> <li>B.E in Civil Engineering (VJTI, Bombay University).in May 1994</li> </ul>
Publications		<ul> <li>A Simplified Approach for Estimating Settlement of Soft Clay under Vacuum Consolidation." KSCE Journal of Civil Engineering,—Geotechnical specialisation, Springer, 23(5), 2017-2024, DOI:10.1007/s12205-019-0001-x</li> <li>"Experimental studies on soft marine clay under combined vacuum and surcharge preloading with PVD." International Journal of Geotechnical Engineering, pp. 1-10, DOI: 10.1080/19386362.2018.1496004.</li> <li>Ground improvement of soft Clay by vacuum preload – A Review", Proceddings of Indian Geotechnical Conference, Pune-2015, dated 18thDecember 2015</li> <li>"Stabilisation of deep soil cut using micropile and soil nailing" 7th International Conference on Case Histories in Geotechnical Engineering, Chicago, 2013.</li> <li>"Ground Improvement Using Vibro Stone Columns – Capacity of Vibro Stone Column" Indian Geotechnical Conference Guntur, AP, 2009</li> <li>"Underpinning of Hospital building using Root Pile" Indian Geotechnical Conference, Mumbai, 2000.</li> <li>"Pile Load Tests Using Pre-stressed Anchors" Indian Geotechnical Conference, Mumbai, 2000.</li> <li>"Innovative Technique of Micropilling" Indian Geotechnical Conference, 1997. Won the Award from Indian Geotechnical Society as the Best Paper Presented At I.G.C. Baroda in 1997</li> </ul>









of

**Employment Record** 

From: August, 2016

To: Available for assignment on SayE Geostructures

**Employer** 

Position Held

Principal Geotechnical Consultant

Description assignments

current

Designing and recommending, monitoring of the various schemes for different projects in the Infrastructure (Highways, Railways, Ports, Oil Tankages many more) in the field of Ground engineering, serving the various organizations (MCGM, KRCL, NHAI, Metrorails, Power corporations etc.) commanding the activities. Deep foundation like Pile foundations, wells etc, Shallow foundations. Ground Improvements in all the worldwide possible methods like Vibrostonecolumn, Vacuum consolidation with and without PVD, Dynamic Compaction, Jet grouting, etc. Mega Pile laod test having test load more than 1000 MT Reinforced Earth Retaining walls, Use of Geosythetics and geomembrane for construction industry Rock fall mitigation and slope protection measures Undeground construction of basement, side protections with Piles and anchors Consolidation, curtain grouting schemes for irrigation projetcs Tunnels for metro and highways.

Related Work Experience (in years)

Total Professional Experience 23 Years in Highways, Ports, Railways infra, Factories, buildings

Details of the Related Work Experience:

From: April 2016

To: Available for assignment on SayE Geostructures

**Employer** 

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**Position Held** 

Principal Geotechnical Consultant

### **FEW IMPORTANT PRESTIGOUS PROJECTS**

Western Freight Corridor - PHASE 2Valtarana to Sachin (CTP 12) and Sachin to Varodara (CTP 13) Year: October 2018 for DFCC

Preparation of Geotechnical Interpretative Report for Major Bridges; Major RUBs; Minor Bridges; Minor RUBs; RFOs.

Design & construction of Metro Line 2 B from BKC to Chembur for Mumbai METRO RAIL CORPORATION LTD.

Responsible for interpretation of the Investigation Reports; risk assessment of the existing structures. The project involves the design of underground Stations; inlet shafts and cut and covers tunnels.

Design & construction Versova Bandra Sea Link for Relience - Astaldi Infra- MMRDA

Responsible for prepretation of the Proposals for the Stacking yard; risk assessment of the existing structures.

Design & construction of tunnel by shield TBM, tunnels, stations (both including) for underground works on Lucknow package UGC 6. For Tender for Tata Projects India ltd.

Lucknow METRO RAIL CORPORATION LTD.

Responsible for interpretation of the Investigation Reports; risk assessment of the existing structures. The project involves the design of underground Stations; inlet shafts and cut and covers tunnels.

Slope Protection works for left bank of Amlakhadi River , For Narmada Cleantech (Subsidary of GIDC)

Responsible for interpretation of the Investigation Reports; risk assessment of the existing structures. Design & construction of Bank protection, Reinforced Soil slopes along with Ground treatment to rest the foundation of the Embankment as per Relevent IRC codes. Pile / Open foundation

Chief Engineer Engineering Division M.M.R.D.A.

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Construction of Major Bridge across River Purna on Shegaon Akola Road dist Akola.for PWD , Maharshtra

Design & construction of Reinforced Soil slopes along with Ground treatment to rest the foundation of the Embankment as per Relevent IRC codes.Pile / Open foundation

Sloe protection measures for Service reservoirs for various MCGM location for TPF Engneering ion of Hill slope mitigation work using high strength boulder nets, Prestresses anchors etc.

Sloe protection measures for Malabar hill using Soll Nail - shotcrete. For MCGM -

Responsible for interpretation of the Investigation Reports; risk assessment of the existing structures. Design & estimation of Hillslope mitigation work using high strength Prestresses anchors, shotcrete etc.

Sloe protection measures for Middle Valtarana approach road for VJTI Mumbai

Responsible for interpretation of the Investigation Reports; risk assessment of the existing structures. Design & estimation of Hill slope mitigation work using high strength Prestresses anchors, shotcrete etc.

MANY Ground Improvement project Design and monitored using PVD and Vacuum consolidation on NH 4 B and SH 53 – (Panvel – Uran road) for NHAI through JMMiPL, TIPL

From: February 1996	To: March 2016
Employer	Sohams Foundation Engineering Pvt. Ltd.
Position Held	Technical Director / Geotechnical Engineer

### **FEW IMPORTANT PROJECT**

Construction of new Dry Bulk Terminal for Iron Ore and Coal IN THREE PHASES

Client: Dhamra Port Co Ltd / Adani Projects with Authority Engineer ~ PMC projects Ltd

Project Features: The Dhamra Port is a major newly developed Port in Bhadrak district, Odisha, India, on the shore of the Bay of Bengal about seven kilometers from the old port of Dhamra. Phase-I Involved two fully mechanized berths of 350 meters each along with backup facilities for handling imports of coking coal, steam/thermal coal, limestone and export of iron ore.

### **Activities Performed:**

As a Geotechnical Engineer, responsible for Design of Ground Improvement Scheme using Prefabricated Vertical Drains with vacuum loading. Stability Analysis using Geoslope 5, Review and check the deliverable drawings, Site support for technical queries, Analysis of Field Tests - SPT / CPTU, Monitoring data of Instruments - Piezometers; Settlement Markers; Back Analysis of Data.

Construction of Hard Stand at Mathura Refinary (IOCL)

Client: G R Construction / Infrastructure with Authority Engineer: Technip

Ground Improvement

Six/Eight Laning of Muscut – Sallah Road undr Municipal corporation of Salah Client: SMC Infra

Project Features: The project involved the widening of expressway of approximately length of 20 kms and construction of 24 kms of service road. As a Geotechnical Engineer, responsible Design of Geogrid Reinforced Soil Wall for the approaches of Flyovers using BS 8006, Review of the drawings, review of the sub-soil data for the flyovers and suggestion of the ground improvement technique if needed

6.70 MLD STP, at Mhapusa Goa

Glient: Project Director, ( JICA Loan Project), PWD ,Goa /SFC Environmental Technologies Pvt. Ltd. Activities Performed:

As a Geotechnical Engineer, responsible for Design of Vibrostone colum, providing GIR and technical packup during execution

125 MLD Intake channel works for Madgaon City at Sanguem Goa

f Engineer

Page 3 of 8



Client: SFC Environmental Technologies Pvt. Ltd

As a Geotechnical Engineer, responsible for Design Landslide mitigation and slope stability analysis, and recommending slope stabilization measures for Intake Channel constructed for 125 MLD water Treatment plant at Xelpem, Goa

Six Laning of NH 4 from Pune to Satara on DBFOT Pattern under NHDP Phase V from km125+000 to km 865+000

Client: Reliance infrastructure Ltd with Authority Engineer - Aarvee associates

Project Features: The project involved the widening of expressway of approximately length of 140.350 kms and construction of 244 kms of service road, building 49 grade separated structures, 58 bridges and upgradation of two existing toll plazas, deep foundation

Six-Laning of Bhubaneswar- Chandikhol Section of NH 5 from km. 263/00 to 502/00 in the state of Odisha

Client: Shri Jagannattha Expressway Pvt Ltd./ Simplex Infrastructure Ltd.) with Engineer - Stup Consultants

Project Features: The project involved Six Laning of Section of NH 5 approximately length of 50kms.deep foundation

As a Geotechnical Engineer, responsible for Design of Geogrid Reinforced Soil Wall for the approaches of Flyovers using BS 8006, Stability Analysis using Geoslope 5, Review and check the deliverable drawings, Site support for technical queries, Design of the treatment required to improve the safe bearing capacity of base to support the Reinforced Soil Wall, Estimation of quantities, Preparation of Method Statement, Monitoring the site progress. Technical coordination with client consultant.

### Ground improvement works for SIOPP Project

Client: DCW Ltd with Engineer Thysekrruup

Project Features: The work involved installation of a Synthetic Iron Oxide plant. The plant consisted different units as Leach Liqor Purification, Pigment Production, Filtration, drying and Packing, Filtration, Drying and Packing, Plant Substation, Main Control Room, Calcium Chloride Plant, Process / Water Tank; Cooling Tower; Chiller Plant & Offices covering area of 14400 sqm.

As a Geotechnical Engineer, responsible for Design of Vibro Stone Columns for various units of Plant. The stone columns were designed based on the geotechnical data provided. Analysis of load test reports on stone column. Assist the execution team for proper execution. Technical coordination with client

Ground Improvement for IOCL Paradip

Client: VA Tech Wabag Ltd with Engineer Foster wheeler

Construction of LPG Mounted Builter at Manglore Refinery

Client: G R Constrcution / Infrastructure with Engineers India ILtd (EIL)

As a Geotechnical Engineer, responsible for Design of Ground Improvement Scheme using various method for construction of LPG mounted Bullet , preparation of Geotechnical Interpretative report, Stability Analysis using Geoslope 5, Review and check the deliverable drawings, Site support for technical queries, Analysis of Field Tests - SPT / CPTU, Back Analysis of Data.

Construction of Hard Stand at Cochin Refinery

As a Geotechnical Engineer, responsible for Design of Ground Improvement Scheme using various method for LPG Mounted bUllet. Prepararyion of GIR,. Stability Analysis using Geoslope 5, Review and check the deliverable drawings, Site support for technical queries, Analysis of Field Tests - SPT / CPTU, Back Analysis of Data.

Four laning from km 64.00 to km 94 of Nagpur Hyderabad Section of NH 7 in the State of Maharashtra

Client: Road Builders Pvt. Ltd Project Features: deep foundation

Chief Engineering Division

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Six-Laning of Surat-Dahisar Section of NH-8 from km. 263/00 to 502/00 in the state of Gujarat and Maharashtra to be executed as BOT (Toll) on DBFO pattern Under NHDP Phase-V Client: Modern Road Makers Private Limited with Engineer AArvee Associates

Four Laning of NH 6 from Km 239 to Km 282 (Raipur - Aurang Section) Client: Raipur Expressways Limited with Engineer Feedback Ventures

Rehabilitation & Upgradation to four laning of Gwallor Jhansi section of NH 75 from km 16/0 to km 95/0 of (NS1/BOT/MP-UP), Total Length 79 Km

Client: Gwalior Jhansi Expressways Limited with Engineer Feedback Ventures

As a Geotechnical Engineer, responsible for Design of Geogrid Reinforced Soil Wall for the approaches of Flyovers using BS 8006, Site support for technical queries, Design of the treatment required to improve the safe bearing capacity of base to support the Reinforced Soil Wall, Estimation of quantities, Preparation of Method Statement, Monitoring the site progress. Technical coordination with client consultant.

Four Lane NH Connectivity to the proposed ICTT at Vallarpadam, Cochin

Client: Suncon Soma JV with Engineer - LASA

Project Features: deep foundation

As a Geotechnical Engineer, responsible for Design of Ground Improvement Scheme using Prefabricated Vertical Drains with surcharge loading, Involved in Design of Ground Improvement using Vibro Stone Columns, Review and check the deliverable drawings, Site support for technical queries, Analysis of Field Tests - SPT / SCPT / VST, Monitoring data of Instruments - Piezometers; Settlement Markers; Back Analysis of Data. Technical coordination with client consultant.

Development of Port facilities at Gangavaram - Package 4E: Area grading and soil improvement works at Gangavaram port

Client: Gangavaram Port Ltd with Engineer Howe India Ltd

ICTT Vallarpadam, Cochin

Client: Man Infraconstrution Ltd with Engineer Royal Haskonings

As a Geotechnical Engineer, responsible for Design of Ground Improvement Scheme using Prefabricated Vertical Drains with surcharge loading, Involved in Design of Ground Improvement using Vibro Stone Columns, Review and check the deliverable drawings, Site support for technical queries, Analysis of Field Tests - SPT / SCPT / VST, Monitoring data of Instruments - Piezometers; Settlement Markers; Back Analysis of Data. Technical coordination with client consultant.

Construction of Major high level Bridge along with approaches on both sides across River Pawana at Rawet Dist. - MSRDC, Maharashtra, India

Design of bridge is aesthetically marvelous 100m span of bridge is supported by two "Basket Handle" type structural Arches.

Leading Team for Conducting Geotechnical Surveys, Preparation of geotechnical reports. Responsible for all types of field & lab test of ground strata. Co-ordination with Team Leader & Design Team. Responsible for Soil Investigations, preparing borehole location schemes, finalizing borehole numbers & depth requirement in consultation with client, Prepare technical specifications and reports for material and Soil investigation, Supervision at site-site visits as required.

Kakrapar Power Projects - 3 & 4 Site

Client: Nuclear Power Corporation of India Ltd

As a Geotechnical Engineer, responsible for Selection of samples for testing, Analysis of Field Tests -CBR Test; Packer Test; Pressuremeter deliverables - Borelogs; Corelogs; subsurface profile drawings, Preparation of Geotechnical Investigation Report

Sahara Hospitality, Mumbai

Client: Larsen & Toubro Ltd, ECC Division

Position Held: Geotechnical Engineer

Activities Performed:

Engineering Division

Page 5 of 8

# STUP Consultants Pvt. Ltd.

As a Geotechnical Engineer, responsible for Design of Pre-stressed Rock Anchors of required capacity, Analysis of Pile Load test result

From: 1996

To: 2006

**Employer** 

Sohams Foundation Engineering Pvt. Ltd.

**Position Held** 

Geotechnical Engineer

### Client: Konkan Railway Corporation

Project Features: Slope stabilization, erosion protection measures, retaining systems for various national and state highway projects, railways,

Design and Construction of various deep cuttings on the Konkan Railway line from Roha to Udipi (500 Km section), Over 10 locations mainly at Chiplun, Khed, Golavali, Sangameswar, Nivasar, Pomendi, Bordave, Kankavali, Pernem, Bali, Cancon etc. has been stabilized using the various techniques of Passive Anchors, Soil Anchors, Micropiles, erosion control mattresses, gabion walls etc. Slopes were analysed using Geoslope 5.0 and executed with indigenous techniques with available resources.

### Design of Reinforced Soil Structures for various Highway Projects:

Serve as Lead Geotechnical Engineer for Design, Execution and after construction Monitoring of Reinforced Earth Retaining wall using BS 8006, FHWA, and MORTH guidelines for various Mega Highway projects as-

- Construction of ROB lieu of level crossing over Mumbai Ahmedabad Rallway Line at Naigaon, Vasai, Dist Thane in the State of Maharashtra, for MMRDA ( for M/S Simplex Infrastructure Ltd) , pile/deep foundation
- Construction of ROB lieu of level crossing over Nagpur Hydrabad Railway Line at Rajura, Dist. Chandrapur, in the State of Maharashtra, for PWD Maharashtra ( for M/S Ajay pal Mangal). pile/deep foundation
- Construction of Railway Over Bridge in lieu of on MR 10 (Dewas- Maksi Link Road) in Between Railway KM 4/19-4/21 of Ujjain - Dewas railway Line. pile/deep foundation

Geotechnical investigation for infrastructure projects such as bridges, highways, industrial structures, offshore projects etc.

Lead role in preparation and finalization of Geotechnical appraisal report for various Projects

- Construction and Rehabilitation of Kabul Kandahar Road Project For Scott Wilson.
- Bridges & Flyovers of Surat Dahisar National Highway section, for IRB Ltd.
- From MP-Maharashtra Border to Dhule Km 168/500 to 265/000, Section of NH3, Maharashtra.
- Anik-Panjarpole Link road by MMRDA Mumbai, Maharashtra., Elevated Road
- Proposed Mumbai-Nashik Expressway by MSRDC, for Stup Consultants.
- Various Geological Geotechnical Investigation for various Dams owned by Tata Electric Companies i.e. Mulshi Dams, Thokarwadi etc.
- Quarry investigations for mega projects like, Reliance Refinery at Patalganga, Redymix Plant at Taloja, Surat for IRB Ltd.

Design and Execution of Retaining wall systems such as soldier pile system, contiguous pile system, secant piling system, diaphragm walls etc., with and without rock anchors for stabilization of Deep Excavations

Design of Peripheral Pile Wall Retaining System Proposed Construction 3 basement of Tower Building

at Menka Indralok, Gorakhpur in purely silty soil

Engineer Engineering Division M.M.R.D.A.

Page 6 of 8



- Design and execution of Rock Anchors For soldier Pile wall for the commercial Buildings of M/s K. Raheja, Naman Builders located in Bandra-Kurla Complex, Mumbai.
- Design of Anchored Micropile Wall Retaining System for Basement of proposed Residential cum commercial building at Mulund Mumbai developed by Neptune.
- Rock anchor both Passive and Prestress has been designed for various structures in Mumbai as Kohinoor square Dadar for L& T, at Kalina for K. Raheja, at Tarapur for Nuclear Power Corporation Ltd.

Design and execution of Leakage control and consolidation grouting scheme through Hydro structure

Recommendation and execution of consolidation grouting scheme for minor and major irrigation projects in Irrigation Department of Maharashtra, Krishna Valley Development, MIDC, Chakan KT weir etc.

Pile foundations: Execution of various types of pile foundation for multi-storied buildings, Design of micro piles foundation.

- Design and execution of Mega Pile Load tests of capacity 1200 T and more capacities, For various Flyover and creek projectsFor MSRDC, For many Flyoveres in Mumbai
- Design of rigid and flexible pavements for Container terminal Yrads

Design of container yard for Kandla Port at Kandla (For M/S ABG)

### **Quality Assurance Plans:**

Developed construction manuals and quality assurance plans, giving training to project managers and site engineers, conducting quality audits for:

- Execution of major Ground Improvement schemes using Vibro Stone column, Prefabricated Vertical drain, Sandpiles
- Construction of high embankments for Highway project.
- Construction of Reinforced Soil Walls using concrete facia, Gabion facia, Green facia.
- Construction of Gabion retaining walls, deep cuttings
- Landslide mitigation works

### Innovative Developments:

VIMU

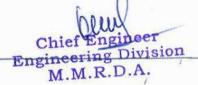
Developed a Mechanical stitcher in India for installing the Pre-fabricated vertical drain for Ground Improvement works.

Developed a apparatus for Pull out testing of Geogrid with concrete block facia.

Developed a large scale consolidometer for modeling of soft marine clay with vacuum consolidation

Interaction with various consultants and authorities in due course of time during approvals

Stup, Freshman Prabhu, Foster Wheeler, Feedback Venture, CES (I), Aarvee associates, Wilbur Smith, Intercontinental, Udhe, Mott Macdonald, Royal Haskonings, CGR, Toyo and many more



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## STUP Consultants Pvt. Ltd.



Languages		Language	Speaking	Reading	Writing
	:	English	Excellent	Excellent	Excellent
		Marathi	Excellent	Excellent	Excellent
		Hindi	Excellent	Excellent	Excellent

### Certification:

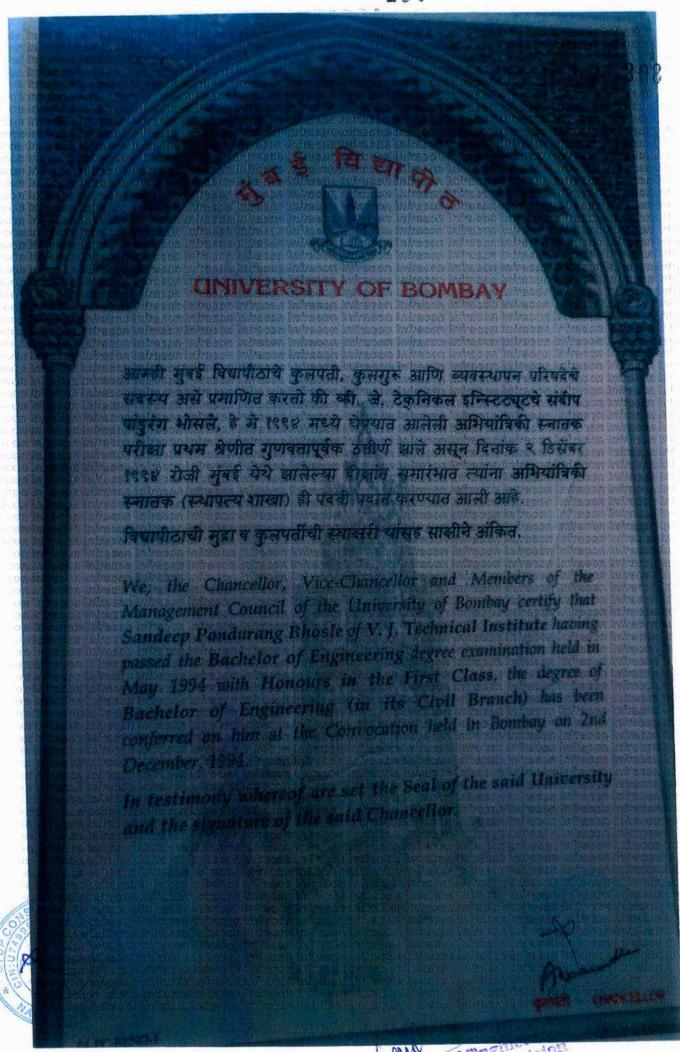
- 1. I am willing to work on the project and I will be available for entire duration of the project assignment and I will not engage himself in any other assignment during the currency of his assignment on the project.
- 2. I, the undersigned, certify that to the best of my knowledge and belief, this bio-data correctly describes me, my qualifications and my experience.

Signature of the Candidate	9:	Shules
Place :		Navi Mumbai
Date :		24.11.2020
Signature of the Authorise	d Representative of the firm	
Place :		Navi Mumbai
Date :		24.11.2020









Olu English Division

### SOHAMS FOUNDATION ENGINEERING PVT. LTD. -



- Reinforced Earth Wall Corp. Indicate the Corp.
- Slope Stabilisation Rock Anchors
   Micropiles Drilling Grouting

301-303, Thapar Complex, Ser Plot No. 51, GBO Belapur, Navi Mumbai 400 614, India

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Dt. 13.10.2016

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# Infracon Infracon Infracon Infracon Infracon TO WHOM SO EVER IT MAY CONCERN

Infracon infra This is to certify that Mr. Sandeep Bhosle is employed with us since 01st March 1996 at Head office, Mumbai as "Technical Director / Material cum Geotech" on permanent rolls. He is handling PMC, DPR Infracon Infra projects, con Infracon I

He is very hardworking and dedicated employee of our company and has good leadership qualities. He has lefracon Infradead project teams effectively, on Infracon Infracon

Intracon Infracon Inf Infracon Inf

Infracon Infra For Sohams Foundation Engineering Pvt. Ltd. Infracon Infracor

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Infracon Inf

Signature

Name

Infracon Infraco

P. S. Jadhay

Manager HR







### Curriculum Vitae (CV) for Proposed Key Staff

1	Proposed Pos	sition	:	Transportation / Traffic Engineer			
2	Name of Staff	of Staff : Jose Thomas		Jose Thomas			
3			:	30-03-1965			
4			:	Indian			
5	Education Qualification		:				
M. Tech – Transportation Engineering from Calicut University in 1990     B. Tech (Civil) from Kerala University in 1986							
6	Membership in Professional Associations		:	Member of Institute of Engineers			
7	Employment Record		:				
	From Employer Position Held	: July 1993 - Till da : STUP Consultan : Traffic and Road	ts Pvt.				
	From Employer Position Held	Employer : Steel Fab Engineering Corporation					
	From Employer Position Held	Employer : Spoton Engineering Software Services					

### Work Undertaken that Best Illustrates Capability to Handle the Tasks Assigned

### **Project Name:**

Independent Engineer Services during Operation & Maintenance Period for 4/6-laning of Hungund-Hospet section from km. 202.000 to km. 299.000 of NH-13 in the State of Karnataka under Phase-III on Design, Build, Finance, Operate and Transfer (DBFOT) Toll Basis under Public-Private Partnership (PPP) mode. Year: April 2015 - August 2019

Client: National Highways Authority of India Position Held: Traffic & Transportation Expert

### Activities Performed:

As Traffic & Transportation Expert, responsible for review the accident record on the project highway and suggest remedial measures; review the safety and traffic management measures implemented during construction period; review type and locations of traffic control and safety measures, design of intersections and interchanges, toll plaza layout, toll collection method and use facilities; review the facilities to be provided for the user; review the O & M Plan prepared the Concessionaire.

### **Project Name:**

Technical Consultant for Preparation of Feasibility Report for Development of State Highways from (i) Mathania-Dechu section of MDR-32 (Highway-I); (ii) Pali-Khandap-Bhadrajun section of MDR-13 (Highway-II); (iii) Bhadrajun-Mokalsar section of MDR-13 (Highway-III); (iv) Sayala-Bagoda-Gudha Malani section of MDR-16 (Highway-IV); (v) Bhinmal-Pantheri Posana-Jeevana section of MDR-169 (Highway-V) totalling 292 kms. through Public Private Partnership on Design, Build, Finance, Operate and Transfer

Year: Oct 2014- 3Oct 2015

Client PWD, Govt. of Rajasthan:

Position Held: Traffic cum Safety Expert

**Activities Performed:** 

As #raffic Engineer-cum-Safety Expert was responsible for suggesting the complete layout and

Chief Bagineer Engineering Division

AVI MPage 1 of 5



design of access regulation measures, traffic safety facilities and provide such solutions which enhance safety. The traffic study included the classified traffic volume counts, Origin Destination study, Turning Movement study, WTP study, past traffic data collection. The data then needed to be assimilated and compiled and worked out the traffic forecast based on the various transportation models.

### **Project Name:**

Independent Engineer services for 4-laning of Lucknow "Raebareli Section of NH " 24 A from Km 12.700 to Km 82.700 on BOT (Annuity) under NHDP Phase IV A in the State of Uttar Pradesh.

Year: Dec 2012- June 2015

Client: National Highways Authority of India Position Held: Traffic & Transportation Expert

### Activities Performed:

As Traffic and Transportation Expert, responsible for review and check traffic analysis, projection and assignment exercises to be carried out by the concessionaire; review design of intersections and interchanges, toll plaza layout, bus bay layout; scheme for traffic management during construction, study and comment on Safety audit report prepared by concessionaire; Review Geometric design from Road Safety angle; Check super elevation, sight distance from road Safety angle; assessment of traffic using emme/2 model, conduct traffic surveys, assessment of future traffic, assessment of traffic demand on the proposed roads with reference to other planned and ongoing projects, assist Transport Economist for economic evaluation, assist Team Leader in construction supervision of Project and Project Management.

### **Project Name:**

Consultancy Services for Preparation of Feasibility study for 6/4/2-lane with paved shoulder of Bhavnagar Pipavav Porbandar Dwarka section of NH-8E in the State of Gujarat

Year: Jan 2011- April 2012

Client: National Highways Authority of India Position Held: Traffic cum Safety Expert

### Activities Performed

As Traffic-cum-Safety Expert was responsible for suggesting the complete layout and design of access regulation measures, traffic safety facilities and provide such solutions which enhance safety during construction and operation.

### **Project Name:**

Feasibility study, Detailed Project Report and Bid Process Management for Integrated Road Development Project in Chandrapur City (2-lane to 4-lane, 59 kms) (project to be implemented on PPP mode on BOOT basis.

Year: Feb 2009- Oct 2009

Client: Maharashtra Urban Infrastructure Development Company Ltd.

Position Held: Traffic cum Safety Expert

### Activities Performed:

As Traffic cum Safety Expert was responsible for suggesting the complete layout and design of access regulation measures, traffic safety facilities and provide such solutions which enhance safety during construction and operation.

### **Project Name:**

Detailed engineering design for the project of 6-laning of Surat-Dahisar section of NH-8 from km. 263.00 to km. 502.00 (length: 239 kms.) in the state of Gujarat/Maharashtra to be executed as BOT (Toll) basis on DBFO pattern under NHDP Phase-V.

Year: Sep 2008- Dec 2009

Client: Modern Road Makers Pvt. Ltd. (A Subsidiary of IRB Infrastructure Developers Ltd.)

Position Held: Traffic cum Safety Expert

### Activities Performed:

As Traffic cum Safety Expert was responsible for suggesting the complete layout and design of access regulation measures, traffic safety facilities and provide such solutions which enhance safety during construction and operation.

### Project Name:

Independent Consultancy Services for 6-laning of Bharuch to Surat from Km. 198.00 to Km. 263.00 of NH-8 in Gujrat on BOT Basis (Package BOT-2)

Chief Engineer Engineering Division M.M.R.D.A.

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MUMBA



Year: Sep2007- Sep2009

Client: National Highways Authority of India Position Held: Traffic & Transportation Expert

### Activities Performed:

As Traffic and Transportation Expert, responsible for review and check traffic analysis, projection and assignment exercises to be carried out by the concessionaire; review design of intersections and interchanges, toll plaza layout, bus bay layout; scheme for traffic management during construction, study and comment on Safety audit report prepared by concessionaire; Review Geometric design from Road Safety angle; Check super elevation ,sight distance from road Safety angle; assessment of traffic using emme/2 model, conduct traffic surveys, assessment of future traffic, assessment of traffic demand etc.

### **Project Name:**

Consultancy services for preparation of Feasibility for 6-laning of NH-2 from Varanasi" Aurangabad (length 190 Km) in the state of Uttar Pradesh/Bihar under NHDP Phase-V (Lot 2), to be executed on BOT (Toll) Project on DBFO Pattern.

Year: Aug2007- July2008

Client: National Highways Authority of India Position Held: Traffic cum Safety Expert

### Activities Performed:

As Traffic cum Safety Expert was responsible for suggesting the complete layout and design of access regulation measures, traffic safety facilities and provide such solutions which enhance safety during construction and operation.

### **Project Name:**

Consultancy Services for Urban Re-Engineering of 8-laning of Sion\*Panvel Highway and balance work of 55 Flyover Project and 25 km (BOT project)

Year: Feb 2007- July 2007

Client: Maharashtra State Road Development Corporation Ltd.

Position Held: Traffic cum Safety Expert

### Activities Performed:

As Traffic Engineer for traffic collection at the locations along the various flyovers and the layout for the proposed Toll Collection plazas, toll collection method working out along with the study of the lane requirements as per the present & forecasted traffic studies.

### Project Name

Consultancy Services for preparation of feasibility for 6-laning of NH-8 from Surat Dahisar (length 239 km) in the state of Gujarat/Maharashtra under NHDP Phase V, to be executed on BOT (Toll) Project on DBFO Pattern

Year: July2006- May 2007

Client: National Highways Authority of India Position Held: Traffic cum Safety Expert

### Activities Performed:

As Traffic cum Safety Expert was responsible for suggesting the complete layout and design of access regulation measures, traffic safety facilities and provide such solutions which enhance safety during construction and operation.

### **Project Name:**

Consultancy Services for preparation of Detailed Project Report for œ4-laning of existing road from Karaswada Junction (NH-17) to Khandepar (NH-4A)\* Assessment for taking up the work on BOT

Year: May 2006- Sep 2006

Client: Goa State Infrastructure Development Corporation Ltd.

Position Held: Traffic Engineer

### Activities Performed:

As Traffic Engineer for traffic collection at the locations along the project road and the layout for the proposed Toll Collection plazas, toll collection method working out along with the study of the lane requirements as per the present & forecasted traffic studies.

### Project Name:

Independent Consultant for Design, Construction and Operation of Maintenance for Widening of Existing 2-lanes to 6-lanes divided carriageway facility including rehabilitation of Existing 2-lanes,

Page 3 of 5

Engineersion Engineering Divasion M.M.R.D.A from km 273.500 to km 363.885 on Jaipur - Kishangarh Section of NH-8 in Rajasthan on BOT basis.

Year: Nov 2002- April 2005

Client: National Highways Authority of India

Position Held: Traffic Engineer

### **Activities Performed:**

To be carried out by the concessionaire; review design of intersections and interchanges, toll plaza layout, bus bay layout; scheme for traffic management during construction, study and comment on Safety audit report prepared by concessionaire; Review Geometric design from Road Safety angle; Check super elevation ,sight distance from road Safety angle; assessment of traffic using emme/2 model, conduct traffic surveys, assessment of future traffic, assessment of traffic demand etc.

### **Project Name:**

### Kalyan"Dombivali Ring Road, Maharashtra

Year: May 2000- Jan 2001

Client: Kalyan-Dombivali Municipal Corporation Position Held: Traffic and Transportation Expert

### Activities Performed:

Kalyan-Dombivali Municipal Corporation (KDMC), Kalyan, Public Works Department, had decided to construct a ring road from Shahad, Barave, Gandhare, Durgadi Fort, Kalyan Patripool, Thakurli, Dombivali (W), Kopar to Manpada road with an intention to solve the traffic congestion problem on the existing Dombivali-Kalyan via. MIDC area. The proposed ring road is a 4-lane divided carriageway approximately 17 km. Length (excluding some portion between Durgadi Fort to Patripool of about 1.70 km in KDMC area). As a Traffic and Transportation Expert was involved in review and checking of traffic analysis, review design of intersections and interchanges, traffic safety, designs and drawings for improvement of city roads, preparation of BOQ, cost estimates, periodical supervision etc.

### **Project Name:**

Mumbai"Talasari Expressway"Section"I.

Year: May 1998- Feb 2000

Client: PWD, Govt. of Maharashtra

Position Held: Traffic and Transportation Expert

### Activities Performed:

Detailed Engineering of the proposed Mumbai-Talasari Expressway- Section 1, from the starting point at proposed Kashi-Mira interchange on NH-8 (included) upto, but excluding, the proposed Interchange at Shirsat at the junction with State Highway No.40 (approx. length " 24 km). As a Traffic and Transportation Expert was involved in review and checking of traffic analysis, review design of intersections and interchanges, traffic safety, toll plaza layout, toll collection methods and user facilities.

### **Project Name:**

Mumbai"Nashik Expressway " Section " III.

Year: May 1998-Feb 2000

Client: Govt. of Maharashtra (PWD)

Position Held: Traffic and Transportation Expert

### Activities Performed:

Detailed Engineering of the proposed Mumbai - Nashik Expressway - Section III from the starting point at Igatpuri at the proposed Igatpuri Interchange (included) upto but not including the proposed interchange at Rajurbahula near National Highway No.3. The approximate length of Section III is 34.4 Kms. As a Traffic and Transportation Expert was involved in review and checking of traffic analysis, review design of intersections and interchanges, traffic safety, toll plaza layout, toll collection methods and user facilities.

### **Project Name:**

Improvement/Upgradation of State Highway and Major District Roads in Tripura - Strategic Options

Study Year: March 1997-Sep 1998

Client: Govt. of Tripura Position Held: Traffic Engineer

Activities Performed:

AVIMOT

Ohler Englisher Ingineering Division M.M.R.D.A. Page 4 of 5

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Responsible for coordinating traffic surveys and analysis, development of composite index for strategic options, traffic forecast, project benefit evaluation and prioritization of roads for improvement.

### **Project Name:**

Traffic Operation and Management Plan for Selected Cities in Tamil Nadu

Year: Aug 1996-April 1997 Client: Govt. of Tamil Nadu Position Held: Traffic Engineer

### Activities Performed:

Responsible for preparation of traffic engineering and management schemes for various towns including cost estimates, checking of traffic analysis, review design of intersections and interchanges, traffic safety, toll plaza layout, toll collection methods and user facilities.

### **Project Name:**

Traffic Engineering and Development of Alternative Transport Network for Cuttack and

Bhubaneswar, Orissa. Year: March 1993-Sep1994 Client: Govt. of Orissa

Position Held: Traffic Engineer

Activities Performed:

Responsible for traffic surveys and analysis, evolving traffic engineering and management schemes, signalization plan, design of terminals, evaluation of development options, economic analysis, travel demand analysis and development of alternative transport network.

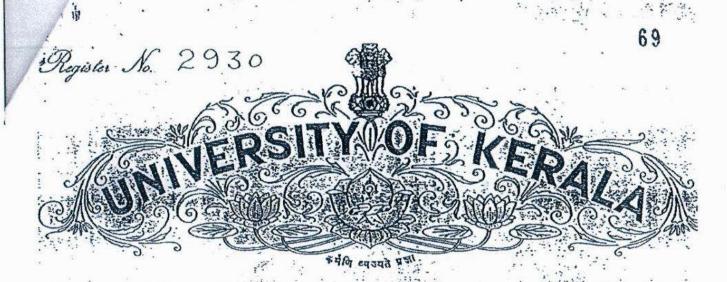
Languages	;	Language	Speaking Reading		Writing	
		English	Excellent	Excellent	Excellent	
		Hindi	Excellent	Excellent	Excellent	

### Certification:

NIMUM

- I am willing to work on the project and I will be available for entire duration of the project assignment and I will not engage himself in any other assignment during the currency of his assignment on the project.
- 2. I, the undersigned, certify that to the best of my knowledge and belief, this bio-data correctly describes me, my qualifications and my experience.

Signat	ture of the Candidate:	Johns
	Place:	Navi Mumbai
	Date :	24.11.2020
Signa	ture of the Authorised Representative of the firm	
	Place:	Navi Mumbai
NTSA	Date :	24.11.2020
112/1		(695 to 12.20 to 50.00)



### FACULTY OF ENGINEERING & TECHNOLOGY

Given under the seal of the University.



Thiversity Buildings.





### FACULTY OF ENGINEERING

Whereas it has been certified by duly appointed Exeminers that Jose Thomas Mankulathil is qualified to receive the Degree of Master of Technology in Engineering (M. Tech.) in Branch I Civil- 12affic and Iransportation Planning he/ske having been placed in First Class at the Examination held in August 1990 (Reg. No. 818 ) The Senate of the University of Calicut hereby confers on him/her the Degree of

### MASTER OF TECHNOLOGY IN ENGINEERING

with all the Rights, Privileges and Honours thereunto appertaining. Given under the seal of the University.



CALICUT UNIVERSITY Date .. 1.1.1.1991.



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(a)	Name of pupil. JOSE (In English. Physic letters. In	HOMBS (	MANKU	катий).
	(In Regional Language)			
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	Native place. Krosllowkac	d Mauralta	chrocha.	terros kulam
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	(In ligures and in words)	D. 3.1965 L. Nimeta	422.	estred and
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12.	Name of parent or guardian: (As in the Admission Register) Guardian's relationship with the pupil:	Arte Parter	ilyonnes 	
	Occupation of guardian : Home address of guardian :	A Michael		etheil.
in.	Personal marks of identification in A lelegle ornote. I	remumbery	to the	Left can . of the meets
	Schools attended	Period o	Standards	
11.		From	То	Standards
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Secretary. Kothamanqalam Municipality

Baby Antony BSc. E.B.



Chief Engineer
Engineering Division
M.M.R.D.A.



Name and signance of Headmaster/Headmistress with date.
High School : 255128





### भारत सरकार

Unique Identification Authority of India Government of India

नोंदविण्याचा क्रमांक / Enrollment No 1190/15783/01720

To, जोत बॉमल Jose Thomas S/O Alpe Thomas B-104, Surya Building Co.Op.Hou.Soc. Plot No.5 Near NRI Complex Sector-50, Nerul Pin Code-400708 NAVI MUMBAI Thane Maharashtra 400615 9930073903

Ref: 315 / 15E / 528629 / 529129 / P



UE467399055IN



आपला आधार कमांक / Your Aadhaar No. :

7946 1120 1096

आधार — सामान्य माणसाचा अधिकार



भारत सरकार GOVERNMENT OF INDIA



जोस बॉमस Jose Thomas जन्म वर्ष / Year of Birth : 1965 पड्य / Male



7946 1120 1096

आधार — सामान्य माणसाचा अधिकार







### STUP Consultants Pvt. Ltd.



Five Decades of Sustainable Design of Infrastructure & Real Estate through Innovation

12 May, 2016

### TO WHOMSOEVER IT MAY CONCERN

This is to certify that Mr. Jose Thomas is working with this organization since 1993 as Traffic & Transportation Expert-Safety-Expert / Traffic Engineer for various Highways / Bridge projects of the company.

Mr. Jose Thomas is a sincere and hardworking engineer and I wish him best success in his future career.

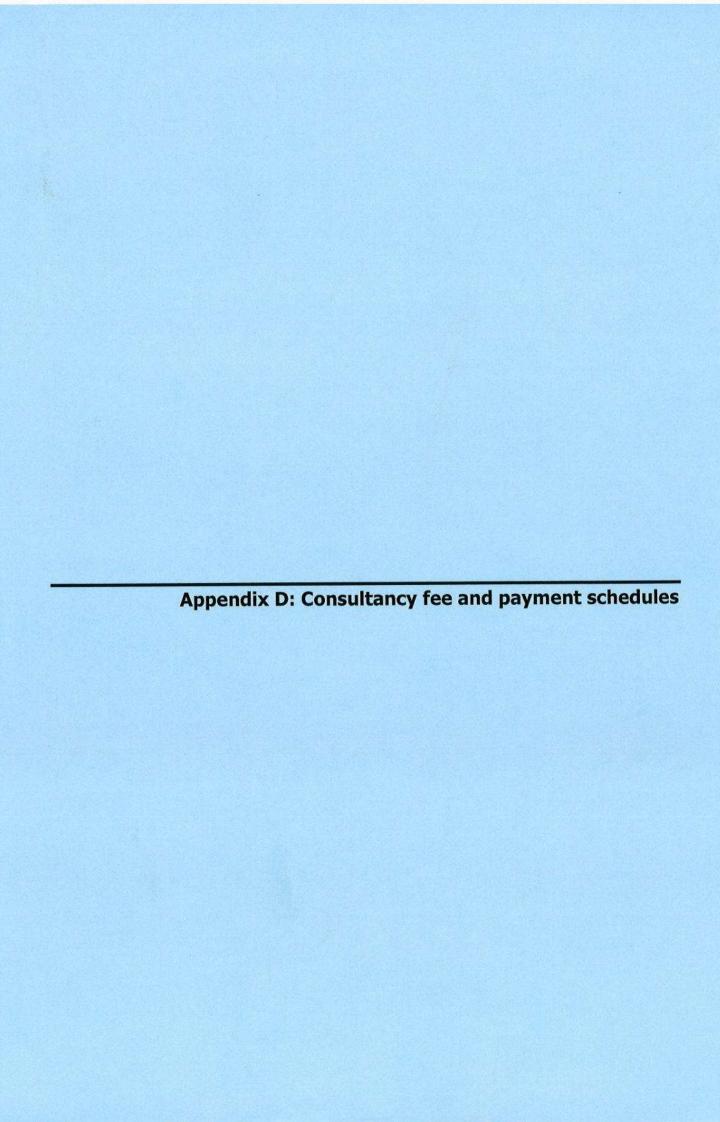
MBEACHMARG

For STUP Consultants Pvt. Ltd.

(A.D. Joshi)

Executive Vice President

Plot No. 22-A. Sector 19-C, Palm Boach mary, Vashi, Navi Mumbal-400 705, India. Tel: 022-40887777, 41224328 Fax: 022-27836240. E-mail: navimumbal@stupmail.com





#### STUP Consultants Pvt. Ltd.



ANNEXURE abla abaigploth the light with the light and a state of the light and the lig COST ESTIMATES WITH DETAILS OF REQUIRED KEY MANPOWER

Sub: Providing Project Management Consultancy Services for Design and Construction of Sewri to Worli **Elevated Connector (Third call)** 

#### **FINANCIAL PROPOSAL**

Sr. No.	Description	Amount (Rs.)
1	Remuneration	101,590,600.00
2	Transportation	7,581,600.00
3	Office Supplies, Utilities and communication	1,053,000.00
4	Office furniture and Equipment	5,997,820.00
5	Report and document printing	1,000,000.00
6	Survey and other expenses	500,000.00
	Total	117,723,020.00

We, STUP Consultants Pvt. Ltd. are hereby quoting the lump-sum fee for the Project Management Consultancy Services as per the scope of Work, terms and contract conditions covered in TOR. The offer is inclusive of all taxes and excluding GST.

(In Words)

Our Fee is Rs. 11,77,23,020/- (Rupees Eleven Crores Seventy Seven Lakhs Twenty Three Thousand & Twenty only) as mentioned in detailed tender notice.

For STUP Consultants Pvt. Ltd.

Joint Vice President 181.:50887777

STUP Consultants Pvt. Ltd.; Plot No.22 A, Sector 19C, Palm Beach Marg, Vashi, Navi Mumbai. Maharashtra- 400 705

Tel: 022 - 4088 7777

Fax: 022 - 2783 6240

Chief Engineer

MUPIO No. 22-A, Sector 19-C, Palm Beach Marg, Vashi Navidurinbaj - 1900 7950 India. Tel: 022-40887777, 41224328. Fax: 022-27836240. E-mails navimumbai@stupmail.com

Regd. Office: 1004 & 5, Raheja Chambers, 213, Nariman Point, Mumbai-400 021, India. CIN: U74999MH1963PTC012649 Tel.: 022-40868686. Fax: 022-22048424. E-mail: mumbai@stupmail.com www.stupco.com

#### STUP Consultants Pvt. Ltd.

## Estimate of costs

## Remuneration of Key Professional Staff

10 kg	Key Personnel	Name	Rate (Rs.)	No. of Persons	No. of Man Months per person per	Man	Man Months & Phase	95	Total Man- Months	Amount
					month	Construction	DIP	Total		
	Personnel									
-	Key Personnel									
K-1 T	Team Leader	P K Jain	261,050.00	1.00	1.00	36.00	•)	36.00	36.00	9,397,800.00
K-2 R	Resident Engineer	Rajesh Jadhav	362,600.00	1.00	1.00	36.00	2.00	38.00	38.00	13,778,800.00
	Structural Engineer PC	Amit Ralkar	345,000.00	1.00	0.50	18.00	٠	18.00	18.00	6,210,000.00
	Structural Engineer Steel	D C Athavale	345,000.00	1.00	0.50	18.00		18.00	18.00	6,210,000.00
	Quality Control Engineer	HTWagh	254,000.00	1.00	1.00	36.00	1	36.00	36.00	9,144,000.00
K-6	Contract Specialist	A S Bokil	207,000.00	1.00	0.50	18.00	2.00	20.00	20.00	4,140,000.00
	Safety Engineer	S N Pote	217,600.00	1.00	1.00	36.00		36.00	36.00	7,833,600.00
8	K-8 Geo-Technical / Foundation Engineer	Sandeep Bhosle	269,250.00	1.00	0.50	18.00		18.00	18.00	4,846,500.00
8	Supporting Staff									
1 (	SS-1 Quantity Surveyor	TBN	108,800.00	1.00	1.00	36.00		36.00	36.00	3,916,800.00
2 1	SS-2 Transportation / Traffic Engineer	TBN	207,000.00	1.00	1.00	36.00		36.00	36.00	7,452,000.00
3	SS-3 Jr. Quantity surveyor	TBN	87,050.00	1.00	1.00	36.00	54.1	36,00	36.00	3,133,800.00
4	SS-4 Jr. Quality Control Engineer	TBN	87,050.00	1.00	1.00	36.00		36.00	36.00	3,133,800.00
S	SS-5 Surveyor	TBN	65,300.00	1.00	1,00	36.00		36.00	36.00	2,350,800.00
1 9	SS-6 Lab Technicians	TBN	58,100.00	2.00	1.00	36.00		36.00	72.00	4,183,200.00
7 F	SS-7 Field Engineers	TBN	72,750.00	4.00	1.00	36.00	2.00	38.00	146.00	10,621,500.00
8	SS-8 Utility Engineer	TBN	72,750.00	1.00	1.00	36.00		36.00	36.00	2,619,000.00
a	SS-9 Expert in social development (R&R)	TBN	72,750.00	1.00	1.00	36.00		36.00	36.00	2,619,000.00







#### APPENDIX - 'D' Fees and payment schedule

#### 1. Fee:

The consultants shall be eligible to receive the fees as quoted/ agreed/ negotiated by the employer and communicated in Work Order / Letter of Intent by competent authority of MMRDA.

#### 2. The Consultants quotation:

The Consultants shall provide the services as per the contract at the rates quoted/agreed by the consultant's quotation.

#### 3. Final Fee payable to the consultants:

The Fee payable to the Consultant shall be the lump-sum fee (which deemed to have included all applicable taxes excluding GST) as quoted/ agreed/ negotiated. The fees as above deemed to include any change in scope of the Contractor, if any, during the construction and no additional fees will be payable to the PMC towards variations / extra items etc. executed by the Contractor.

#### 4. Break-up of the fees payable for the different periods:

The total fee payable will be divided into 4 parts and paid as indicated below:

	Cost of project in core	% fees payable during different periods
1.	Scrutiny of design and working drawings submitted by the Contractor for execution.	15%
2.	Supervision in Construction Period i.e. technical supervision, monitoring quality assurance and other allied services, running account bills etc.	75%
3.	Miscellaneous activities viz. As build drawings, Final bill of Contractor & Maintenance Manual, Final handing over of facility to corporation/PWD at the end of DLP.	5 %
4.	Supervision during Defects liability period.	5%

#### 4.1 Payment Schedule for proof checking:

Fee will be divided independently for each structures of the bridge for which proof checking is completed and drawing released for construction. Total fee as per the (i) or (ii) above will be divided in two phases:

Phase	Stage of work		Fee payable
Phase-I	Scrutiny of detailed Contractor and accept completion) On completion of scrut i) Foundations	design of design Consultant / ted by MMRDA. ( in proportion of tiny of: 20% 10% 40% 05%	75%

BIDDER

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MMRDA

Phase	Stage of work		Fee payable
Phase-II			25%
	ii) Substructure 05% iii) Superstructure 05% iv) Miscellaneous 03% v) After DLP 05%	% 6	

- 4.2 Payment to consultants against supervision during construction period will commence after Work order is issued to the consultant and after the consultants mobilizes their manpower at site. The fees payable during supervision to be bifurcated into 2 parts (for regular as well as extended period if any ) as follows:
  - 4.2.1 Fees against manpower deployment and fees against progress of works.

The proportionate fees should be 70% for manpower deployment and 30% for progress related component. At the time of signing the agreement, key staff to be deployed should be mentioned in the Agreement and if any short fall occurs in it, the fee should be deducted proportionately. A condition to this effect is clearly included in the document. For extended period, the fees towards supervision (Manpower deployment and progress) may be paid by working out proportionately limiting to the monthly fees being paid in the original contract if staff is deployed as per TOR.

If the progress of work is very slow due to unforeseen reasons during the operation period of contract i.e. during original & extended period, employer may direct for reduction of staff in manpower deployment in proportion to work front available & fees towards the manpower deployment will be reduced in proportion to reduced manpower deployment. No claims in this regard will be entertained for reduction in man power deployment, proportionate fees will be deducted as per weightage basis of salary.

4.3 Break-up of payment schedule for Miscellaneous activities:

Break-up of payment schedule for a miscellaneous activity is as below:

	Component	% fees to be retained
1	As build drawing	1.0 %
2	Final bill of Contractor & Maintenance Manual	2.0%
3	Claiming deposits from tree/mangrove authority	0.5 %
4	Final handing over of facility to Corporation/PWD at the end of DLP	1.0 %
5	Special reports on damages ,lack of needed performance	0.5 %
	Total	5.0 %

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MMRDA

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ngineering Division

#### Payments if Project is delayed:

If the actual completion time extends beyond the base completion and variation the payment will be made as follows:

-	Base Completion as per contract	Variation period
L	Up to 9 Month	± 1 month
2	9 to 15 Month	± 2 months
2	15 to 36 month	± 3 months

In the event of construction extended beyond base completion + variation, the monthly payment will be subject to the ceiling as given below:

Fees payable per month =

Total Fees ( as mentioned in Appendix D ar Sr No 4.2 i.e.(75

%)

(Base completion Time limit

+ variation period in Month)

The payments will be worked out in proportion to the actual manpower deployed and approved by Engineer-In Charge during period under consideration. The payment towards **financial** progress related fees shall be paid to the PMC in proportion to the financial progress of the work till end of the project including extended period (if any). For reduction in man power deployment, proportionate fees will be deducted as per weightage basis of salary.

#### Notes:

- This clause will come in to existence only after agreed Man-Months as per Contract are exhausted.
- The balance agreed Man-Months of individual professional at the end of the original contract period (excluding DLP period) shall be carry forward in the extended contract period.
- 3. The payments for the extended will be made based on actual man months provided by the Consultants, with prior approval of the employer. The additional payments will be worked out in proportion to deployment of the actual man months, certified by the "Employer""

#### 6. Consultants reports of Manpower deployment:

The consultant shall submit the details of manpower deployment of key staff required for each quarter in advance. This shall be arrived at based on the scheduled works in the next quarter and the actual and anticipated progress achieved by the contractor. The consultants shall get the actual deployment duly certified by the Engineer in-charge at the end of every month. The certified manpower of key staff deployment and the approved schedule of deployment for the quarter shall be considered as the basis for consultants payments. No payment will be released if consultant fails to submit and get approval of Engineer In-Charge for manpower deployment of key staff required for each quarter in advance before fifteen days of start of respective quarter. Each bill of PMC must accompanied the letter in this regard.

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Chief Engineer Engineering Division

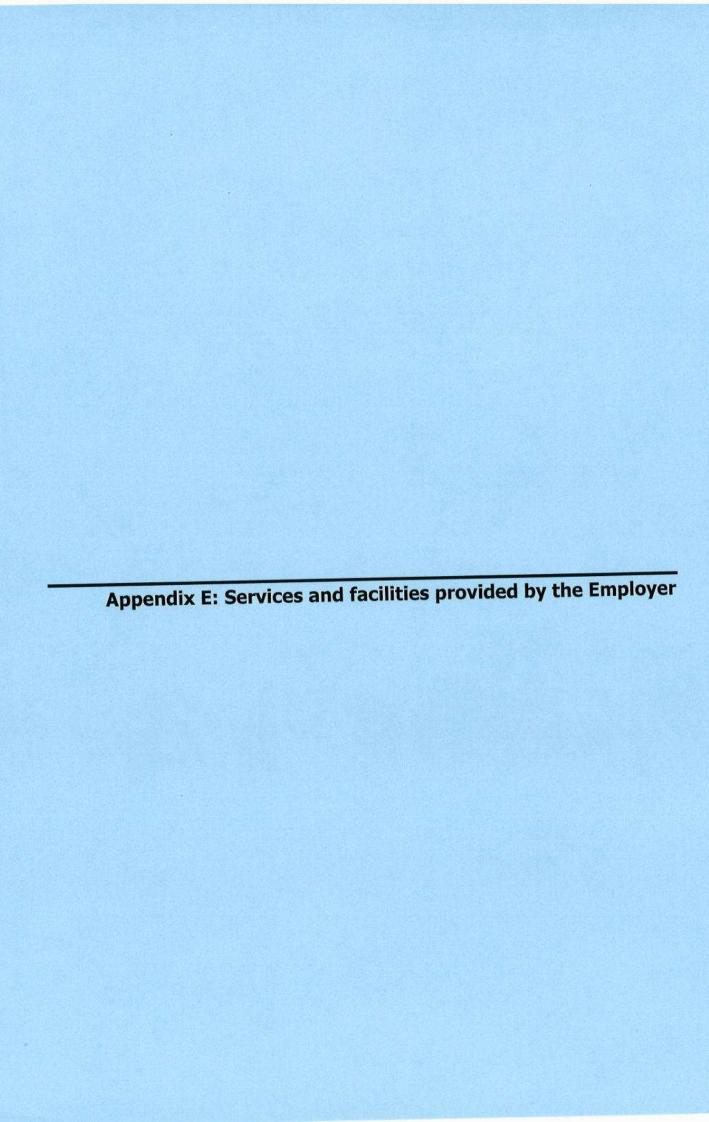
7. Reimbursable expenditure towards additional copies of reports:

The consultants shall submit additional copies of the report as and when required by the employer at no extra cost.

PLOT NO.22-A OF SECTOR 9-C, PALM BACC MARG, NO TEL.:40887173

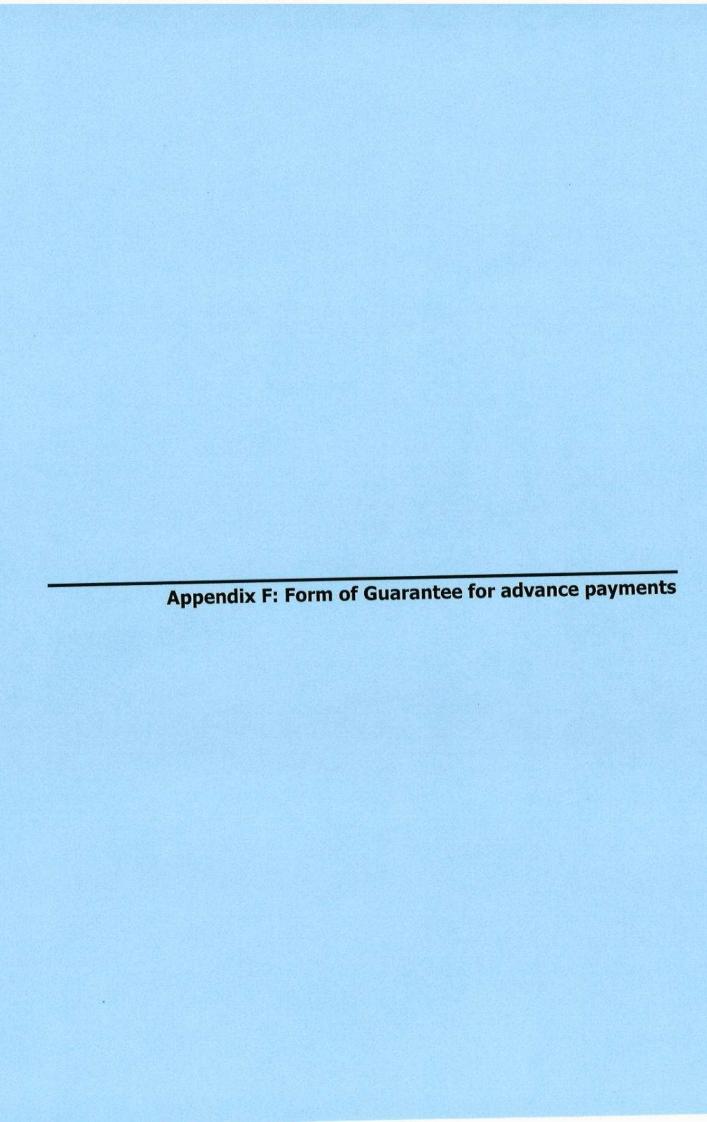
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MMRDA



### APPENDIX – 'E' Service and Facilities Provided by the Employer Not applicable





APPENDIX - 'F'

Deleted



Appendix G: Corrigendum's / modifications / corrections , CSD as per pre bid meeting

Chief Engineer Engineering Division M.M.R.D.A.

Name of work: PROVIDING PROJECT MANAGEMENT CONSTULTANCY SERVICES FOR DESIGN AND CONSTRUCTION OF SEWRI TO WORLI ELEVATED CONNECTOR (Third call)

Common Set of Clarifications (CSC-1)

AVIMUM

# CONNECTOR (Third Call)

# Common Set of Clarifications (CSC-1)

Sr.

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		Тhе Сошпол	The Common Set of Clarifications is not part of the Bid Documents	art of the Bid Documents	
Ref. Clause No./Page No.		Condition	u	Query	Clarification
M/s. TECHNO	GEM CON	M/s. TECHNOGEM CONSULTANTS PVT. LTD.			
Section 1:	Instruct	Instruction To Bidder			Please refer
Clause No. 3	Clause 3	Clause 3. Preparation Of Proposal:		3	to Sr No 3 of
Page No. 16					1-050
0	7. Yell as V	The bidder should upload : /AT certificate etc. and sca	7. The bidder should upload scanned copy of PAN Card as well as VAT certificate etc. and scanned attested photocopies of	The bidder should upload scanned copy of PAN Card and GST certificate etc. and scanned attested photocopies of	
g	all docur	ments on above mentioned	all documents on above mentioned MMRDA official e-Tendering	all documents on above mentioned MMRDA official e-	
	portal &	produce in original on requ	portal & produce in original on request by MMRDA at any stage.	Tendering portal & produce in original on request by MMRDA at any stage.	
E	Did Brow	Bid Demandion and Submission on line - 23/11/2020	line - 23/11/2020	Due to Diwali Festival & substantial documentation is	Please refer
chort Notice	1200 hrs	און מנוטוו מווע טמטווווזאוטוו טוו נ		involved in this bid, It is requested to extend the date of	to Sr No 1 &
Page No.7	0071	,		submission of Bids by at least 15 working days from the date of issue of CSD/ clarification to pre-bid points.	2 of CSD-I
	3 Criter	ria sub-criteria, and poin	3 Criteria sub-criteria and point system for the evaluation	Minimum average annual financial turnover of INR 10	Please refer
Clause No.	of Full 7	of Full Technical Proposals		Crore in last three financial years ending 31st March 2019	to Sr No 4
Sr. No. 3	Sr.	Parameter	Maximum Marks	in the Consultancy services as certilled by CA.	of CSD-
Criteria, sub-	No.		Criteria for Marking	Average Annual 141100Crore: 5 Marks	
criteria, and	2.	Minimum average	10	> INR 12.00 but < 15.00 Crore : 7 Marks	
for the		annual financial turnover	Average Annual Turnover:	≥ INR 15.00: 10 Marks	
evaluation of		of INR 10 Crore in last	> INR 10.00 but < 25.00	Also, consider the enhancement factor @ 10 per year for	
Full		three financial years	Crore: 5 Marks	turnover of previous years to bring avg. uniover	
Proposals		ending 31st March 2019	> INR 25.00 but < 50.00	character to be come a company of the company of th	
Page No.21		in the Consultancy	Crore: 7 Marks		

Page 1 of 46

Name of work: PROVIDING PROJECT MANAGEMENT CONSTULTANCY SERVICES FOR DESIGN AND CONSTRUCTION OF SEWRI TO WORLI ELEVATED CONNECTOR (Third call)

MARG	20 C C C C C C C C C C C C C C C C C C C		services as certified by CA.	certified	oy ≥ INK 50.00: 10 Marks					
TD.	Appendix A		Tender Condition	ndition		Position	Modifica	Modifications Requested	uested	
	Clause 31 Qualification and experience requirement for key professional	0	Minimu m Qualific ation & upper age	Mini mum Over all Exper ience	Specific Experience of Similar Nature		Mini mum Qualif icatio n & upper age limit	Minimu m Overall Experie nce	Specific Experience of Similar Nature	P ease refer
	Staff page	Key Pr	Key Professionals			Key Professionals	sionals			to Sr No 8
Chief Engineer	97 oN	Team Leade r Resid ent Engin	Graduatio n in Civil Engineeri ng Upper age limit 65 years Graduatio n in Civil Engineeri ng Upper	years years Years	Out of 20 years' experience, minimum 5 years' experience as a Team Leader (TL).  Experience in planning & execution/ supervision of one completed project having minimum 1500 meter Viaduct length in urban area as TL.  Experience in planning & execution/ supervision of one completed flyover/bridge/Metro having structural steel superstructure of at least 40 meter span as TL.  Out of 20 years' experience, 5 year experience as a Resident Engineer.  Minimum 5 years' experience of planning & execution/ supervision of one Elevated metro viaduct/ 2 lane flyover in urban area	Leader leader	Graduatio n in Civil Engineeri ng Upper age limit 70 years	20 years	Out of 20 years experience, 5 years experience as a Team Leader TL/ Project Manager/ Resident Engineer.  Experience in planning & execution/ supervision of one completed project having minimum 1500-meter Viaduct length in urban area as TL/ Project Manager/ Resident Engineer.	CSD-I

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Name of work: PROVIDING PROJECT MANAGEMENT CONSTULTANCY SERVICES FOR DESIGN AND CONSTRUCTION OF SEWRI TO WORLI ELEVATED CONNECTOR (Third call)

Common Set of Clarifications (CSC-I)

Experience in planning & execution /supervision of one completed flyover/Metro having minimum 1500 meter Viaduct	Experience in planning & execution/ supervision of one completed flyover/bridge/Metro having structural steel superstructure of at least 40 meter span	Out of 15 year experience, minimum 5 years' experience as a Quality Control /Quality Assurance Engineer.  Experience of at least 1	completed project of Ervated metro / 2 lane flyover /Bridge costing not less than 100 Crore as a Quality Control / Quality Assurance Engineer	Out of 20 year experience an inimum 10 years' experience as Contract Engineer / Contract Specialist of project.  Experience of at least 1 completed project of elevated metro /Monorail viaduct /flyover/ROB costing not less	than 300 Crore as a Contract Engineer / Contract Specialist
& Resident one Engineer aving	one Aetro steel t 40	jence as /Quality least 1	ridge Control Crore /Quality aality Assurance Engineer		ist
Graduatio n in Civil Engineeri ng	Upper age limit 65 years		Graduatio n in Civil Engineeri ce ng Upper r age limit		
15 Years			10 year		
experience, 5 year experience as a Resident Engineer/ Asst. Resident Engineer.	Minimum 5 years' experience of planning & execution / supervision of one Elevated metro viaduct / 2 lane flyover/ Major Bridge/ ROB.	Experience in planning & execution / supervision of one completed flyover / Metro/ ROB/ Major Bridge having minimum 750 meter Viaduct length in urban area.	Out of 10 years experience, minimum 5 years experience as a Quality Control / Quality Assurance	Engineer.  Experience of at least 2 completed project of Elevated metro / 2 lame flyover / Bridge/ Urban Road/ Highway project as a Quality Control / Quality Assurance Engineer.	

Name of work: PROVIDING PROJECT MANAGEMENT CONSTULTANCY SERVICES FOR DESIGN AND CONSTRUCTION OF SEWRI TO WORLI ELEVATED CONNECTOR (Third call)

Common Set of Clarifications (CSC-I)

Out of 15 year experience minimum 10 years' experience as Contract Specialist/ Documentation Expert/ Project Manager. Minimum experience in 1 project in similar capacity costing not less than 100 Cr.	Minimum 5 year experience in Elevated metro viaduct/ 2 lane flyover/ ROB/ Major Bridges in as safety Engineer.	Minimum 10 years in Elevated metro/ 2 lane flyover/ ROB/ Major Bridge/ Highways/ roads as geo-technical engineer.  Minimum 5 years/ experience in Transportation planning, traffic management	des of fl n are
20 year	10 Year	15 Year 10 Year	
Graduatio n in Civil Engineeri ng Upper age limit 70 years	Graduatio n in Civil Engineeri ng OR Diploma in Civil / Safety Upper age limit 65 years	BE civil Upper age limit 65 years M. Tech / ME in Transno	rtation/ Traffic Engineer
Contract	Safety Engineer	Geo- Technical U / Roundatio n Engineer Support Staff Transporta Ition/ ITraffic Fromber	0
Minimum 5 year experience in Elevated metro viaduct/ 2 lane flyover in urban area as safety Engineer	Minimum 10 years in Elevated metro/ 2 lane flyover in urban area as geo-technical engineer	Minimum 5 years' experience in Transportation planning, traffic management, traffic design, highway design of flyover project in urban area.	
15 Year	15 Year	15 Year	
Graduatio n in Civil Engineeri ng OR Diploma in Civil/ Safety Upper	65 years BE civil Upper age limit 65 years	B.E. Civil, M. Tech / ME in Transpor tation / Traffic Engineeri ng Upper age limit	
Safety Engin eer	Geo- Tech nical/ Foun datio n Engin eer	Support Staff  SS-2 B.E. ( Trans M. Te portat ME ion/T Trans raffic tation engin Traffi eer Engin ng ng ng	

Chief Engineer Engineering Division M.M.R.D.A, Page 4 of 46

Name of work: PROVIDING PROJECT MANAGEMENT CONSTULTANCY SERVICES FOR DESIGN AND CONSTRUCTION OF SEWRI TO WORLI ELEVATED CONNECTOR (Third call)

	Please refer to Sr No 6 & 7 of CSD-I		Bid stipulation shall prevail	stipulation shall prevail
ing,   Upper   age limit   65 years   Note :- To bring project cost to present cost, an updation factor @ 10% per annum shall be considered for the projects of Key personnel's.	We request to allow replacement of key personnel without deduction of fees after completion of original time period of 36 months (i.e. during extended period). In such case, replacement with equal or better qualification & experience shall be permitted.		We request you to kindly consider the previous three years Annual Financial turnover i.e. FY 2016-17, 2017-18 & 2018-19	In case of extra work or works under provisional cost of the Contractor, there will be two possibilities:  Consultant will have to mobilize additional staff than earlier anticipated based on the nature of extra work - in this case we request that the Client should accept additional fees - please confirm  Consultant will have to mobilize staff for longer
	4.5 Removal and / or replacement of personnel	2. M/s. Louis Berger International WSP Company	2. Eligibility of Criteria 2. Minimum average annual financial turnover of INR 10.00 Crore in last three financial years ending 31st March 2020 in the Consultancy services as certified by Chartered Accountant.	iv) The consultancy fees will be fixed as quoted by consultant firm in tender irrespective of the accepted tender cost of work to the contractor as well as final cost of the work. No increase/ decrease in the consultant's fees will be considered for increase / decrease in cost of work and due to extra work or works under provisional Sum.
1150	III. GENERAL CONDITION S OF CONTRACT Clause No. 4.5	. Louis Berger	I-B: INSTRUCTIO NS TO THE BIDDER Clause Page 15 Sr no 2(2)	I-B Instruction to bidder clause-4 (iv) Page-17,
2-A C 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	S	2.M/s	9	- (mul)
2-A COLLING AND		2.M/s.Lo		Chief Engineer gineering Division M.M.R.D.A.

Page 5 of 46

Name of work: PROVIDING PROJECT MANAGEMENT CONSTULTANCY SERVICES FOR DESIGN AND CONSTRUCTION OF SEWRI TO WORLI ELEVATED CONNECTOR (Third call)

ANI MUMB

	a w	_ , , ,	the Bid tes shall prevail ted ent Key the lbe and
	duration than earlier anticipated - in this case we request that the Client should give additional time as well as addition fees - please confirm.	The duration of sixty (60) days for making the payment to the Consultant will create cashflow issue. We refer to similar tenders from MMRDA for e.g. Metro Rail PMC where the payment is made within 30 days. We have attached relevant extracts from one of the recent tenders from MMRDA for you ready reference.  We strongly request that the payment should be made to the Consultant within thirty (30) days after submission of valid invoice.  Please refer enclosure 1 for relevant extracts	The penalty for substitution is high in context of the present pandemic situation. The present COVID-19 situation has further constrained the ability of candidates to commit to project or firms due to health-related concerns.  Hence, we suggest as below:  Penalties should be applicable only if the PMC is unable to demonstrate efforts to retain staff expressing intent to resign and leave  PMC should be allowed for one replacement of the Key Staff without attracting penalties. However, the replacement candidate should fulfil the RFP criteria For any replacements after the one free replacement, a penalty of 5% of the billing rate for that position would be levied only for the first replacement thereafter and would be applicable only on the balance man months for that position. At all times the replacement candidate should
		(c) The Employer shall cause the payment of the Consultants icily as given in schedule of payment above within sixty (60) days after the receipt by the Employer of bills with supporting documents. Only such portion of a monthly statement that is not satisfactorily supported may be withheld from payment. Should any discrepancy be found to exist between actual payment and costs authorized to be incurred by the Consultants, the Employer may add or subtract the difference from any subsequent payments. Interest at the rate specified in the SC shall become payable as from the above due date on any amount due by, but not paid on, such due date.	sur ex
TA	N.F.	General Condition of Contract Mode of Billing & payment clause 6.4, (c) Page-52,	Removal and d) / or replacement of personnel Page-49 clause 4.5(d)
NO OR CASE	1000	ω ω	Chief Engineer Engineering Division M.M.R.D.A.

Page 6 of 46

Name of work: PROVIDING PROJECT MANAGEMENT CONSTULTANCY SERVICES FOR DESIGN AND CONSTRUCTION OF SEWRI TO WORLI ELEVATED CONNECTOR (Third call)

AV/ MUMP

	Bid	stipulation shall prevail	Bid stipulation shall prevail	Bid stipulation shall prevail
fulfil the RFP criteria	off allegan took about the state of	The state of the s	It is very unreasonable for the Consultant to be involved on the project for such a long duration after commissioning of the project. Even for mega-projects such as Metro Rail, DLP is not included in the scope of the PMC consultant. We have attached relevant extracts from one of the recent tenders from MMRDA for you ready reference.  We strongly request that the requirement of Consultant to provide services during DLP be revised to 12 months. Please refer enclosure 3.	The Independent Engineer assignments undertaken for Metro rail projects that are developed on PPP basis involves work of review of designs, inspection and monitoring of construction works, review and monitoring of safety and quality, inspection and testing of rail systems, review inspection and monitoring of O&M. In
or better qualification and experience.		Mobilization Advance	The time of contract shall be 36 months Plus DEFECT LIABILITY period of 60 months.  The time will commence from work order issued to the Consultant.	Eligibility Criteria Design/proof checking & Project Management works (successfully completed works)
A	6	General	Special Condition of Contract Page 55, Clause 2.4	General
22 A	17	10	11	12

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Name of work: PROVIDING PROJECT MANAGEMENT CONSTULTANCY SERVICES FOR DESIGN AND CONSTRUCTION OF SEWRI TO WORLI ELEVATED CONNECTOR (Third call) Common Set of Clarifications (CSC-I)

	Bid stipulation shall prevail
fact 'Independent Engineer' provide comprehensive consultancy in a PPP project where GC and/or PMC is not employed.  We therefore understand that completed Independent Engineering project experience will be considered for Eligibility Criteria (design/proof checking & Project Management works). Please confirm.	As per the present scoring criterion, a firm having experience of more than One project will score full marks. We request that for scoring, the marking system may be modified as below:  1. For experience of preparation of designs / Proof consultant of at least 1 completed minimum 2-lane elevated viaduct/Metro or Monorail Viaduct a. length not less than 1500 m - 6 marks b. length greater than 2 times the minimum requirement (i.e. 3000 m) - 7.5 marks 2. For experience of Project Management consultant of at least 1 completed minimum 2-lane elevated viaduct/Metro or Monorail Viaduct a. length not less than 1500 m - 8 marks length greater than 2 times the minimum requirement (i.e. 3000 m) - 10 marks  Criteria, sub-criteria, and point system for the evaluation of Full Technical Proposals:
fact cons emp We Engi Eligi	to a did
	tem for deminimum laving legmental ac Date.  experien and nimum 2 arban are inimum 1
	and and mical Programmical Prog
	25. Proposal Evaluation and Detern  Responsiveness  3. Criteria, sub-criteria, and point systevaluation of Full Technical Proposals: 3.i) Design consultant having experience of It designs / Proof consultant of at least 1 completed and less than 1500 m with precast sesuperstructure in the last seven years as on Bid Du and less than 1500 m with precast sesuperstructure in the last seven years as on Bid Du Anak  No of project fulfilling criteria  No of project fulfilling criteria  More than 1 Project  A.5.  A.5.  Anark  T.5  Horoject Management consultant having technical supervision, monitoring, quality assurallied services of at least one completed mi elevated viaduct / Metro or Monorail Viaduct in a precast segmental type superstructure having m length in the last seven years as on Bid Due Date.
	Responsi Responsi Responsi Responsi criteria, evaluati i) Design co esigns / Proof me elevated vi ot less than uperstructure lini) Project More than 1 F More than 1 F inii) Project echnical super echnical super lilied services levated viadu orecast segmel
	3.1) 3.1) designation of the super s
TANTS MH198JAN	ITB - Criteria, sub- criteria, and point system for the evaluation of Full Technical Proposals Page 23,24
LOT NO.22-A CONTROL OF THE CONTROL O	13

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of work: PROVIDING PROJECT MANAGEMENT CONSTULTANCY SERVICES FOR DESIGN AND CONSTRUCTION OF SEWRI TO WORLI ELEVATED CONNECTOR (Third call)	Control Cot of Cariffications (Cariffications Cariffications Carif
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			As per the present scoring criterion, a firm having Bid experience of more than One project will score full marks. stipulation We request that for scoring, the marking system may be shall prevail modified as below:	1. For experience of preparation of designs / Proof	consultant of at least 1 completed minimum 2-lane elevated viaduct/Metro or Monorail Viaduct with one span having structural steel superstructure of length not less than 40 meters  a. length not less than 40 metres – 6 marks  b. length greater than 2 times the minimum	2. For experience of Project Management consultant of	at least 1 completed minimum 2-faile character viaduct/Metro or Monorail Viaduct with one span	less than 40 meters	length greater than 2 times the minimum requirement	(i.e. 80 m) – 15 marks	
Mark	8	10	of the		ence of preparation of st 1 completed minimum Monorail Viaduct with perstructure of length not in years as on Bid Due	Legineri.		Mark	9	7.5	int having experience of auality assurance and other oleted 2 lane elevated viaduct/an Area with one span having length not less than 40 meters ue Date.
No of project fulfilling criteria	1 Project	More than 1 Project	25. Proposal Evaluation and Determination Responsiveness 3. Criteria, sub-criteria, and point system for	evaluation of Full Technical Proposals:	3. ii) Design consultant having experience of preparation of designs / Proof consultant of at least 1 completed minimum 2-lane elevated viaduct / Metro or Monorail Viaduct with one span having structural steel superstructure of length not	Date.	7.5	No of project fulfilling criteria	1 Project	More than 1 Project	3.iv) Project Management consultant having experience of technical supervision, monitoring, quality assurance and other allied services of at least one completed 2 lane elevated viaduct/ Metro or Monorail Viaduct in Urban Area with one span having structural steel superstructure of length not less than 40 meters in the last seven years as on Bid Due Date.
V TA/ M 119 PLOT NO. 5 SEC AC M ACC	2 A C	LID.	14 ITB- Criteria, sub- criteria, and	point system for the	ion of	Page 23,24			1/-		Olly

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Name of work: PROVIDING PROJECT MANAGEMENT CONSTULTANCY SERVICES FOR DESIGN AND CONSTRUCTION OF SEWRI TO WORLI ELEVATED CONNECTOR (Third call) Common Set of Clarifications (CSC-1)

				Bid stipulation shall prevail	Bid stipulation shall prevail
				<ul> <li>Our understanding with respect to the referred clause is as below:</li> <li>For any additional work beyond the scope of services, the deployment of staff will be increased in such a way that any such increase shall be within the Ceiling amount.</li> <li>However, if the increase in deployment of staff causes the payment to exceed the Ceiling amount, the payment will be made after written agreement between Client and Consultant to modify the terms and conditions of the Contract.</li> </ul>	Similar to the Dispute Resolution provisions in most of the MMRDA Contracts, we note that any dispute between the parties that cannot be settled by mutual agreement involving the top Managements of both the parties shall be referred for final settlement to the arbitration by appointing one or more arbitrator agreed between the parties and the said arbitration shall be carried out in accordance with the Indian Arbitration and Conciliation Act 1996 or such other version current at the time of the referral under this clause.
	Mark	12	15	The second secon	f a dispute of any kind whatsoever arises between the Engineer-in-charge and the Consultant in connection with, or arising out of, the Contract or the scope of the work, whether during the study or after completion of the study and whether before or after repudiation or termination of the Contract, including any dispute as to any opinion, instruction, determination, certification or valuation of the Engineer In charge, the matter shall be in the first place, be referred in writing to the Engineer In charge within 30 days of its occurrence for review, with a copy to the Employer. If the Consultant fails to refer the dispute for review within 30 days, the Engineer In charge's decision shall be final and binding on the Consultant. Such reference shall state that it is
15	No of project fulfilling criteria	1 Project	More than 1 Project	(c) If additional work is required beyond the scope of the Services specified in <i>Appendix A</i> , the estimated of engagement of Key Personnel set forth in <i>Appendix C</i> may be increased by agreement in writing between the Employer and the Consultants, provided that any such increase shall not, except as otherwise agreed, cause payments under this Contract to exceed the ceilings set forth in Clause GC 6.1 (b) of this Contract.	8.2.1 If a dispute of any kind whatsoever arises between the Engineer-in-charge and the Consultant in connection with, or arising out of, the Contract or the scope of the work, whether during the study or after completion of the study and whether before or after repudiation or termination of the Contract, including any dispute as to any opinion, instruction, determination, certification or valuation of the Engineer In charge, the matter shall be in the first place, be referred in writing to the Engineer In charge within 30 days of its occurrence for review, with a copy to the Employer. If the Consultant fails to refer the dispute for review within 30 days, the Engineer In charge's decision shall be final and binding on the Consultant. Such reference shall state that it is
LIAN P196	LS P			General Conditiona of Contract Description of personnel Clause 4.2 (c) Page 48	Special Conditions of cotract- Disputes shall be settled in accordance with the following provisions Clause 8.2 Page 57;
T 10.22	A COLARGIA	110		15	16
1 MUN	11/9	*//			Chief Engineer Engineering Division M.M.R.D.A.

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A SOUTH OF SEWRI TO WORLI ELEVATED CONSTULTANCY SERVICES FOR DESIGN AND CONSTRUCTION OF SEWRI TO WORLI ELEVATED CONNECTOR (Third call)	Common Set of Clarifications (CSC-1)
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	Bid stipulation shall prevail
	We request you to consider below mentioned criteria for Structural Design Engineer PC Position:  • Out of 15 years' Experience, 10 years' experience as a Structural Engineer
made pursuant to this Clause. No later than the fourteenth day after the day on which he received such reference, the Engineer In charge shall give notice of his decision to the Employer and the Consultant. Such decision shall state that it is made pursuant to this Clause.  Notwithstanding the arising of any dispute, unless the Contract has already been repudiated or terminated, the Consultant shall, in every case, continue to proceed with the work with all due diligence and the Consultant and the Engineer In charge shall give effect forthwith to every such decision unless and until the same shall have been revised, as hereinafter provided.  8.2.2 If either the Employer or the Consultant disagrees with the decision of the Engineer In charge, the decision shall then be referred by the Employer or by the Consultant, within 30 days of the decision of the Engineer-In-charge to the Metropolitan Commissioner, MMRDA. The decision of the Metropolitan Commissioner, MMRDA shall be final and binding on both the parties.	Structural design Engineer PC Out of 20 years' experience, 10 years' experience as a Structural design Engineer. Having experience in designing/ Proof checking of pre-stressed Elevated metro/ min 2 lane flyover/ ROB/ Major Bridge projects having precast segmental work at least 1500 meter length in urban area.
AWTS	Appendices Qualification and experience requirement for key professional Staff Clause no 1.30 Page 85,
100 22-A C T T T T T T T T T T T T T T T T T T	Chief Engineer Engineering Division M.M.R.D.A.

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NAME OF WORK: PROVIDING PROJECT MANAGEMENT CONSTULTANCY SERVICES FOR DESIGN AND CONSTRUCTION OF SEWRI TO WORLI ELEVATED CONNECTOR (Third call) Common Set of Clarifications (CSC-1)

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PS	100					
	Appendices Qualification and experience requirement for key professional Staff Clause no 1.30 Page 85,		Structural design Engineer Steel Out of 20 years' experience, 10 years' experience as a Structural design Engineer.  Experience of design/ Proof checking of Steel superstructure of Elevated metro viaduct / 2 lane flyover/ ROB/ Major Bridge having steel superstructure viaduct/ ROB of at least 40 meter span.	experience as a Structural of Steel superstructure of over/ ROB/ Major Bridge ROB of at least 40 meter	We request you to consider below mentioned criteria for Structural Design Engineer PC Position:  • Out of 15 years' Experience, 10 years' experience as a Structural Engineer	Bid stipulation shall prevail
19	Appendix D Fees and	<b>4.</b> IT ii	Break-up of the fees payable for the different periods: The total fee payable will be divided into 4 parts and paid indicated below:	the different periods: ed into 4 parts and paid as	• The payment terms as per current stipulation for this tender are on lump sum basis further broken up for 4 different periods of project implementation. The Client expects that all manpower should be deployed on the	Please refer to Sr No 9 of CSD-I
	payment schedule Page 92		Cost of project in core	% fees payable during different periods	project site for 100% of duration, however, large amounts of payments (over 40%) are being retained from all stages of work either for construction progress or for DLP. This is Not Acceptable and is a recipe for	
		H	Scrutiny of design and working drawings submitted by the Contractor for execution.	15%	Consultant to either fail because of cashflow issues or fall into unethical practices. In addition, the consultant is still been penalized even in the case the contractor fails in delivering the project due to their own reasons,	
		7	Supervision in Construction Period i.e. technical supervision, monitoring quality assurance and other allied services, running account bills etc.	75%	Client's such as NHAI, RVNL as well as MMRDA (for MTHL GC) have more reasonable payment terms. We have attached relevant extracts from recent tenders invited by NHAI, RVNL etc. for you ready reference     Instead of bifurcation of overall fees in 4 parts, our proposed suggested payment terms is bifurcated in two	
0		8	Miscellaneous activities viz. As build drawings, Final bill of Contractor & Maintenance Manual, Final handing over of facility to corporation/PWD at the	5 %	parts as below:  • Regular payment – 90% to be paid in equal monthly installments over the duration of 36 months  • Progress related payment – 10% to be paid as per the physical progress of the contractor. If the delay	

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Name of work: PROVIDING PROJECT MANAGEMENT CONSTULTANCY SERVICES FOR DESIGN AND CONSTRUCTION OF SEWRI TO WORLI ELEVATED CONNECTOR (Third call)

Common Set of Clarifications (CSC-I)

Contrasterior		to interested bidders.
	We request the Client to provide us copy or Contractor's schedule including the design construction phases and timeline	
end of DLP.  4 Supervision during Defects 5% liability period.	4.2.1 The proportionate fees should be 70% for manpower deployment and 30% for progress related component. At the time of signing the agreement, key staff to be deployed should be mentioned in the Agreement and if any short fall occurs in it, the fee should be deducted proportionately. A condition to this effect is clearly included in the document. For extended period, the fees towards supervision (Manpower deployment and progress) may be paid by working out proportionately limiting to the monthly fees being paid in the original contract if staff is deployed as per TOR.	If the progress of work is very slow due to unforeseen reasons during the operation period of contract i.e. during original & extended period, employer may direct for reduction of staff in manpower deployment in proportion to work front available & fees towards the manpower deployment will be reduced in proportion to reduced manpower deployment. No claims in this regard will be entertained for reduction in man power deployment, proportionate fees will be deducted as per weightage basis of salary.
NT S 9 6 3 0 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Fees against manpower deployment and fees against progress of works  Clause 4.2.1 Page 93	
UMBA	20	Chief Engineer Engineering Division M.M.R.D.A.

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rk: PROVIDING PROJECT MANAGEMENT CONSTULTANCY SERVICES FOR DESIGN AND CONSTRUCTION OF SEWRI TO WORLI ELEVATED CONNECTOR (THIRD CALL)	
ne of work: PRO	10.000
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	Appendix D	хД	As per Clause 5, in case of delay the payment will be made   Please refer hased on the provided formula. However, it is further   to Sr No 9 of	Please refer to Sr No 9 of
5. Payr	5. Payments if Project is delayed:	ij.	noted that payment will be made in proportion to actual	CSD-I
If the complet	If the actual completion time completion and variation the paym	If the actual completion time extends beyond the base completion and variation the payment will be made as follows	manpower deployed. There is therefore ambiguity in the present clause. To avoid ambiguity during project execution, we provide our interpretation of Clause 5 as	
If the act complet follows:	If the actual completion time extends beyond the base completion and variation the payment will be made as follows:	tends beyond the base syment will be made as	• It is our understanding from the RFP that Clause 5 would be applicable for the period beyond the construction phase (36 months) plus the variation	
	Base Completion as per contract	Variation period	period of 3 months, i.e. after 39 months • We request that the formula be revised as below: Fees payable per month = total fees (90%)/ (base	
-	Up to 9 Month	± 1 month	time+variation period)	
2	9 to 15 Month	±2 months		
es es	15 to 36 month	±3 months		
In th comj to th	In the event of construction extended beyond base completion + variation, the monthly payment will to the ceiling as given below:	In the event of construction extended beyond base completion + variation, the monthly payment will be subject to the ceiling as given below:		
Ŗ	Fees payable per month =	Total Fees ( as mentioned in Appendix D ar Sr No 4.2 i.e.(75 %)		
		(Base completion Time limit + variation period in Month)		

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proportion to the financial progress of the work till end of

manpower deployed and approved by Engineer-In Charge during period under consideration. The payment towards financial progress related fees shall be paid to the PMC in

The payments will be worked out in proportion to the actual

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Name of work: PROVIDING PROJECT MANAGEMENT CONSTULTANCY SERVICES FOR DESIGN AND CONSTRUCTION OF SEWRI TO WORLI ELEVATED CONNECTOR (Third call)

Common Set of Clarifications (CSC-I)

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	DPR copy is available on MMRDA website	Please refer to Sr No 1 & 2 of CSD-I	Please refer to Sr No 12	ar 10 0 0 0 0 0 0	1.5423 ×					
	Please provide a copy of DPR	We request you to provide at least 2 weeks' after reply to pre-bid queries are issued	We refer to the minimum manpower and corresponding man-months of design related staff positions and our	comments are as below  1. As per the minimum manpower details, the positions	corresponding to Structural Engineer (PC & Steel), Geotechnical Engineer, Transportation /Traffic		2. Proof-checking of such complex structures requires involvement of well-experienced senior-level Key	Professional supported by mid-level and junior staff.  However, the proposed team as per RFP does not include any mid-level and junior staff for supporting the Key Professional.	3. We therefore suggest that the Consultant should be	main office in Mumbai) for the positions that are on part-time basis. The experts will be available at the project site on as required basis. This solution will really add value to the project since the Consultant's office will be having necessary wherewithal's including support staff and software for effective delivery of the
the project including extended period (if any). For reduction in man power deployment, proportionate fees will be deducted as per weightage basis of salary.			LP	No. of Man days	09	09	09		taff	Man Amou Months & nt Phase
the project including extended period (if a in man power deployment, proportion deducted as per weightage basis of salary.	Appendix-A Project Management Consultancy	11/2020	Minimum Key Manpower for DLP	No of persons	1.00	1.00	1.00		Remuneration of Key Professional Staff	No. of Man Months
extended oloyment, ghtage bas	Appendix-A anagement C	Last date of Submission is on 23/11.	n Key Mar		neer			of Key Prof	No of perso ns	
including wer der perweig	roject M	mission	Minimun	Key Personnel	Resident Engineer	Contract specialist	Field Engineer	osts	eration	Nam Rat
project i man po ucted as	d.	ce of Sub			Resid	Cont	Field	Estimate of costs	Remun	Key N Pers onne
the in ded		Last dat		Sr. No.	Н	2	3	Estima		Sr. I No. I
NTS PI	Appendix-A Page no 60	Online E tender Schedule Page 8	Appendices	Minimum Key Manpower	for DLP	Page no 90		Estimate of costs		Page no 103
22-A CO TO	22	23	24					Com	}	
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proofchecking services. Similar solution is being effectively used on similar projects such as Mumbai Coastal Road project as well.  Please confirm if this is acceptable.		T						
Total Manmonths		9	4 0	11 8	8			
DLP		0	2	0	0			
Construction	aff	36	36	18	18			
per person per month	Key professional staff	1.00	1.00	0.50	0.50			
	A. Key prof	-	-	H	**			
	-			Stru ctura l Engi neer PC	Stru ctura l Engi			

e 9	2 2	6 3	8 8		6 3	9	
0	2	0	0		0	0	
36	18	36	18		36	36	
1.00	0.50	1.00	0.50	Supporting staff	1.00	1.0	
1	н	-		Suppor	11	-	
Qual ity Cont rol Engi	Cont ract speci alist	Safet y Engi	Geo- Tech nical /Fou ndati on Engi		Qua ntity surv eyor	Tran	
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Name of work: PROVIDING PROJECT MANAGEMENT CONSTULTANCY SERVICES FOR DESIGN AND CONSTRUCTION OF SEWRI TO WORLI ELEVATED CONNECTOR (Third call)

Common Set of Clarifications (CSC-I)

			-	nnot Bid o be stipulation	
				Demerger under orders of Honourable High court cannot	be ignored & Experience of earner entry has to be considered as experience of demerged entity respecting the orders.  This clause & statement in the RFP/ NIT especially with reference to demerged entities is perhaps intended to apply to bidders where demerger is not by the order of the Honourable High court. We therefore, request this clause to be suitably amended to permit judicially demerged entities which are legally permitted, to use the references, while participating in the bid. Otherwise, it amounts to ignoring court orders and goes against the tenets of business rules as per the laws of the land. MMRDA cannot consider itself to be above the orders issued by the Honourable High court of the land.
	1 1.0 6	1 1.0		BIDDER	I the following eligibility criteria; ct. Management Consultant for agineering infrastructure works for so for last 7 years as on bid due date. all financial turnover of INR 10.00 ncial years ending 31st March 2020 ervices as certified by Chartered consultant including preparation of scking of Designs of successfully (s) during last seven years as on Bid
neer	SS- Utilit 8 y Engi	SS_ Expe 9 rt in socia 1 deve lopm ent (R&	neering Pvt. Ltd	I-B: INSTRUCTIONS TO THE	2. Eligibility of Criteria The bidding firm must fulfil  1. Experience as Proje Construction of Civil en Govt. / Semi. Govt. work  2. Minimum average ann Crore in last three fina in the Consultancy s Accountant.  3. Experience as Design ( designs / Proof che completed similar work
TAN7 A1963	\$ 0		3.M/s. TPF Engineering Pvt. Ltd	1-B:	INSTRUCTIO NS TO THE BIDDER Eligibility of Criteria Page 15
* MUM	RECEIVED AND AND AND AND AND AND AND AND AND AN			25	Chief Engineer Engineering Division M.M.R.D.A.

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ma of work: PROVIDING PROJECT MANAGEMENT CONSTULTANCY SERVICES FOR DESIGN AND CONSTRUCTION OF SEWRI TO WORLI ELEVATED CONNECTOR (TRIFA CALL)	Common Set of Clarifications (CSC-1)
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-	Due Date.	Besides, restrictive clauses like these will lead to severely
7	4. Experience as Project Management Consultant including technical supervision, contract management, monitoring, quality assurance and other allied services of successfully completed similar work(s) during in the last seven years as on Bid Due Date.	restricted competition in this bid and will allibuilt to showing undue favor to certain parties.
	<ol><li>Joint venture of firms is not allowed for participation in the bid.</li></ol>	
	Similar work(s) are defined as follows;	
Ą.	A completed project having minimum 2-lane elevated viaduct of flyover/Metro Viaduct in urban area with length of precast segmental type superstructure not less than 1500 m; and	
B	A completed project having minimum 2-lane elevated viaduct of flyover/Metro viaduct in urban area having at least one span of structural steel superstructure with span length not less than 40 meters.	
	The works mentioned at A. and B. above need not be from the same project.	
Section (Section (Sec	Certificate of satisfactory completion of similar works as well as works being performed, details of Key personnel etc. shall be uploaded by the bidder.	
	Certificate from Client /Employer in the name of bidding firm for satisfactory completion of similar works shall clearly fulfill criteria mentioned in Eligibility criteria above. Experience of parent company will not be considered.	
	The bidder from the	g)

Chief Engineer Engineering Division M.M.R.D.A. age 20 of 46

d call)		Bid stipulation shall prevail
CONSTRUCTION OF SEWRI TO WORLI ELEVATED CONNECTOR (Thir- (CSC-1)		We request you to consider the river bridge/Bridge on water experience also and hence request you to modify the clause as below:  Similar work(s) are defined as follows;  A. A completed project having minimum 2-lane elevated viaduct of river bridge/Bridge on water flyover/Metro Viaduct in urban area with length of precast segmental type superstructure not less than 1500 m;  and  B. A completed project having minimum 2-lane elevated viaduct of river bridge/bridge on water flyover/Metro Viaduct in urban area having at least one span of structural steel superstructure with span length not less than 40 meters.
Name of work: PROVIDING PROJECT MANAGEMENT CONSTULTANCY SERVICES FOR DESIGN AND CONSTRUCTION OF SEWRI TO WORLI ELEVATED CONNECTOR (Third call)	demerged/parent/subsidiary/sister/associate company of the bidder shall not be considered for the purpose of the eligibility criteria above.	1-B: INSTRUCTIONS TO THE BIDDER  2. Eligibility of Criteria Similar work(s) are defined as follows;  A. A completed project having minimum 2-lane elevated viaduct of flyover/Metro Viaduct in urban area with length of precast segmental type superstructure not less than 1500 m;  and  B. A completed project having minimum 2-lane elevated viaduct of flyover/Metro viaduct in urban area having at least one span of structural steel superstructure with span length not less than 40 meters.
Name of work: PR	170	I-B: INSTRUCTIO NS TO THE BIDDER Clause 2. Eligibility of criteria- 5 (A) & 5(B) Page 15
PLOTNO	22-A C	56

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4. M,		4 M/s Composites Combine Technocrats Pvt. Ltd		
2.7	/s. Composites C			
	I-B:	I-B: INSTRUCTIONS TO THE BIDDER	Elevated viaduct with PSC/Structural steel superstructure Bid	Bid
	INSTRUCTIO	2. Eligibility of Criteria	should be allowed instead of only segmental viaduct.	stipulation shall prevail
7	BIDDER	Similar work(s) are defined as follows;		
1		A) A completed project having minimum 2-lane elevated		
	Clause 2.	viaduct of flyover/Metro Viaduct in urban area with		2
	Eligibility of	length of precast segmental type superstructure not less		
	criteria- 5	than 1500 m;		
	(A) & 5(B)			

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Engineering Division
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Name of work: PROVIDING PROJECT MANAGEMENT CONSTULTANCY SERVICES FOR DESIGN AND CONSTRUCTION OF SEWRI TO WORLI ELEVATED CONNECTOR (Third call)

Common Set of Clarifications (CSC-I)

		Please refer to Sr No 4 of CSD-I											
17		We request you to consider average turnover of 7Cr instead of 10Cr.											
	B) A completed project having minimum 2-lane elevated viaduct of flyover/Metro viaduct in urban area having at least one span of structural steel superstructure with span length not less than 40 meters.	Determination of	point system for the oposals:	Maximum Marks	Criteria for Marking	10	Average Annual Turnover:	≥ INR 10.00 but < 25.00 Crore : 5 Marks	25.00 but	50.00 Crore : / Marks	≥ INR 50.00: 10	Marks	
	A completed project having minim viaduct of flyover/Metro viaduct in least one span of structural steel span length not less than 40 meters.	I-B: INSTRUCTIONS TO THE BIDDER Proposal Evaluation and Responsiveness	Criteria, sub-criteria, and point s evaluation of Full Technical Proposals:	Parameter		Minimum average	annual financial turnover of INR 10 Crore in last three	financial years ending 31st March 2019 in the Consultancy	s as certified	by CA.			
and	B) A complete viaduct of least one span length	I-B: INSTRUCTIO 25. Proposal Eva Responsiveness	3. Criteria, su evaluation o	Sr. No.		2.							
Page 15		INSTRUCTIO NS TO THE BIDDER	Page 23										
1963X		28							ì	5			

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Name of work: PROVIDING PROJECT MANAGEMENT CONSTULTANCY SERVICES FOR DESIGN AND CONSTRUCTION OF SEWRI TO WORLI ELEVATED CONNECTOR (Third call) Common Set of Clarifications (CSC-1)

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1	II-B:	I-B: INSTRUCTIONS TO THE BIDDER	As per bid document JV is not allowed. We request to	Bld
	INSTRUCTIO NS TO THE	2. Eligibility of Criteria	allow the JV for bid submission	supulation shall prevail
	BIDDER			
	Clause 2.	<ol> <li>Joint venture of firms is not allowed for participation in the bid.</li> </ol>		
	Eligibility of			
	criteria- 5			
	(A) & 5(B)			
	Page 15			
5. M	6. M/s. Amiand Consulting Pvt. Ltd	ulting Pvt. Ltd		
30	I-B:	I-B: INSTRUCTIONS TO THE BIDDER	We are requesting you to please Allow Joint Venture /	Bid
	INSTRUCTIO	2. Eligibility of Criteria	Consortum.	shall prevail
	NSTO THE BIDDER	<ol><li>Joint venture of firms is not allowed for participation in the bid.</li></ol>		
	Clause 2.			
	Eligibility of criteria- 5			
	Clause 2.5			
	Page 15			
1			37	
				*

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Bid stipulation shall prevail	
Our firm is registered with MSME under class "E" in Ministry of Micro, small & Medium Enterprises. For MSME registered firm there is relaxation / concession in EMD & Tender Fee as per MSME The Gazette of India Part-II, section 3, Sub section-ii, published on 26th March 2012. Clause no, 10. Copy of same enclosed herewith. So, kindly consider the same.	
Contract	36 Months (includin g monsoon ) plus DLP period 60 month
Perfor mance securit y	5 % of accepte d contrac t value.
Earnes t Money Deposi t (In Rs.)	10,51,8
Cost of Blank Tender Form (Per Each)	5,600/- (Includi ng GST)
Tender ed cost of Constr uction Work	6 Crore
Name of Work	Providi ng Project Manage ment Consult ancy Services for the work of Design and Constru ction of Sewri to Worli Elevate d Connect or ( Third call)
Details of work Clause 1 Page 8	

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Chief Engineer
Engineering Division
M.M.R.D.A.

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Name of work: PROVIDING PROJECT MANAGEMENT CONSTULTANCY SERVICES FOR DESIGN AND CONSTRUCTION OF SEWRI TO WORLI ELEVATED CONNECTOR (Third call) Common Set of Clarifications (CSC-I)

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	K-1			77(10)		-

Name of work: PROVIDING PROJECT MANAGEMENT CONSTULTANCY SERVICES FOR DESIGN AND CONSTRUCTION OF SEWRI TO WORLI ELEVATED CONNECTOR (Third call) Common Set of Clarifications (CSC-1)

		Please refer to Sr No 11 of CSD-I
		Experience as Design Consultant including preparation of designs / Proof checking of Designs of successfully completed similar work(s) during last seven years as on Bid Due Date.  Please clarify whether the bidder has to furnish details of similar works in hand in both annexure II & III and also clarify whether ongoing works would be consider for marking or not.
Ar-7 Safet 2 0.4 0.5 0.08 0.1 1.12 1.4 Engin	K-8       Geo-       2       0.4       0.5       0.08       0.1       1.12       1.4         Tech       nical/       Foun       1.4       1.12       1.4         Foun       datio       1.12       1.4       1.12       1.4         Engin       1.12       1.12       1.4       1.14       1.14	ANNEXURE II  List of similar works in hand  a) Experience as Design Consultant including preparation of designs / Proof checking of Designs of successfully completed similar work(s) during last seven years as on Bid Due Date.  b) Experience as Project Management consultant including technical supervision, contract management, monitoring, quality assurance and other allied services of successfully completed similar work(s) during in the last seven years as on Bid Due Date
		ANNEXURE II ANNEXURE III Page 100, 101
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CHMARG. NO. 00 4.408877777 60 *		Chief Engineer Engineering Division M.M.R.D.A.

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Name of work: PROVIDING PROJECT MANAGEMENT CONSTULTANCY SERVICES FOR DESIGN AND CONSTRUCTION OF SEWRI TO WORLI ELEVATED CONNECTOR (Third call) Common Set of Clarifications (CSC-I)

	Bid	stipulation	shall prevail											Please refer to Sr No 1 &	2 of CSD-I												
5	Please clarify whether bidder has to submit support staff	Cvs along with the bid or not.												It is requested to extend the date of submission of Bids by	clarification to pre-bid points.												
	sessments of	ths for the	eployed for	the supervision works as envisaged in this TOR. The consultants	lology to be	red to furnish	f field support	nbers and man	inical Proposal	be included in	oort staff will	ess and no		End Date			10/11/20	1800hrs	22/11/20	20	1800hrs		23/11/20	ì	1200 hrs		17/11/.20
	e their own a	ns of man mon	posed to be d	in this TOR. T	posed methor	ants are requi	al staff. CV's o	d, but the nur	ed in the Tech	sonnel are to	s of field supp	f responsivene	sitions	Start Date	3		10/11/20	hrs	/11/20		1800hrs		10/11/20	1801hrc	2		12/11/20
	The consultants are required to make their own assessments of	the manpower requirements in terms of man months for the	different categories of personnel proposed to be deployed for	rs as envisaged	shall address this aspect in their proposed methodology to be	submitted to the Employer. Consultants are required to furnish	CVs for the following key professional staff. CV's of field support	staff are not required to be submitted, but the numbers and man	months for such staff shall be included in the Technical Proposal	and the costs in respect of these personnel are to be included in	the Financial Proposal. The positions of field support staff will	be evaluated only for the purpose of responsiveness and no	points will be awarded for these positions	Bidder	Scriennic				Tender	Document	Download		Bid	11characon	Submission	on line	Period of submission
	isultants are r	npower requi	nt categories c	ervision work	ldress this asp	ted to the Emj	the following	e not required	s for such staff	costs in resp	ancial Propos	uated only for	will be award	Tender	Schedule		Tender	Authorizat ion and Publishing									Pre-bid
	The cor	the man	differer	the sup	shall ad	submit	CVs for	staffar	months	and the	the Fin	be eval	points	Sr.	0		1.		2.				3.				4
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	Annendices	Clause	1.15.21	Page 81										Online	Tender	Schedule	Clause	Page 8									
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Name of work: PROVIDING PROJECT MANAGEMENT CONSTULTANCY SERVICES FOR DESIGN AND CONSTRUCTION OF SEWRI TO WORLI ELEVATED CONNECTOR (Third call) Common Set of Clarifications (CSC-1)

			***				e e		Bid	nia	shall prevail
										Higher qualification	As mentioned in marking Criteria, higher qualifications carry marks. So please confirm PGDM will considered as
20	1500Hrs	17/11/20 20	1500 hrs	23/11/20 201400 hrs	24/11/20 20 1400 hrs	28/11/20 20 1800 hrs	28/11/20 20 1800 hrs	28/11/20 20 1800 hrs		cs and	rking
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Chief Engineer
Engineering Division
M.M.R.D.A.

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Chief Engineer
Engineering Division
M.M.R.D.A.

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ional ations ence the	Mark s	8
Key professional staff qualifications and competence for the assignment:	Key on	Team
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shall prevail shall prevail stipulation stipulation Name of work: PROVIDING PROJECT MANAGEMENT CONSTULTANCY SERVICES FOR DESIGN AND CONSTRUCTION OF SEWRI TO WORLI ELEVATED CONNECTOR (Third call) Bid Bid It is requested to increase input for the above position as As per our assessment for the similar type of project the Please clarify whether bidder has to submit support staff The positions of field support staff will be evaluated only for the purpose of responsiveness and no points will be The input of position K-3, K-4, K-6 & K-8 are provided input of Positions of K-3, K-4, K-6 & K-8 are 1.0 per full time instead of 0.50 per month. CVs along with the bid or not awarded for these positions. 0.50 per month. month. Common Set of Clarifications (CSC-1) the supervision works as envisaged in this TOR. The consultants staff are not required to be submitted, but the numbers and man months for such staff shall be included in the Technical Proposal CVs for the following key professional staff. CV's of field support and the costs in respect of these personnel are to be included in The consultants are required to make their own assessments of submitted to the Employer. Consultants are required to furnish Months the Financial Proposal. The positions of field support staff will person month shall address this aspect in their proposed methodology to be No. of 1.4 different categories of personnel proposed to be deployed for Man per per the manpower requirements in terms of man months for the be evaluated only for the purpose of responsiveness and no 1.12 person No of 0.1 points will be awarded for these positions 80.0 Key Personnel 0.5 0.4 2 Engin nical/ Foun datio Tech Geoeer eer Sr. No. K-8 checking and construction Manpower Appendix C Minimum for Proof during Appendices period Page 81 1.15.21 Clause 37

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ceering Division M.R.D

Name of work: PROVIDING PROJECT MANAGEMENT CONSTULTANCY SERVICES FOR DESIGN AND CONSTRUCTION OF SEWRI TO WORLI ELEVATED CONNECTOR (Third call)

Common Set of Clarifications (CSC-1)

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Team Leader	Resident Engineer	Structural Engineer PC	Structural Engineer Steel	Quality Control Engineer	Contract specialist	Safety Engineer	Geo Technical/Foundation Engineer	Support staff	Quantity surveyor	Transportation/ Traffic Engineer	Jr. Quantity surveyor	Jr. Quality Control Engineer	Surveyor	Lab technician	Field Engineer	Utility Engineer
K-1.	K-2.	K-3.	K-4.	K-5.	K-6.	K-7.	K-8	B	SS-1.	SS-2.	SS-3.	SS-4.	SS-5.	SS-6.	SS-7	SS-8
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	d Field Engineer are 60 to Sr No 12	xure-V, Total Man-month of CSD-I SS-6 & SS-7 are mismatch.			= x	<u> </u>				
	As per Appendix C Manpower in DLP period for Resident Fnoineer. Contract Specialist and Field Engineer are 60	Nab-days each. But as per Annexure-V, Total Man-month for the position of K-2, K-6 and SS-6 & SS-7 are mismatch.	It is requested, please clarify.				Amound nt on on one			
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So-5   Expert in social development (R&R)	Minimum Key Manpower for DLP	Key Personnel	Resident Engineer	Contract specialist	Field Engineer	te of costs Remuneration of Key Professional Staff	y Nam Rat No of rs e e perso ne ns		B. Key prof	Tea 1
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Name of work: PROVIDING PROJECT MANAGEMENT CONSTULTANCY SERVICES FOR DESIGN AND CONSTRUCTION OF SEWRI TO WORLI ELEVATED CONNECTOR (Third call) Common Set of Clarifications (CSC-I)

NEXURE  LIST OF SIMILAR WORKS IN HAND  BEFORE THE BID DUE DATE  The bidding firm must fulfill the following eligibility of criteria;  ause 2.  The bidding firm s is not allowed for participation in iteria-5  the bid.  The bid.  The bid.  S. Joint venture of firms is not allowed for participation in iteria-5  the bid.  The bid.  The bid.  S. Joint venture of firms is not allowed for participation in iteria-5  the bid.  The bid.  The bid.  The bid.  S. Joint venture of firms is not allowed for participation in iteria-5  the bid.  The bid.  The bid.  The bid.  S. Joint venture of firms is not allowed for participation in iteria-5  the bid.  The b	PLO	W. W.		300	Dlasca refer
WORKS COMPLETED IN THE LAST 7 YEARS m E BID DUE DATE  E BID DUE DATE  INSTRUCTIONS TO THE BIDDER  BY of Criteria:  Ry of Criteria  Ry	9	TAN 7	ANNEXURE II	Experience as Design Consultant including preparation of design of successfully	to Sr No 11
WORKS COMPLETED IN THE LAST 7 YEARS m E BID DUE DATE  ty of Criteria:-  ty of Criteria:-  ng firm must fulfill the following eligibility and firms is not allowed for participation in siveness  sub-criteria, and point system for the stion of Full Technical Proposals:-  ster  Criteria for Maximum Marks  eter  Criteria for Maximum Marks  eter  Criteria for Griteria for the Firm in Carrying out carrying and marking last 7 years	6 6	ANNEXURE	LIST OF SIMILAR WORKS IN HAND	completed similar work(s) during last seven years as on	of CSD-1
E BID DUE DATE  E BID DUE DATE  The bid	=	ANNEXURE	ANNEXURE III	Please clarify whether the bidder has to furnish details of similar works in hand in both annexure II & III and also	
ty of Criteria:  by of Criteria:  In the following eligibility of firm must fulfill the following eligibility and the following eligibility of firms is not allowed for participation in all Evaluation and Determination of siveness  sub-criteria, and point system for the sion of Full Technical Proposals:  And the Firm in carrying out the firm in		Page 100,	LIST OF SIMILAR WORKS COMPLETED IN THE LAST 7 YEARS BEFORE THE BID DUE DATE	clarify whether ongoing works would be considered for marking or not.	
ty of Criteria:-  ng firm must fulfill the following eligibility ng firm must fulfill the following eligibility are of firms is not allowed for participation in al Evaluation and Determination of siveness sub-criteria, and point system for the ation of Full Technical Proposals: ation of Full Technical Proposals: Anximum Marks eter  Criteria for Marking Marking Experience of the Firm in carrying out					
1-B: INSTRUCTIONS TO THE BIDDER  INSTRUCTIO  2. Eligibility of Criteria:  Clause 2.  Eligibility of Criteria:  Clause 2.  Eligibility of Criteria:  Clause 2.  Eligibility of Criteria:  Clause 2.  Eligibility of Criteria:  Clause 2.  Eligibility of Criteria:  Clause 2.  Eligibility of Criteria:  Criteria:  Clause 2.  Eligibility of Criteria:  Criteria:  Clause 2.  Eligibility of Criteria:  The bid criteria:  Criteria:  Clause 2.  Clause 3.  Clause 3.  Clause 3.  Clause 3.  Clause 3.  Clause 4.  Criteria for the Firm in Carrying out Correction and Correcti	8.M/	's Shrikhande C		We requiest you to allow joint venture	Bid
INSTRUCTIO  2. Eligibility of Criteria:  Clause 2.  Eligibility of S. Joint venture of firms is not allowed for participation in criteria-5  (A) & 5(B)  Page 15  ITB  Responsiveness  Clause 25  sub clause 3  Striteria, sub-criteria, and point system for the evaluation of Full Technical Proposals:  St. Parameter  Criteria:  A) Saminum Marks  Criteria for must fulfill the following eligibility of criteria, and point system for the maximum Marks  Criteria for Maximum Marks  Criteria for Amarking out  Criteria for Amarking out  Criteria for Amarking out  Criteria in carrying out	41	I-B:	I-B: INSTRUCTIONS TO THE BIDDER	and the state of t	stipulation
Clause 2.  Eligibility of 5. Joint venture of firms is not allowed for participation in criteria-5 the bid.  (A) & 5(B) Page 15  ITB 26. Proposal Evaluation and Determination of ITB Responsiveness  Clause 25  sub clause 3  (i) Page 3. Criteria, sub-criteria, and point system for the evaluation of Full Technical Proposals:  22  Sr. Parameter  No. Criteria for participation in Criteria for Marking Marks  Criteria for Marking out Criteria in carrying out Criteria and Auring last 7 Vears		INSTRUCTIO NS TO THE BIDDER			shall prevail
Eligibility of criteria-5 the bid.  (A) & 5(B) Page 15  ITB 26. Proposal Evaluation and Determination of ITB Responsiveness  Clause 25 sub clause 3 (i) Page 3 (i) Page 8 (ii) Page 8 (iii) Page 9 (iii) Page 9 (iiii) Page 9 (iiiiiii) Proposals:  22 Sr. Parameter Raximum Marks   Criteria for Maximum Marks   Maximum Marks   Amarking   Criteria for   Criteria for   Amarking   Criteria for		Clause 2.			
TTB   26. Proposal Evaluation and Determination of ITB   Responsiveness	The state of the s	Eligibility of criteria- 5 (A) & 5(B)	Joint venture of firms is not the bid.		
Clause 25 Sub clause 3 (i) Page  Sr. Parameter No.  Clause 25 Sub clause 3 (i) Page  evaluation of Full Technical Proposals:  Amaximum Marks No.  Criteria for Marking Marking Marking out  2. Experience of the Firm in carrying out		Page 15	Defermination	Design consultant having experience of preparation of	
3.Criteria, sub-criteria, and point system for the evaluation of Full Technical Proposals:  Sr. Parameter  No.  Criteria for Maximum Marks  Maximum Marks  2. Experience of the Firm in carrying out	42	ITB	Evaluation and Determination	designs / Proof consultant of at least 1 completed minimum 2-lane elevated viaduct/Metro or Monorail	stipulation
3.Criteria, sub-criteria, and point system for the evaluation of Full Technical Proposals:  Sr. Parameter Maximum Marks  No. Criteria for Marking  2. Experience of the Firm in carrying out		Clause 25		Viaduct having length not less than 1000 m with PSC	
Sr. Parameter Maximum Marks  No. Criteria for Marking  2. Experience of the Firm in carrying out		sub clause 3 (i) Page	for	W14557 - 00100	2 4) 4)
Criteria  Marking  2. Experience of the Firm in carrying	Ant	22	Parameter	y produced and a second a second and a second a second and a second a second and a second and a second and a	
Experience of the Firm in carrying	))	1	Criteria Marking		
SIMILAT ASSIGNMENT UNITED THE			Experience of the Firm in carrying similar assignment during last 7 years		

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Name of work: PROVIDING PROJECT MANAGEMENT CONSTULTANCY SERVICES FOR DESIGN AND CONSTRUCTION OF SEWRI TO WORLI ELEVATED CONNECTOR (Third call)

	f Bid n stipulation shall prevail			
	Design consultant having experience of preparation of designs / Proof consultant of at least 1 design assignment completed			
	nd Determination of point system for the al Proposals:	Maximum Marks Criteria for Marking Firm in carrying out		
Design consultant having experience of preparation of designs / Proof consultant of at least 1 completed minimum 2-lane elevated viaduct/Metro or Monorail Viaduct having length not less than 1500 m with precast segmental type superstructure in the last seven years as on Bid Due Date.	25. Proposal Evaluation and Determi Responsiveness 3. Criteria, sub-criteria, and point syste evaluation of Full Technical Proposals:	Parameter Criteria Criteria Aarking 3. Experience of the Firm in carrying similar assignment during last 7 years	Design consultant having experience of preparation of designs / Proof consultant of at least 1 completed minimum 2-lane elevated viaduct/Metro or Monorail Viaduct having length not less than 1500 m with precast segmental type superstructure in the last seven years as on Bid Due Date.	
1,944	3.0	Sr. No.	7994	
	Clause 25 sub clause 3 (i) Page	77		
1 S S S S S S S S S S S S S S S S S S S	43	The Market of th	l	

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Name of work: PROVIDING PROJECT MANAGEMENT CONSTULTANCY SERVICES FOR DESIGN AND CONSTRUCTION OF SEWRI TO WORLI ELEVATED CONNECTOR (Third call) Common Set of Clarifications (CSC-1)

stipulation shall prevail		Please refer to Sr No8 of	CSD-1	
technical supervision, monitoring, quality assurance and other allied services of at least one completed minimum 2 lane elevated viaduct / Metro or Monorail Viaduct in urban area having length not less than 1000 m with PSC / precast segmental / composite type superstructure OR 6 Lane of 850 m. with PSC / precast segmental / segmental / segmental / seven years as on Bid Due Date.		Experience in planning & execution/ supervision of one completed project having minimum 1500 meter	Viaduct length in urban area as TL.	
25. Proposal Evaluation and Determination of Responsiveness  3. Criteria, sub-criteria, and point system for the evaluation of Full Technical Proposals:    Parameter	Project Management consultant having experience of technical supervision, monitoring, quality assurance and other allied services of at least one completed minimum 2 lane elevated viaduct / Metro or Monorail Viaduct in urban area with precast segmental type superstructure having minimum 1500m length in the last seven years as on Bid Due Date.	Tender Condition	Minimu Mini mum Qualific Over Specific Experience of Similar ation & all Nature upper Exper	Key Professionals
25. Pr Ra 3.Crit Sr. Pa No.	iii		Positi on	Key Pro
Clause 25 sub clause 3 (ii) Page 22		Appendix- A	Clause 1.30 Qualification and experience requirement for key	professional Staff Page 84
100 30 L 100 22-A COL 100 100 100 L 100 L		45	Chief Engineeri M.M.	Agineer ng Divisio R.D.A.

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Name of work: PROVIDING PROJECT MANAGEMENT CONSTULTANCY SERVICES FOR DESIGN AND CONSTRUCTION OF SEWRI TO WORLI ELEVATED CONNECTOR (Third call) Common Set of Clarifications (CSC-I)

	Bid stipulation shall prevail	Bid stipulation shall prevail	
	We request you to exempt the Tender Form and EMD for MSME organizations as per the Central Government Notification on this subject.	MMRDA is humbly requested to consider the Eligible projects for last 10 years in lieu of last 7 years, since the flagship projects of AECOM are generally of longer duration.	
Out of 20 years' experience, minimum 5 years' experience as a Team Leader (TL).  Experience in planning & execution/ supervision of one completed project having minimum 1500 meter Viaduct length in urban area as TL.  Experience in planning & execution/ supervision of one completed flyover/bridge/Metro having structural steel superstructure of at least 40 meter span as TL.	orm (Per Each) - Rs. 5,600/- and s. 10,51,860/	ITB- Instruction to Bidders  2. Eligibility of Criteria:- The bidding firm must fulfill the following eligibility criteria; 3. Experience as Design Consultant including preparation of	designs / Proof checking of Designs of successfully completed similar work(s) during last seven years as on Bid Due Date. Experience as Project Management Consultant including technical supervision, contract management, monitoring, quality assurance and other allied services of successfully
Graduatio 20 n in Civil years Engineeri ng Upper age limit 65 years	Cost of Blank Tender Form (Per Ea Earnest Money Deposit Rs. 10,51,860/	ITB- Instruction to Bidders  2. Eligibility of Criteria: The bidding firm must fulfill th 3. Experience as Design Cons	designs / Proof checking of Disimilar work(s) during last seven Experience as Project Mana technical supervision, contraquality assurance and other
Team Leade r	Detail E Cost tender Earne short notice page 8	ise 2	design simila Exper techni quality
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completed similar work(s) during in the last seven years as on

Bid Due Date.

Name of work: Providing project management constultancy services for design and construction of sewri to worli elevated connector (Third call) Common Set of Clarifications (CSC-I)

Please refer to Sr No 12 of CSD-I		4											-2			(40)
•In Annexure V, page 103 and 104 there is an arithmetical mismatch of Total Man-months for the positions K-2, K-6 and SS-7. These may kindly be corrected.								2								
40.000	<b>E</b>															
iths	Total Manmonths		36			40			18					18		
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Name of work: PROVIDING PROJECT MANAGEMENT CONSTULTANCY SERVICES FOR DESIGN AND CONSTRUCTION OF SEWRI TO WORLI ELEVATED CONNECTOR (Third call) Common Set of Clarifications (CSC-I)

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AVI MUM

S Name of work: PROVIDING PROJECT MANAGEMENT CONSTULTANCY SERVICES FOR DESIGN AND CONSTRUCTION OF SEWRI TO WORLI ELEVATED CONNECTOR (Third call) PLOT NO.2 SECTOR

AVI MUM

	en de la companya de	*		ilar Please refer tate to Sr No 11	idly of CSD-I			*	and Please refer d 19 to Sr No 1 &	
				Annexure II, page 100, which is the list of "Similar Works in Hand". but subsections a and b state	"successfully completed similar works". This may kindly be amended				Due to the ensuing holidays of Deepavali, Bhai Dhuj and Guru Nanak Jayanti coupled with the ongoing Covid 19	pandemic, it is requested to extend the Bid Due date by at
V	1.0	36 0			Itant including preparation of of Designs of successfully during last seven years as on	ement consultant including	ct management, monitoring, allied services of successfully	ing in the last seven years as		11/2020 upto 12.00 hrs
Field Engi neer	SS- Utilit 8 y Engi	SS_ Expe 9 rt in socia 1 deve	lopm ent (R& R)	ANNEXURE II	a) Experience as Design Consultant including preparation of designs / Proof checking of Designs of successfully completed similar work(s) during last seven years as on	Bid Due Date  b) Experience as Project Management consultant including	technical supervision, contract management, monitoring, quality assurance and other allied services of successfully	completed similar work(s) during in the last seven years as on Bid Due Date	e-Tender Short Notice	Last date of Online submission 23/11/2020 upto 12.00 hrs
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<b>DETAILED e-TENDER SHORT NOTICE</b> 2 weeks.	iks.
2. Online E-Tender Schedule	
Last date of Online submission 23/11/2020 upto 12.00 hrs	

Same of work: PROVIDING PROJECT MANAGEMENT CONSTULTANCY SERVICES FOR DESIGN AND CONSTRUCTION OF SEWRI TO WORLI ELEVATED Name of work: PROVIDING PROJECT MANAGEMENT CONSTULTANCY SERVICES FOR DESIGN AND CONSTRUCTION OF SEWRI TO WORLI ELEVATED CONNECTOR (Third call)

Common Set of Deviations (CSD -I) CONNECTOR (Third call))

		To date/time	25/11/2020 10.00hrs	17/11/2020 15.00 hrs	25/11/2020 12.00 hrs		End Date &Time		25/11/2020 1000hrs	25/11/2020
		time	10/11/2020 2 18.01hrs 1	1	10/11/2020 2 18.01hrs 1	chedule	Start Date & Time	10/11/2020 1545 hrs	10/11/2020 1800hrs	10/11/2020 1801hrs
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oart of the Bid		To date/time	22/11/2020 18.00hrs	17/11/2020 15.00 hrs	23/11/2020 12.00 hrs		End Date &Time	10/11/2020 1800hrs	22/11/2020 1800hrs	23/11/2020
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Modified Provision  Clause 2 Prenaration Of Proposal:	The bi I GST certil document andering por any stage.	system	Parameter Maximum Marks Criteria for Marking	Minimum average annual financial financial financial years ending 31st March consultancy consultancy by CA.  Minimum average average Annual Average furnover:  Turnover:  Turnover:  Turnover:  Turnover:  Crore: 5 Marks  Crore: 5 Marks  2 INR 25.00 but < 50.00  2 INR 25.00 but < 50.00  2 INR 25.00 but < 50.00	Proposal Evaluation and Determination of Responsiveness  1. Evaluation of Technical Proposal:
ied Provision	Clause 3. Preparation Of Propo 7. The bidder should uplos and GST certificate etc. and sca all documents on above me Tendering portal & produce in o at any stage.	Criteria, sub-criteria, al luation of Full Technical P	Parameter	fin fin last n last ll 31* l in ancy s as ce	al Evaluation isiveness aation of Technic
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Modif		3.	Sr. No.	6	25.
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				requirement will be rejected. Only those technical proposals, which score at least 75points out of 100, shall be considered for financial evaluation. The firms will be ranked using combined technical and financial scores, as indicated below. The evaluation committee appointed by MMRDA will carry out its evaluation applying the evaluation criteria and point system specified. Each responsive proposal will be assigned a technical score (5r) as follows:	requirement will be rejected. Only those technical proposals, which score at least 70 points out of 100, shall be considered for financial evaluation. The firms will be ranked using combined technical and financial scores, as indicated below. The evaluation committee appointed by MMRDA will carry out its evaluation applying the evaluation criteria and point system specified. Each responsive proposal will be assigned a technical score (Sr) as follows:
	70	CCC	4.5	4.5 Removal and / or replacement of personnel	4.5 Removal and / or replacement of personnel
	-		2	d) After award of contract the Client expects all of the proposed	d) After award of contract the Client expects all of the proposed key
En	William I		1	key personnel to be available during implementation of the	personnel to be available during implementation of the contract.  The client will not consider substitutions during contract
Ch				contract implementation except under exceptional	implementation except under exceptional circumstances. For the
W iei					reason other than death/ extreme medical ground (i) for total
W TI	1			medical ground (i) for total replacement up to 10% of key	replacement up to 10% of key personnel, remuneration of that
ng				nersonnel. remuneration shall be reduced by 10% (ii) for	professionals shall be reduced by 5% (ii) for replacement
ine				replacement between 10% to 50%, remuneration shall be	between 10% to 50%, remuneration of that professionals shall
er				reduced by 15% (iii) for replacement beyond 50% of the total	be reduced by 10% (iii) for replacement beyond 50% of the total
ion		III III III III III III III III III II		key personnel, the Client may initiate debarment proceedings	key personnel, remuneration of that professionals shall be
1				so as to debar such consultant for future projects of MMRDA	reduced by 15%. In such case the Client may initiate debarment

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Specific Experience of on Similar Nature	for a period of 12 months to 24 months. If, for any reason for a period of 12 months to 24 months. If, for any peyond the reasonable control of the consultants, it becomes necessary to replace any of the personnel, the forthwith provide as a replacement a person of equivalent or better qualification and experience.	Section Ref. Existing Provision in the Bid document Modified Provision  Clause No. No.
Qualific Over Specific Experience of on ation & Over	Appendix A clause  1.22 After award of the contract the Employer expects all 1.22  the proposed key personnel to be available during implementation of the contract. The Employer will not consider substitutions during contract implementation except, under exceptional circumstances up to a maximum of one third of the key personnel. In case of replacements the Supervision Consultant will ensure that there is a reasonable overlap between the staff to be replaced and the replacement. The replacement should be strictly with the acceptance of MMRDA.	Appendix A clause 1.22 After award of the contract the Employer expects all 1.22 the proposed key personnel to be available during implementation of the contract. The Employer will not consider substitutions during contract implementation except, under exceptional circumstances up to a maximum of one third of the key personnel. In case of replacements the Supervision Consultant will ensure that there is a reasonable overlap between the staff to be replaced and the replacement. The replacement should be strictly with the acceptance of MMRDA.
	Appendix A clause 1.22 After award of the contract the Employer expects all 1.22  1.22 the proposed key personnel to be available during implementation of the contract. The Employer will not consider substitutions during contract implementation except, under exceptional circumstances up to a maximum of one third of the key personnel. In case of replacements the Supervision Consultant will ensure that there is a reasonable overlap between the staff to be replaced and the replacement. The replacement should be strictly with the acceptance of MMRDA.	Appendix A clause  Appendix A clause  Consider substitutions during contract. The Employer will not consider substitutions during contract implementation except, under exceptional circumstances up to a maximum of one third of the key personnel. In case of replacements the Supervision Consultant will ensure that there is a reasonable overlap between the staff to be replaced and the replacement. The replacement should be strictly with the acceptance of MMRDA.
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Name of work: PROVIDING PROJECT MANAGEMENT CONSTULTANCY SERVICES FOR DESIGN AND CONSTRUCTION OF SEWRI TO WORLI ELEVATED CONNECTOR (Third call)

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Pag e e N N	Section	Ref. Clause No.	Existing	Existing Provision in	ı the Bio	Pag Section Ref. Existing Provision in the Bid document Modified Provision Clause No.	Modified	Modified Provision				
						one completed flyover/Metro having minimum 1500 meter Viaduct length in urban area.  Experience in planning & execution/ supervision of one completed flyover/bridge/Metro having structural steel superstructure of at least 40 meter span.				execution/ supervision of one completed flyover/bridge/Metro/ROB having structural steel superstructure of at least 40 meter span.	supervising structing struction of a	supervision of one flyover/bridge/Metro ing structural steel ure of at least 40
			Quality y Control ol /Qual ity Assur ance Engin eer	Graduatio n in Civil Engineeri ng Upper age limit 65 years Graduatio	15 year	minimum 5 years' experience, minimum 5 years' experience as a Quality Control /Quality Assurance Engineer.  Experience of at least 1 completed project of Elevated metro / 2 lane flyover /Bridge costing not less than 100 Crore as a Quality Control / Quality Assurance Engineer  Out of 20 year experience minimum 10 years'	Quality y Control ol /Qual ity Assur ance Engin eer	Graduatio n in Civil Engineeri ng Upper age limit 65 years	15 year	Out of 15 year experience, minimum 5 years' experience as a Quality Control /Quality Assurance Engineer.  Experience of at least 1 completed project of Elevated metro / 2 lane flyover / Bridge as a Quality Control / Quality Assurance Engineer	15 year e 5 years' exp ty Control e Engineer. ce of at ed project o lane flyover, y Control e Engineer	Out of 15 year experience, minimum 5 years' experience as a Quality Control /Quality Assurance Engineer.  Completed project of Elevated metro / 2 lane flyover / Bridge as a Quality Control / Quality Assurance Engineer
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Page 7 of 15

Upper age li 70 yea		the Bid document	Модіпед	Modified Provision		
-	mit rs atio 15	Specialist of project.  Experience of at least 1 completed project of elevated metro /Monorail viaduct /flyover/ROB costing not less than 300 crore as a Contract Engineer / Contract Specialist	act speci	n in Civil   y Engineeri ng Upper age limit 70 years	year	minimum 10 years' experience as Sr. Contract Engineer / Contract Specialist/Contract expert on project.  Experience of at least 1 completed project of elevated metro /Monorail viaduct /flyover / ROB as a Sr. Contract Engineer / Contract Specialist
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						monitoring	qualit	y assurance					

Name of work: PROVIDING PROJECT MANAGEMENT CONSTULTANCY SERVICES FOR DESIGN AND CONSTRUCTION OF SEWRI TO WORLI ELEVATED CONNECTOR (Third call)

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Section   Ref	AC	1 5	A 1 5						
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Name of work: PROVIDING PROJECT MANAGEMENT CONSTULTANCY SERVICES FOR DESIGN AND CONSTRUCTION OF SEWRI TO WORLI ELEVATED CONNECTOR (Third call)

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project including extended period (if any). For reduction in proportion to the financial progress of the work till end of the man power deployment, proportionate fees will be deducted financial progress related fees shall be paid to the PMC in The payments will be worked out in proportion to the actual manpower deployed and approved by Engineer-In Charge during period under consideration. The payment towards Total Fees ( as mentioned in Appendix D ar Sr No (Base completion Time completion + variation, the monthly payment will be ±2 months limit + variation Same of work: PROVIDING PROJECT MANAGEMENT CONSTULTANCY SERVICES FOR DESIGN AND CONSTRUCTION OF SEWRI TO WORLI ELEVATED CONNECTOR (Third call) In the event of construction extended beyond base as per weightage basis of salary of the professionals. period in Month) 4.2 i.e.(80 %) subject to the ceiling as given below: Fees payable per month = 15 to 36 month 9 to 15 Month Modified Provision **ANNEXURE II** Deleted 3 7 The payments will be worked out in proportion to the be paid to the PMC in proportion to the financial progress of the work till end of the project including extended period (if any). For reduction in man power deployment, proportionate fees will be deducted as per payment towards financial progress related fees shall In Charge during period under consideration. The in Appendix D ar Sr No 4.2 actual manpower deployed and approved by Engineer-Total Fees ( as mentioned (Base completion Time ±2 months ±3 months completion + variation, the monthly payment will be limit + variation In the event of construction extended beyond base period in Month) i.e.(75 %) Existing Provision in the Bid document subject to the ceiling as given below: LIST OF SIMILAR WORKS IN HAND Fees payable per month = weightage basis of salary. 15 to 36 month 9 to 15 Month ANNEXURE II Ref. Clause No. ANNEXURE Section 100 Pag e No. 11 5 ZO

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Same of work: PROVIDING PROJECT MANAGEMENT CONSTULTANCY SERVICES FOR DESIGN AND CONSTRUCTION OF SEWRI TO WORLI ELEVATED CONNECTOR (Third call)

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Name of work: PROVIDING PROJECT MANAGEMENT CONSTULTANCY SERVICES FOR DESIGN AND CONSTRUCTION OF SEWRI TO WORLI ELEVATED CONNECTOR (Third call)

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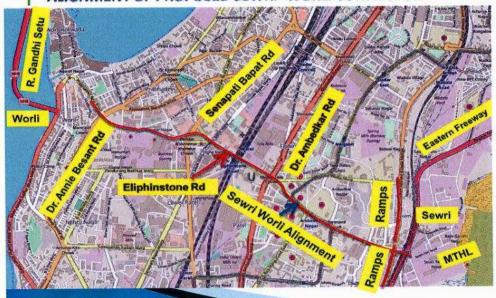
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#### INDEX PLAN

## ALIGNMENT OF PROPOSED SEWRI- WORLI CONNECTOR





Chief Engineer

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**Appendix G: Letter of Intent** 



## MUMBAI METROPOLITAN REGION DEVELOPMENT AUTHORITY Bandra-Kurla Complex, Bandra (East), Mumbai – 4000 51. Tel: 26590001/04. Fax: 91-022-26594179

Website: http://www.mmrda.maharashtra.gov.in

#### e-Tender Short Notice

Mumbai Metropolitan Region Development Authority (MMRDA) invites bids from eligible Bidders through e-Tendering. e-Tender details are as under.

Division	Engineering		
Name of work	Providing Project Management Consultancy Services for the Work of Design and Construction of Sewri to Worli Elevated Connector (Third call)		
Contact details	Chief Engineer, Engineering Division, MMRDA  Tel: 022 26594076 Fax: 022 26594179  Email: chiefengineer1@mailmmrda.maharashatra.gov.in  e-tenderportal: https://etendermmrda.maarstra.gov.in		
Important dates	Milestone	From date/time	To date/time
	Bid document download	10/11/2020 18.01hrs	22/11/2020 18.00hrs
	Pre-bid meeting		17/11/2020 15.00 hrs
	Last date of Online submission	10/11/2020 18.01hrs	23/11/2020 12.00 hrs

The e-Tender can be downloaded from https://etendermmrda.maharashtra.gov.in. In case of any queries, Bidders may contact MMRDA's e-tendering service desk at http://etendersupport@mailmmrda.maharashtra.gov.in on any working day from 10 AM to 5.30 PM (Phone No. 022-26597445).

Date: 10.11.2020 Place: Mumbai (Dr. D.T.Thube) Chief Engineer, MMRDA



MMRDA



#### Mumbai Metropolitan Region Development Authority

2<sup>nd</sup>floor, M.M.R.D.A. Office Building, Bandra-Kurla Complex, C-14 & 15, E Block Bandra (East), Mumbai - 400 051

# DETAILED TENDER NOTICE AND GUIDELINES FOR SUBMISSION OF e-TENDER

#### DETAILED e-TENDER SHORT NOTICE

MMRDA e-Tendering Portal: https://etendermmrda.maharashtra.gov.in

Digitally Signed & unconditional online Tenders are invited by the Office of the Chief Engineer, Mumbai Metropolitan Region Development Authority, Bandra (East), Mumbai-400 051, from Consultants fulfilling conditions as under:

#### 1. Details of work

Name of Work	Tendered cost of Construction Work	Cost of Blank Tender Form (Per Each)	Earnest Money Deposit (In Rs.)	Performance security	Contract Period
Providing Project Management Consultancy Services for the work of Design and Construction of Sewri to Worli Elevated Connector( Third call)	1051.86 Crore	5,600/- (Including GST)	10,51,860/	5 % of accepted contract value.	36 Months (including monsoon) plus DLP period 60 month

2. The tenders will be received online on above mentioned MMRDA official E-Tendering portal and will be opened by Chief Engineer on scheduled date and time.

#### 3. Online E-Tender Schedule

Sr. No.	Tender Schedule	Bidder Schedule	Start Date & Time	End Date &Time
1.	Tender Authorization and Publishing	*******	10/11/2020 1545 hrs	10/11/2020 1800hrs
2.		Tender Document Download	10/11/2020 1800hrs	22/11/2020 1800hrs
3. V7.S	Ar Sullin W	Bid Preparation and Submission on line	10/11/2020 1801hrs	23/11/2020 1200 hrs

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MMRDA

Sr. No.	Tender Schedule	Bidder Schedule	Start Date & Time	End Date &Time
4	Pre-bid meeting	Period of submission of queries	12/11/2020 1800 hrs	17/11/.2020 1500Hrs
5		Pre-bid meeting at venue		17/11/2020 1500 hrs
6	Tender Closing		23/11/2020 1201hrs	23/11/2020 1400 hrs
7	******	Online Control Transfer of Bid	23/11/2020 1401 hrs	24/11/2020 1400 hrs
8	Opening Envelope A – Tender Fees, EMD	*****	24/11/2020 1401 hrs	28/11/2020 1800 hrs
9	Opening Envelope B – Technical Bid		24/11/2020 1401 hrs	28/11/2020 1800 hrs
10	Opening Envelope C – Financial Bid if possible		26/11/2020 1000 hrs	28/11/2020 1800 hrs

- 4. Bidders should have valid class 2 or 3 Digital Signature Certificate (DSC) having both Signing and Encryption Certificates obtained from any Certifying Authorities empanelled by Controller of Certifying Authorities India. In case of requirement of DSC, Bidders should go to <a href="https://etendermmrda.maharashtra.gov.in/filesmmrda/misc/Digital%20Certificate.rar">https://etendermmrda.maharashtra.gov.in/filesmmrda/misc/Digital%20Certificate.rar</a> and follow the procedure mentioned in the document procedure for Digital Certificate. Bidders who are participating in e-tendering for the first time shall have to obtain User ID & password from the above mentioned portal.
- 5. Tender Document and Supporting can be downloaded for reference purpose from the e-Tendering Portal of MMRDA during the period mentioned in the tender notice. Interested Bidders have to make online payment of Rs. 5,600/- (Rupees Five Thousand Six Hundred only) inclusive of GST as Tender Processing Fee (non-refundable) using online payment gateway during bid preparation using Debit Card/Credit Card/Net-Banking. Tender Fee receipt will be system generated during bid preparation.
- 6. Tender Fee receipt must be uploaded during bid preparation by the bidder.
- 7. The Competent Authority reserves the right to reject any or all of the tender offers, without assigning any reasons thereof.
- 8. The bids shall be received online on above mentioned MMRDA's official e-Tendering portal.
- Validity period of the offer of the bidder will be 120 days from the submission date of the e-tender.
- 10. The Successful bidder will have to submit the rate analysis of all major items, if called for.
- 11. A statement showing names of partners, Directors, etc. of the firm with complete address of each should be uploaded to above mentioned MMRDA official e-Tendering portal and authorized person on the behalf of firm who will sign e-tender using Digital Signature Certificate.

Page 9





- 12. The acceptance of bid will be intimated by email or otherwise by the Authority Competent to accept the tender or by the higher Authority of MMRDA, to the contractor, which shall be deemed to be an intimation of the tender given by the Authority Competent to accept the tender.
- The Successful bidder shall be responsible for executing, completing the work as per specifications.
- 14. The successful Bidder shall have to submit **signed copy of tender manually** to the Department before signing the Agreement.
- 15. MMRDA reserves the right to verify financial transaction of contractor in his Bank / Financial Institutions. Contractor should give Authority to that effect along with his accounts number and Bank/ Financial institution name & address. Any changes / modification may be communicated to MMRDA immediately.
- 16. The bidder should visit the site prior to submission of tender and ascertain the local site condition, working restrictions, constraints, conditions in tender document regarding necessary approvals, NOC required for the work from the local Authorities and shall quote the offer inclusive of all such expenses likely to be incurred while execution of the work. No claim or compensation for any extra payments incurred by the bidders towards the approvals/ NOC's/ permissions will be entertained by MMRDA, which shall be noted.

#### **E-Tendering Guidelines**

- Bidders should do Online Control Transfer of Bid as per Schedule given in Tender Document any bidder failing to complete this Step will not be considered for Bid Opening.
- 2. Bidders who are participating in e-tendering for the first time will have to register and obtain User ID & Password from the above mentioned portal.
- In case of any queries, Bidders may contact MMRDA's e-tendering service desk at etendersupport@mailmmrda.maharashtra.gov.in on any working day from 10am to 5.30pm.(Phone No. 022-26597445).
- The tenders shall be received online on above mentioned MMRDA official E-Tendering portal and opened by the Chief Engineer on scheduled date and time.
- 5. If there is any amendment in the tender, the same shall be published on following MMRDA's official e-Tender portals / website:
- 6. MMRDA e-Tender Portal: https://etendermmrda.maharashtra.gov.in
- 7. MMRDA Website: https://mmrda.maharashtra.gov.in
- The detailed e -Tender notice along with the subsequent corrigendum, addendum etc. shall form part of the tender document.
- 9. The acceptance of tender will be intimated by email or otherwise by the authority competent to accept the tender or by the higher Authority of MMRDA, to the contractor, which shall be deemed to be an intimation of the tender given by the Authority Competent to accept the tender.

OT NO.22-A BIDDER
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Chief Fagineer Engineering Division

- 10. Bid shall be submitted online on the e-tendering portal in 'three electronic envelopes system' within prescribed schedule.
  - e-Envelope 'A'(Prequalification Criteria if any): Bidder should upload scanned copies of Payment Receipt
  - e-Envelope 'B' (Technical bid):
     Bidder shall upload scanned copies of Technical Document as per RFP/Bid document.
  - e-Envelope 'C' (Financial bid):
     Bidder shall quote his offer on Lump Sum basis at the prescribed space in e Envelope C.
    - i) The amount quoted by the Bidder shall be calculated by the system.
    - ii) Upload Quotation in company's Letter head under Price bid Cover Letter option

#### 11. Payment Procedure for Tender Fee and EMD

Tender Document and Supporting can be downloaded for reference purpose from the e-Tendering Portal of MMRDA during the period mentioned in the tender notice. Interested Bidders have to make online payment of Tender Fee using online payment gateway during bid preparation i.e. Debit Card/Credit Card/Net-Banking. Tender Fee receipt can be system generated during bid preparation by the Bidder.

#### 12. Earnest Money Deposit:

#### EMD can be paid by using two Modes of Payment:

Online payment gateway (i.e. Debit Card/Credit Card/Net-Banking.) RTGS / NEFT mode using the System Generated Unique Challan (Account No for EMD transaction for this particular Tender is mentioned in the Challan)

#### Payment procedure for NEFT/RTGS

EMD Payment as mentioned above has to be made through RTGS / NEFT mode using the System Generated Challan. Bidders should ensure that the payment of the EMD is made atleast 5 working days prior to the last date of Bid Preparation and Submission of the Tender Schedule to have seamless submission.

Bidders need to upload scanned copy of EMD paid receipt during bid preparation.

Bidders failing to complete the payment of EMD using the above mentioned process of RTGS / NEFT or Online payment gateway after downloading the system generated challan will not be able to submit their bids.

#### 13. EMD Refund:

Bidders should mention the beneficiary details for EMD refund in the Earnest Money Deposit Form for fields marked as details required for Refund. MMRDA or e-Tendering Service Provider will not be liable for delays caused in EMD refund due to incorrect beneficiary details.

The earnest money deposit of unsuccessful bidders will be refunded through RTGS, NEFT mode only after finalization of the tender for which the above refund details are required.

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Bidders should also upload scanned copy of cancelled cheque along with refund letter for refund of their EMD payment. In case of successful bidder, amount of the earnest money deposit may be transferred towards part of the security deposit to be paid after the award of the work, if he intends to do so in writing.

Bidders failing to complete the payment of EMD using the above mentioned process of RTGS / NEFT after downloading the system generated challans will not be able to submit their bids.

Note: Kindly note that transfer of funds to MMRDA's account through NEFT / RTGS mode, from the Bidders' ICICI accounts is currently not possible. In case of funds transfer through NEFT / RTGS, Bidders are requested to transfer from any other bank (excluding ICICI Bank).

EMD Account should remain active until tender is awarded.

EMD Refund will happen only after Awarding or Cancellation of tenders.

#### 14. MMRDA E-Tendering Bidder's Process, Basic Requirement and Tutorial Links:

Stage1: Bidder Registration

Stage2: Bid Document Download (Tender Document Downloaded)

Stage 3: Bid Preparation and Submission (Bid Status: Bid Hash Prepared)

Stage4: Online Control Transfer (Bid Status: Bid Re-encrypted)

MMRDA e-Tender Basic Requirement

Latest Version of Java Run Time Environment (JRE)

PDF Reader

Use Browser Mozilla Firefox for best compatibility.

Always Allow pop-ups and Java Plug-in for MMRDA e-tendering site

Windows 7 or latest

Bidders are requested to read Tender Document Carefully.

Digital Certificate with both Signing Certificate & Encryption Certificate.

Download Any desk (Free Software) for Monitoring / Screen Sharing for assistance purpose.

#### Kindly use following link for Tutorials:

#### **Bidder Registration Process:**

https://etendermmrda.maharashtra.gov.in/files/mmrda/misc/1%20Bidders%20Registrat ion.pdf

#### **Bid Document Download:**

https://etendermmrda.maharashtra.gov.in/files/mmrda/misc/2%20Bid%20Document%2 0Download.pdf

#### Bid Preparation & Submission:

https://etendermmrda.maharashtra.gov.in/files/mmrda/misc/3%20Bid%20Preparation %20&%20Submission.pdf

#### **Online Control Transfer**

https://etendermmrda.maharashtra.gov.in/files/mmrda/misc/4%200nline%20Control% 20Transfer.pdf

**Install NSEU Utility** 

LM BEACH MAR

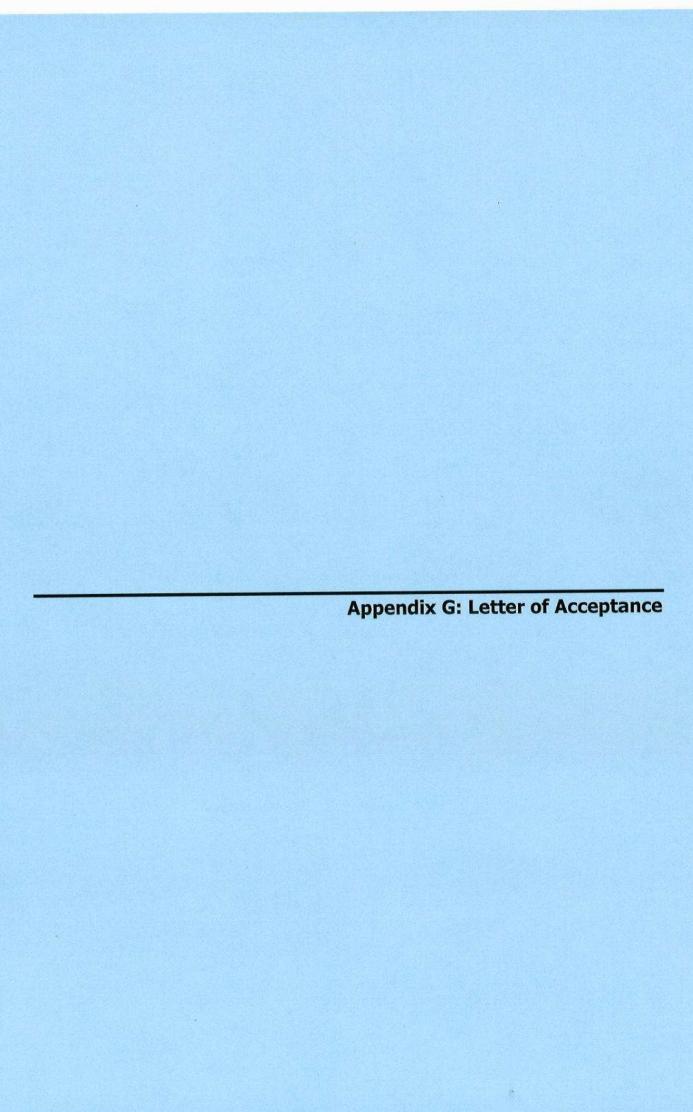
MMRDA Page 12

https://etendermmrda.maharashtra.gov.in/files/mmrda/misc/Utility%20and%20Java%2 0Installation%20for%20DSC.pdf

PLOT NO. 22-A SECTION 9-C. SECT

MMRDA

Page 13





No.MMRDA/ED/SWEC/PMC/STUP/LOA/0039/2021

**Engineering Division** Date: 18th February 2021

To, **Authorised Signatory** M/s STUP Consultant Pvt Ltd. 1004 & 5 Raheja Chamber 213, Nariman Point Mumbai -400021.

## Letter of Acceptance

Providing Project Management Consultancy Services for the Work of Design and Construction of Sewri to Worli Elevated Connector Sub :-

Ref :-

1. MMRDA E-tender notice dated 10.11.2020

Your financial bid for the consultancy opened on 29th December 2020.

3. Your letter No Com/201/316/SD:KPT/2279 dtd 31st December 2020 submitting justification.

Sir.

- 1. This has reference to your bid submitted for "Providing Project Management Consultancy Services for the Work of Design and Construction of Sewri to Worli Elevated Connector". Your financial offer submitted in the said bid amounting to (Rupees Eleven Crore Seventy Seven lakhs Twenty Three Rs.11,77,23,020/-Thousand Twenty only) excluding GST is here by accepted.
- 2. Pursuant to clause No.32 (Instruction to Bidders) and detail Tender notice, it is requested to furnish performance security in the form of Bank Guarantee to be drawn on any Nationalized or scheduled bank branch located in Mumbai only amounting to Rs.58,86,151/- (Rupees Fifty Eight lakhs Eighty Six Thousand One Hundred Fifty One only), initially valid up to 36 months, within 15 days from the date of issue of this letter. Before expiry of the said Bank Guarantee, it shall be extended for further period till 28 days beyond completion of Defects Liability Period (DLP).
- 3. This letter of acceptance is issued subject to all the relevant provisions in the contract. The receipt of this letter shall be acknowledged and sent to this office for record. Thanking you,

Yours faithfully,

(Dr. D. T. Thube)

Chief Engineer, MMRDA,

Mumbai Metropolitan Region Development Authority

Bandra-Kurla Complex, Bandra East, Mumbai 400 051 T +91 22 2659 1234 EPABX +91 22 2659 0001 / 4000 F +91 22 2659 1112 / 1264 https://mmrda.maharashtra.gov.in



No. MMRDA/ED/SWEC/STUP-PMC/PS/54/2021

Engineering Division Date: 2nd March 2021

To, Authorised Signatory M/s STUP Consultant (P) Ltd. 1004 & 5 Raheja Chamber 213.Nariman Point, Mumbai -400021

Sub: Providing Project Management Consultancy Services for the Work of Design and Construction of Sewri to Worli Elevated Connector (MMRDA/ENG 1/2247 dated 10.11.2020)

- Regarding reduction in Performance Security & Draft of PBG.
- Ref 1. MMRDA Letter No. MMRDA/ED/SWEC/PMC/STUP/LOA/ 0039 /2021 dated 18th February 2021 for LOA
  - Office Memorandum no.F.9/4/2020-PPD dated 12.11.2020by Govt. of India, Ministry of Finance, Department of Expenditure, Procurement Policy Division
  - M/s. STUP consultant Pvt. Ltd. letter no. COM/201/336/SD:KPT /2788 dated 22<sup>nd</sup> February 2021.

Sir.

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- MMRDA vide letter referred at Sr.No.1 has issued Letter of Acceptance to you for your lump sum offer amounting to Rs11,77,23,020/- (Rs. Eleven Crore Seventy Seven lakhs Twenty Three Thousand Twenty only)excluding GST & requested to submit the performance security @ 5% of accepted contract cost i.e. amounting to Rs. 58,86,151/-(Rupees Fifty Eight Lakh Eighty Six Thousand One Hundred Fifty One only)
- 2. As per your request received vide letter referred at Sr.No. 3 above & the Office Memorandum issued by Govt. of India, Ministry of Finance, dated 12.11.2020 referred above, your request to reduce the performance security from 5 % to 3% of your financial quote is hereby accepted. The draft of bank Guarantee towards performance security has been approved.
- 3. In view of above, in pursuant to clause No.32 (Instruction to Bidders) and detail Tender notice, it is requested to furnish performance security amounting to Rs. 35,31,691/-(Rupees Thirty Five lakhs Thirty One Thousand Six Hundred Ninety One only) in the form of Bank Guarantee initially valid upto the 36 months to be drawn on any Nationalized or scheduled bank branch located in Mumbai only within 15 days from the

date of issue of this letter.

Mumbal Metropolitan Region Development Authority

Bandra-Kurla Complex Bandra East Mumbai 400 051 +91 22 2659 1234 EPABX +91 22 2659 0001 / 4000 F +91 22 2659 1112 / 1264 https://mmrda.maharas/t.tc///

 Before expiry of the same, it shall be extended further till the period 28 days beyond completion of Defects Liability Period (DLP).

Thanking you,

Yours faithfully,

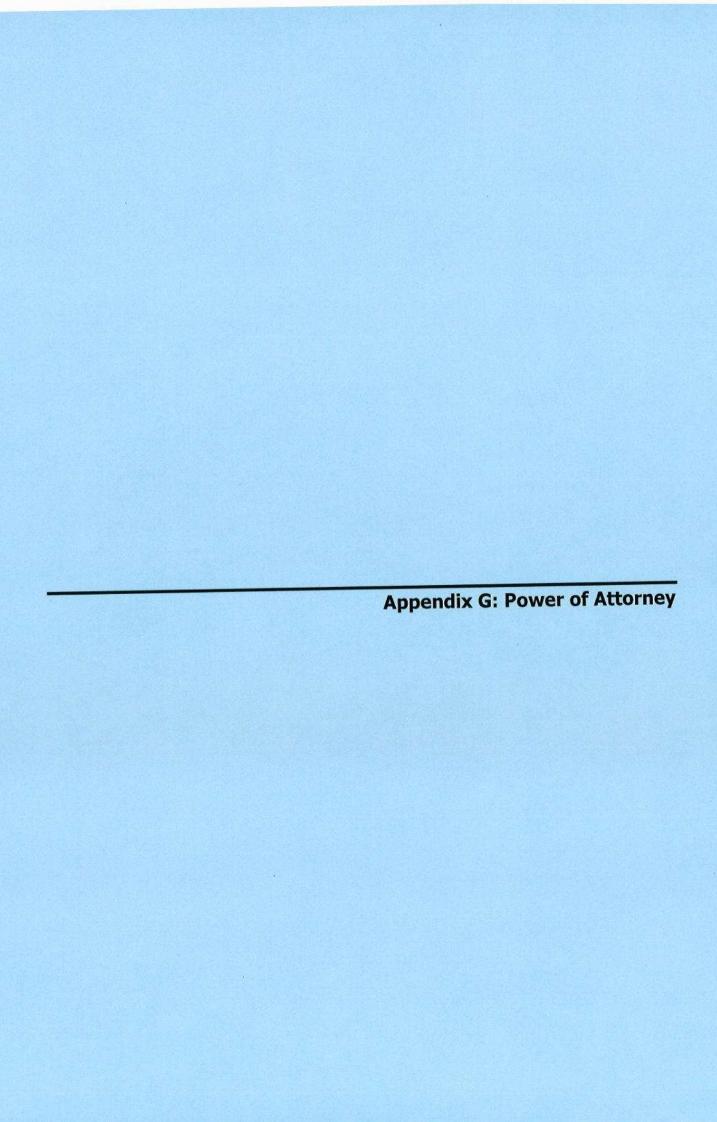
(Dr. D.T.Thube)
Chief Engineer MMRDA



# BANK GUARANTEE BOND FOR PERFORMANCE SECURITY

Name of work: Providing Project Management Consultancy Services for Design and Construction of Sewri to Worli Elevated Connector.

In Consideration of the Mumbai Metropolitan Region Development Authority 1 having its office at Bandra - Kurla Complex, Bandra (East), Mumbai-400 051 (hereinafter called "the MMRDA") having agreed to exempt STUP Consultants Pvt. Ltd. (hereinafter called "the said contractor(s)" from the demand, under the Acceptance Letter of the of conditions MMRDA/ED/SWEC/PMC/STUP/LOA/0039/2021 dated 18th February 2021. and issued by the Chief Engineer, Engineer Division, MMRDA to STUP Consultants Pvt. Ltd. for the consultancy services for "Providing Project Management Consultancy Services for Design and Construction of Sewri to Worli Elevated Connector" (hereinafter called "the said Agreement"), of security deposit for he due fulfillment by the said contractor(s) of the terms and conditions contained the said Agreement, on production of a Bank Guarantee for Rs. 35,31,691/- (Rupees Thirty Five Lakhs Thirty One Thousand Six Hundred & Ninety One only) (hereinafter referred to as "the Bank") at the request of STUP Consultants Pvt. Ltd. We. (Contractor(s) do hereby undertake to pay to the MMRDA an amount not exceeding Rs. 35,31,691/- (Rupees Thirty Five Lakhs Thirty One Thousand Six Hundred & Ninety One only) against any loss or damage caused to or suffered or would be caused to or suffered by the MMRDA by reasons of any breach by the said contractor(s) of any of the terms or conditions contained in the said Agreement. (indicate name of the bank) do hereby 2. undertake to pay the amounts due and payable under this guarantee without any demur, merely on a demand from the MMRDA stating that the amount claimed is due by way of loss or damages to or would be caused to or suffered by the MMRDA by reason of breach by the said contractor(s) of any of the terms or conditions contained in the said Agreement or by reasons of the contractor(s) failure or repudiation to perform the said Agreement. Any such demand made on





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प्रधान मुद्रांक कार्यालय, मुं प.मु.वि.क. ८ ० ० ० ० ० । 5 SEP 2020 सक्षम अधिकारी

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## GENERAL POWER OF ATTORNEY

TO ALL WHOM THESE PRESENTS SHAIL COME, I, A.C. ALIMCHANDANI, the Executant of this Power of Attorney and the Chairman of M/S. STUP CONSULTANTS PRIVATE LIMITED, a Company incorporated under the Companies Act, 1956 vide Corporate Identification Number: U74999MH1963PTC012649 and having its Registered Office at 1004-05, Raheja Chambers, 213, Natiman Point, Mumbai – 400 021, send greetings:

WHEREAS the Company is engaged in the business of offering Engineering and Architectural Consultancy Services, and for and on behalf of the Company, I am required to execute empanelment/consultancy offers/consultancy bid related documents, consultancy contracts, etc. (hereinafter called "such business contracts") with various government departments, public sector and private organizations from time to time;

AND WHEREAS under Articles of Association of the Company and by a Resolution of the Board of Directors, certain powers are vested in me including the power to appoint any person/s to be the Attorney/ies of the Company and on my behalf;

M.M.R.D.A.



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AND WHEREAS it has become necessary and for exigencies of business it is convenient that in exercise of such powers, I should appoint fit and proper person/s to sign and execute such business contracts, as true and lawful Attorney/ies for me and in the Company's name.

By these presents, I appoint, nominate and constitute Mr. Sunil Dutt, son of Mr. Ganesh Dutt Sharma, presently residing at RH-55, Sector 7, Shivkripa Building, Koparkhairane, Navi Mumbai- 400 709, presently employed with us and holding the position of Joint Vice President (Business Development) of the Company, to be the true and lawful Attorney for and on behalf of me and in the Company's name to enter into all such negotiations and execute, sign and admit execution of such business contracts and execute and do all such acts, deeds, and things in the name and on behalf of the Company as he may consider expedient for or in relation to any of the matters aforesaid or otherwise for the purposes of "such business contracts" of the Company.

I hereby undertake to ratify and confirm all lawful acts, deeds, things and matters that the said Attorney shall do by virtue of the Power of Attorney hereby granted. This Power of Attorney shall be effective from the date of its execution and will remain valid for one year from the said date or till it is revoked earlier in writing by the undersigned.

IN WITNESS WHEREOF, WE, M/S. STUP CONSULTANTS PRIVATE LIMITED, REPRESENTED BY ITS CHAIRMAN, MR. A.C. ALIMCHANDANI, THE ABOVE NAMED EXECUTANT, HAVE EXECUTED THIS POWER OF ATTORNEY ON THIS 06th DAY OF NOVEMBER, 2020.

FOR STUP CONSULTANTS PVT. LTD

A. C. ADMCHANDANI

CHAIRMAN

STUP CONSULTANTS PVT. LTD

1004-5, RAHEJA CHAMBERS 213, NARIMAN POINT

MUMBAI - 400 021

ACCEPTED

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SUNIL DUTT

JOINT VICE PRESIDENT (BUSINESS

DVELOPMENT)

RH-55, SECTOR 7, SHIVKRIPA BUILDING

KOPARKHAIRANE

NAVI MUMBAI- 400 709

BEFORE ME

ATTESTED BY ME

Mrs. VEENA PRAVIN WAGLE B.Com, LL.B.

ADVOCATE & NOTARY GOVT. OF INDIA

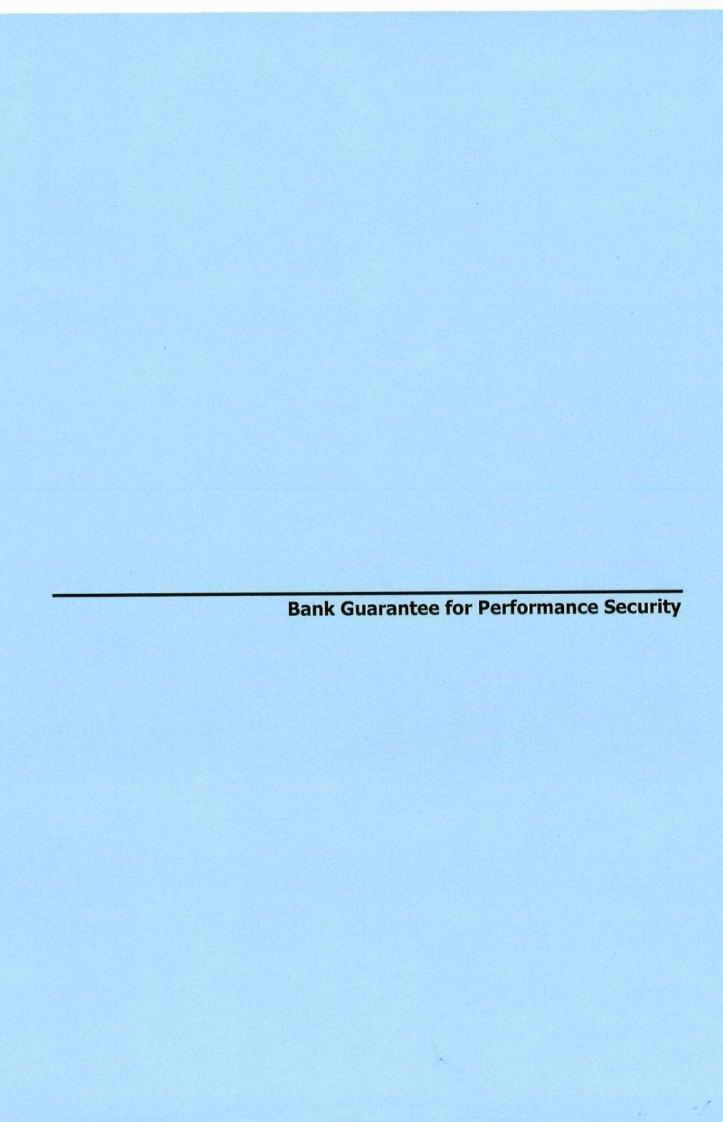
0 6 NOV 2020





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STATE BANK OF INDIA

TRADE FINANCE

Tel No. Fax No.

022-23024300/01/02/03 022-23024351/52/53/54

SWIFT No.

SBININBB582

CPC,MUMBAI MAFATLAL CHAMBERS,1st PIN Code

FLR, CD WING

NMJOSHI MARG,LOWER

400 013

PAREL, MUMBAI

09-03-2021

To. MUMBAI METROPOLITAN REGION DEVELOPMENT AUTHORITY BANDRA KURLA COMPLEX **BANDRA EAST** MUMBAI 400051

DEAR SIR(S),

Guarantee Number

Date of Issue

**Guarantee Amount** 

Date of Expiry Date of Claim

**Applicant Name** 

0505021BG0000243

09-03-2021

INR 3,531,691.00

01-03-2024

01-03-2025

STUP CONSULTANTS PVT LTD

We confirm having Issued / Extended the captioned Bank Guarantee in your favour on behalf of our above named Constituent and the same signed by the officers of the Bank.

YOURS FAITHFULLY,

AUTHORISED SIGNATORY - 1 VARUN PRIYADARSHI

S.S. NO. #10989

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**4ORISED SIGNATORY - 2** 

MUMBAY\*2nd signatory required, if BG is for Rs. 50000/- and above)

P - 12999

The beneficiaries are advised in their own interest to verify the genuineness of the Guarantee with the BG issuing Branch and also verify that Bank Guarantee for Rs.50000/- (Rupees Fifty Thousand Only) & above is signed by two authorized officials of the Bank.

PLEASE CONTACT BRANCH FOR eTradeSBI FACILITY-INTERNET ACCESS TO TRADE FINANCE

Mar 9, 2021 6:19 PM

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Page 1 of 1

# रिहात बंक व काषाग्रार पावनी URED BANK & TREASURY RECEIPT (e-SBTR

16113964138307

Bank/Branch :

SBI / 11688-SME BACKBAY RECLAMATION BRANCH

Pat Txn id : Pmt DtTime :

87279

08-03-2021@02:22:35

00211688080321051727

Stationery No :

XXXXXXXXXXX8307

District :

Print DtTime :

08-03-2021802:23:27 IGR182-BOM1 MUMBAI CITY 1 SUB

ChallanIdNo :

7101/MUMBAT

Office Name :

REGISTRAR

GRAS GRN : GRN Date : MH012829274202021S 08-03-2021002:22:36

StDuty Schm :

StDuty Amt :

0030045501

Rs 500/- (Rs Five Zero Zero Only)

RgnFee Schm :

RgnFee Amt :

Article :

5(h) (B) (VI) /AGGREMENT IF NOT OTHERWISE PROVIDED FOR

Prop Mvblty : Prop Descr :

Not Applicable

Consideration :

Rs 3531691/-

1004 05, RAHEJA CHAMBERS, NARIMAN POINT MUMBAI, 400021

Duty Payer :

PAN-AABCS1945E, STUP CONSULTANTS PVT LTD

Other Party :

MUMB

PAN-AAACS8577K, STATE BANK OF INDIA

Bank official-1 Name & Signature

This Guarentee has been processed By State Earth of India Trade Finance CPC, 1st Floor, Mafettal Chambers, Lower Parel (E) Mumbal 400 013 For State Bank of India SME Backbay Reclamation Branch, Nariman Point Mumbal 400 024 Mumbal - 400 021

Bank official-2 Name & Signature

This ESBTR is an integral part of Bank Character No: 0505021 Ba0000243 issued on 09/03/2021 for

Rs. 3531691 -

- Pripadarshi VARUN PRIYADARSHI S.S. NO. P10989

TECPC

ामा सागर पांचास R S PANCHAL P-12999

Chief Engineer Engineering Division

https://sbi11688svr.bsc/Modules/STGT/MAHARASHTRA/frmEsbtrReRrint.aspx

3/8/2021

By State E...k of India Trade Finance CPC, 1st Floor, Mafettal Chambers, Lower Parel (E) Mumbal 400 013 For State Bank of India SME Backbay Reclamation Branch, Nariman Point Mumbal - 400 021

#### BANK GUARANTEE BOND FOR PERFORMANCE SECURITY

Name of work: Providing Project Management Consultancy Services for Design and Construction of Sewri to Worli Elevated Connector.

In Consideration of the Mumbai Metropolitan Region Development Authority having its office at Bandra - Kurla Complex, Bandra (East), Mumbai-400 051 (hereinafter called "the MMRDA") having agreed to exempt STUP Consultants Pvt. Ltd. (hereinafter called "the said contractor(s)" from the demand, under the terms and conditions of the Letter of Intent no. MMRDA/ED/SWEC/PMC/STUP/LOA/0039/2021 dated 18<sup>th</sup> February 2021, made between the Chief Engineer, Engineer Division, MMRDA and STUP Consultants Pvt. Ltd. for the consultancy services for "Providing Project Management Consultancy Services for Design and Construction of Sewri to Worli Elevated Connector" (hereinafter called "the said Agreement"), of security deposit for he due fulfillment by the said contractor(s) of the terms and conditions contained the said Agreement, on production of a Bank Guarantee for Rs. 35,31,691/- (Rupees Thirty Five Lakhs Thirty One Thousand Six Hundred & Ninety One only).

We, State Bank of India, at TFCPC, 1st Floor, C&D Wing Mafatlal Chambers, Lower Parel, Mumbai – 400 013 having its Headquarters office at State Bank Bhavan, Nariman Point, Mumbai 400 021, (hereinafter referred to as "the Bank") at the request of STUP Consultants Pvt. Ltd. (Contractor(s) do hereby undertake to pay to the MMRDA an amount not exceeding Rs. 35,31,691/- (Rupees Thirty Five Lakhs Thirty One Thousand Six Hundred & Ninety One only) against any loss or damage caused to or suffered or would be caused to or suffered by the MMRDA by reasons of any breach by the said contractor(s) of any of the terms or conditions contained in the said Agreement.

2. We, State Bank of India, (indicate name of the bank) do hereby undertake to pay the amounts due and payable under this guarantee without any demur, merely on a demand from the MMRDA stating that the amount claimed is due by way of loss or damages to or would be caused to or suffered by the MMRDA by reason of breach by the said contractor(s) of any of the terms or conditions contained in the said Agreement or by reasons of the contractor(s) failure or repudiation to perform the said Agreement. Any

VARUN PRIYADARSHI

S.S. NO. P10989

TFCPC SH

R S PANCHAL

This Guarantee has been processed By State ELIK of India Trade Finance CPC, 1st Floor, Mafettal Chambers, Lower Parel (E) Mumbal 403 013 For State Bank of India SME Backbay Reclamation Branch, Nariman Point Mumbal - 400 021

such demand made on the bank shall be conclusive as regards the amount due and payable by the Bank under this guarantee. However, our liability under this guarantee shall be restricted to an amount not exceeding Rs. 35,31,691/- (Rupees Thirty Five Lakhs Thirty One Thousand Six Hundred & Ninety One only).

- 3. We undertake to pay the MMRDA Bank Guarantee Amount of Rs. 35,31,691/- so demanded notwithstanding any dispute or disputes raised by the contractor(s). The payment so made by us under this bond shall be a valid discharge of our liability for payment there under and the contractor(s) shall have no claim against us for making such payment.
- 4. We, State Bank of India, further agree that the guarantee herein contained shall remain in full force till 01.03.2024 and it shall continue to be enforceable till all the dues of the MMRDA under or by virtue of the said Agreement have been fully paid and its claims satisfied or discharged or till the Chief Engineer, Engineering Division of MMRDA certified that the terms and conditions of the said Agreement have been fully and properly carried out by the said contractor(s) and made on us in writing on or before the claim date i.e 01.03.2025, we shall be discharged from all liability under this guarantee thereafter.
- 5. We, State Bank of India, further agree with the MMRDA that the MMRDA shall have the fullest liberty without our consent and without affecting in any manner our obligation hereunder to vary any of the terms and conditions of the said Agreement or to extend time of performance by the said contractor(s) from time to time or to postpone for any time for from time to time any of the powers exercisable by the MMRDA against the said Contractor(s) and to forbear or enforce any of the terms and conditions relating to the said agreement and we shall not be relieved from our liability by reasons of any such variation, or extension being granted to the said Contractor(s) or for any forbearance, act or commission on the part of the MMRDA or any indulgence by

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TFCPC

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VARUN PRIYADARSHI S.S. NO. P10989

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This Guerantee has been processed By State Earlk of India Trade Finance CPC, 1st Floor, Mafettal Chambers, Lower Parel (5) Mumbal 409 013 For State Bank of India SME Backbay

the MMRDA to the said Contractor(s) of Name of India SML Bank of I under the law relating to sureties would, but for this provision, have effect of so relieving us.

- This guarantee will not be discharged due to the change in the constitution of the Bank 6. or the Contractor(s) / Suppliers(s).
- We, State Bank of India, lastly undertake not to revoke this guarantee during its 7. currency.

"Notwithstanding anything contrary contained in any law for the time being in force or banking practice, this guarantee shall not be assignable or transferable by the beneficiary. Notice or invocation by any person such as assignee, transferee or agent of beneficiary shall not be entertained by the Bank. Any invocation of guarantee can be made only by the beneficiary directly."

Notwithstanding anything contained herein.

- 1. Our liability under this Bank Guarantee is limited to Rs. 35,31,691/- (Rupees Thirty Five Lakhs Thirty One Thousand Six Hundred & Ninety One only).
- This Bank Guarantee shall be valid up to 01.03.2024.

1) The beneficiary's right as well the Bank's liability under this guarantee shall stand extinguished unless a written claim or demand is made under this guarantee on or before 01.03.2025.

वारतीय

TFCPC

MUMBP

VARUN PRIYADARSHI

S.S. NO. P10989

hipadarshi

द्ये सागर पांचार R S PANCHAL P - 12999

