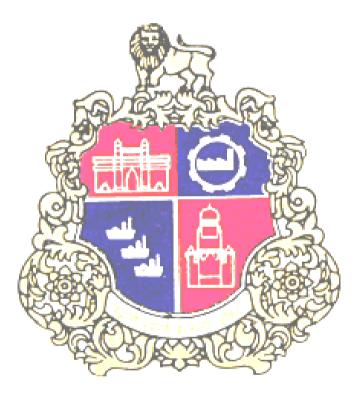
MUNICIPAL CORPORATION OF GREATER MUMBAI



Standard General Conditions of Contract for Construction Works

2016

CONTENTS

SECTION A: GENERAL

1. Definations and Interpretations:	Page No
a)Definitions	6
b) Heading and Marginal Notes	11
c) Singular and plural	11
d) Gender	11
2. Engineer and Engineers' Representative:	
a)Engineers Duty and Authority	12
b)Duties & Powers of the Engineers Representative	12
c)Engineer's decision	13
d)Work to be in accordance with Contract	13
3. Assignment and sub-contracting:	
a)Assignment	14
b)Sub-letting	14
c)Nominated sub-contractor	14
d) Joint Venture	16
4. <u>Contract Documents</u> :	
a)Language/s	20
b)Contract Documents	20
c)Drawings: Custody of drawings	20
d)Engineer to have power to issue further drawings	
or instructions	22
e)Discrepancies in drawings or specifications	22
f)Official Secrecy	23
g)Subsequent legislation	23

h)Contract Execution	24
i) No claim to any payment or compensation or alteration	24
in or restriction of work.	
j) The limit for unseen claims	25
5. General Obligations of Contractor	
a) Inspection of site and sufficiency of tender.	26
b)Temporary Office for the Engineer	
(Work costing upto R.s 50lakhs)	27
c) Temporary Office for the Engineer	
(Work costing upto R.s 50lakhs)	27
d)Contractor's office near works	27
e)Works to be carried out	28
f) Security Deposit	28
g) Levels	33
h)Use of Municipal Land	33
i)Water supply for Municipal Work	34
j) Pumping out Water	34
k) Contractors Staff	35
I)Contractor's Supervision	35
m)Setting out the Work	36
n)Precautions for works in thorough-fares	36
o) Maintenance of underground utility services	37
p) Fencing, watching and lighting	38
q) Treasure Trove Fossils etc	38
r) Protection of trees	38
s)Contractor to preserve peace	38
t) Sanitation	39

	u)Safety Provisions	39
	v) Provision of first aid	39
	w)Apprentices	39
	x)Storage of Explosives	40
	y)Contractor's other liabilities & Insurance	40
	z)Changes in constitution	43
	aa) Facilities to the other contractors	43
	ab)Patent Right and Royalties	43
	ac)Production of Vouchers	43
	ad)Employment of local personnel	43
	ae) Personnel.	43
	af) Contractor to keep site clear	44
	ag) Clearance of site on completion	44
6	. <u>Labour</u>	
	a)Employment of Labour	45
	b)Compliance with Labour Regulation	46
	c)Regulation Employment Welfare	49
7	Materials, Plant and Workmanship	
	a)Plant and equipment	51
	b)Use of Specification I.S.I	51
	c) Work to be open to Inspection and Contractor or	
	Responsible agent to be presesnt:	51
	d)Uncovering and making good	53
	e)Materials	54
	f)Stock of Materials required	55
	g)Photographs of the works	55

8. Suspension, commencement and delays:

a) Suspension of work	56
b)Rate of progress	56
c)Restriction on Working Hours	56
d)Commencement Time and Extension for Delay	57
e) Compensation for delay	59
f) Action And Compensation Payable In Case Of	
Bad Work And Not Done As Per Specifications	59
g)Completion Certificate	60
h)Works where PERT chart's is required along with Tender	62
i) Network Schedule & Monthly progress Reports	62
j) Management Meetings	63
k) Contractor remain liable to pay compensation	63
I) Extension of Time in Contracts	63
9. <u>Defects Liability</u>	
a)Defects liability period	65
b)Liability for defects or imperfection and rectification thereof	67
c) Liability for damages and risks	68
d)Contractor to Search	70
10 <u>Variations</u>	
a)Rate of Excess	71
b)Reimbursement refund on variation of price of labour and materials	73
11 <u>. Measurements</u>	
a)Records and measurement	77
b)Method of Measurement	77

12. Payments, Tax and Claims

ANNEXURE-I	104
SECTION B: Safety Health & Environment	98
15. Banning/De-Registration of Agencies of Construction work	91
b) Notices to local bodies	90
a) Instructions and notices	90
14. <u>Notices</u>	
h) Frauds and Corrupt Practices	89
g)Cancellation of contract in full or in part.	87
f) Details to be Confidential.	87
e)Arbitration and Jurisdiction	86
d)Settlement of Disputes	86
c)Foreclosure of contractor in full or in part	85
b)Urgent Works	85
a)Termination of contract for death	85
13. <u>Settlement of Disputes</u>	
k) Submissions of final completion drawings	84
j)Taxation payments of Bills and other claims	83
i)Currency of payment	83
h)Income-Tax	82
g)Payment of final bill	81
f)Overpayment and underpayment	80
e)Receipts to be signed firm's name by any one of the partners	80
d) No interest for delayed payments due to disputes, etc.	80
c) Payment on intermediate certificate to be regarded as advances	79
b)Interim Payment	79
a)Provisional Sum and Advances	78

1.Definitions and Interpretations

1.a) Definitions:

- The "Employer" shall mean the Municipal Corporation for Greater Mumbai / Municipal Commissioner for Greater Mumbai, for the time being holding the said office and also his successors and shall also include all "Additional Municipal Commissioners, Director (Engineering Services & Projects)" and the Deputy Municipal Commissioner, to whom the powers of Municipal Commissioner, have been deputed under Section 56 and 56B of the Mumbai Municipal Corporation Act.
- Contract : The "Contract" shall mean the tender and acceptance thereof and the formal agreement if any, executed between the Contractor, Commissioner and the Corporation together with the documents referred to therein including these conditions and appendices and any special conditions, the specifications, designs, drawings, price schedules, bills of quantities and schedule of rates. All these documents taken together shall be deemed to form one Contract and shall be complementary to one another.
- Contractor: The "Contractor" shall mean the individual or firm or company whether incorporated or not, whose tender has been accepted by the employer and the legal successor of the individual or firm or company, but not (except with the consent of the Employer) any assignee of such person.
- **Bidder:** The Bidder shall mean a person or corporate body who has desired to submit Bid to carry out the Works, including routine maintenance till the tender process is concluded.
- Arbitrator: "Arbitrator" means the person or persons appointed by agreement between the Employer and the Contractor to make a decision on or to settle any dispute or difference between the Employer and the Contractor referred to him or her by the parties pursuant to General Conditions of Contract amended up to date.
- **Contract Sum:** "Contract Sum" means the sum named in the letter of acceptance including Physical contingencies subject to such addition thereto or deduction there-from as may be made under the provisions hereinafter contained.

Note : The contract sum shall include the following -

• In the case of percentage rate contracts the estimated value of works as mentioned in the tender adjusted by the Contractor's percentage.

- In the case of item rate contracts, the cost of the work arrived at after finalisation of the quantities shown in schedule of items / quantities by the item rates quoted by the tenderers for various items and summation of the extended cost of each item.
- In case of lumpsum contract, the sum for which tender is accepted.
- Special discount / rebate / trade discount offered by the tenderer if any and accepted by the Corporation.
- Additions or deletions that are accepted after opening of the tenders.
- **Contract Cost:** "Contract Cost" means the Contract Sum plus Price Variation. This cost shall be included in the letter of acceptance.
- A. Engineer: The "Engineer" shall mean the City Engineer / the Hydraulic Engineer / the Chief Engineer / the Special Engineer, appointed for the time being or any other officer or officers of the Municipal Corporation who may be authorized by the commissioner to carry out the functions of the City Engineer / the Hydraulic Engineer / the Chief Engineer / the Special Engineer or any other competent person appointed by the employer and notified in writing to the Contractor to act in replacement of the Engineer from time to time.
- **B. Engineer's Representative:** "Engineer's Representative" shall mean the Assistant Engineer, Sub. Engineer/Jr. Engineer in direct charge of the works and shall include Sub Eng./ Jr. Eng of Civil section/ Mechanical section/ Electrical section appointed by MCGM. from time to time by the Sub Clause 2a.
- C. Excepted Risks: "Excepted risks" are risks due to riots (otherwise than among Contractors' employees) and civil commotion (in so far as both these are uninsurable), war (whether declared or not), invasion, act of foreign enemies, hostilities, civil war, rebellion, revolution, insurrection, military or usurped power, any act of government, damage from aircraft, acts of god, such as earthquake, lightning and unprecedented floods and other causes over which the Contractor has no control and accepted as such by the Commissioner or causes solely due to use or occupation by the Municipal Corporation of the works in respect of which a certificate of completion has been issued or a cause solely due to faulty municipal design of work.
- **D. Corporation:** The "Corporation" or the "Municipal Corporation" shall mean the Municipal Corporation of Greater Mumbai, constituted under the M.M.C. Act 1888 as amended up to date.

- **E. Annexure:** The "Annexure" referred to in these conditions shall means the relevant annexure appended to the tender papers issued by the Municipal Corporation.
- **F. Site:** The "Site" shall mean the land and other places including water bodies more specifically mentioned in the special conditions of the tender, on, under in or through which the permanent works or temporary works are to be executed and any other lands and places provided by the Municipal Corporation for working space or any other purpose as may be specifically designated in the contract as forming part of the site.
- **G. Urgent Works:** "Urgent works" shall mean any urgent measures which in the opinion of the Engineer become necessary during the progress of the work to obviate any risk of accident or failure or which become necessary for security.
- **H. Works:** The "Works" shall mean the Permanent Works and the Temporary Works or either of them as appropriate to be executed in accordance with the contract or part(s) thereof, as the case may be and shall include all extra or additional, altered or substituted works as required for performance of the contract as found necessary as per suggestion of the Engineer.
- I. Temporary Works: "Temporary Works" shall mean all Temporary Works of every kind required in or about execution, completion or maintenance of the work also Temporary Works are works designed, constructed, installed, and removed by the Contractor that are needed for construction or installation of the Works.
- **J. Permanent Works** : "Permanent Works" means the permanent works to be executed (Including Plant) and installation of machineries in accordance with the Contract at specified required site and location.
- **K. Contractor's Equipment:** Contractor's Equipment means all appliances and things of whatsoever nature required for the execution and completions of the Works and the remedying of any defects therein, but does not include plant material or other things intended to form or forming part of the Permanent Works.
- L. Drawings: Drawings means all the drawings, calculations and technical information of a like nature provided by the Engineer to the Contractor under the Contract and all drawings, calculations, samples, patterns, models, operation & maintenance manual and other technical information of like nature submitted by the Contractor and approved by the Engineer.

- **M. Approved:** "Approved" shall mean approved in writing including subsequent confirmation of previous verbal approval and "approval" shall mean approval in writing including as aforesaid.
- **N. Specification:** "Specification" means the specification referred to in the tender and any modification thereof or addition or deduction thereto as may from time to time be furnished or approved in writing by the Engineer.
- **O. Tender:** "Tender" means the Contractor's priced offer to the Employer for the execution and completion of the Works and the remedying of any defects therein in accordance with the provision of the Contract, as accepted by the Letter of Acceptance.
- **P. Letter of Acceptance:** "Letter of Acceptance" means the formal acceptance by the Employer of the tender, for the particular specified work or job.
- **Q. Commencement Date:** "Commencement Date" means the date upon which the Contractor receives the notice to commence, issued by the Engineer pursuant to Clause 8d.
- **R. Time for Completion:** "Time for Completion" means the time for completing the execution of and passing the Tests on Completion of the Works or any Section or part thereof as stated in the Contract (or as extended under Section8) calculated from the Commencement Date.
- **S. Taking over Certificate: "Certificate of Taking-Over/ Take-over Certificate"** shall mean the certificate issued by the **Employer** after completion of Works in all respects.
- T. Defect Liability Period: "Defect Liability Period" means the period of validity of the warranties given by the Contractor commencing from the date of 'certificate of taking over' of the Works or a part thereof, during which the Contractor is responsible for defects with respect to the Works (or the relevant part thereof).
- **U. Plant:** "Plant" means machinery, apparatus, and the like intended to form or forming part of the all types of permanent works.
- V. Section: "Section" means a part of work specially identified in the contract as a section.
- **W. Cost:** "Cost" means all expenditure properly incurred or to be incurred whether on or off the site including overheads and other charges properly allocable thereto but does not include any allowance for profit.
- X. Day: "Day" means Calendar day

- Y. Month: "Month" means Calendar month of the Gregorian calendar.
- Z. GCC: GCC means General Conditions of Contract.
- **AA.** Foreign Currency: "Foreign Currency" means currency of a country other than that in which the works are to be located, approved by Govt of INDIA/Reserve Bank of INDIA.
- **BB. Writing:** Writing means any hand written, type-written, or printed communication including telex and facsimile transmission ,electronic and digital media.
- **CC. Country**: Country means the country in which the Site is located
- DD. Variation: Variation means a change to the:
 - i) Specification and /or Drawings (if any) which is instructed by the Employer.
 - ii) Scope in the Contract which is instructed by the Employer.
 - iii) Price in the Contract which is instructed by the Employer.
- **EE.Force Majeure:** Force Majeure means an exceptional event or circumstance: which is beyond a Party's control; which such Party could not reasonably have provided against before entering into the Contract; which, having arisen, such Party could not reasonably have avoided or overcome; and, which is not substantially attributable to the other Party.
- FF. Law: Law means law that is in force in India
- **GG.** Performance Security/ Performance Guarantewe: It is the security in the form of a deposit to be provided by the contractor to the Engineer for his proper performance of the contract within the specified period.
- **HH. Communication:** Wherever provision is made for the giving or issue of any notice, instruction, or other communication by any person, unless otherwise specified such communication shall be written in the English language and shall not be unreasonably withheld or delayed.
- OO)**Tests on Compliance:** "Tests on Compliance" means the tests specified in the Contract or otherwise agreed by the Engineer and the Contractor which are to be made by the Contractor before the works or any section or part thereof are taken over by the employer.
- PP)**Extra items:** 'Extra' means additional or substituted items of work activity not included in the 'Bill of Quantities and Rates', however such items are in the prevailing 'Unified Schedule of Rates' for MCGM.

- QQ) **Excess/Savings:** Increase or decrease in "Bill of Quantities" of the bidding documents shall be termed as "Excess" or "Savings" correspondingly
- RR) **Extra item:** This shall mean additional or substituted items of work activity not included in the "Bill of Quantities and Rates", however such item of work are in the prevailing "Unified Schedule of Rates" of MCGM.
- SS) **FAIR item:** This shall mean additional or substituted items of work activity not included in the "Bill of Quantities and Rates", and even not existing in the "Unified Schedule of Rates" of MCGM at the time of tender.
- TT) **Unforeseen works**: Unforeseen works shall mean the works of bursting / leakages of water pipelines, settlement of sewage lines / manholes, settlement of storm water drains in city areas
- UU) **Subcontractor:** Any person named in the contract as Subcontractor for part of the Works or any person to whom a part of the Works has been subcontracted with the consent of the Engineer and the legal successors in the title to such person, but not any assignee of such person.
- VV) **Bill of Quantities:** It means the priced and completed bill of quantities forming part of the tender.

1.b) Headings & Marginal Notes to Conditions:

Headings and marginal notes to these conditions shall not be deemed to form part thereof or be taken into consideration in the interpretation or construction thereof or of the contract.

1.c) Singular & Plural :

Where the context so require, words importing the singular shall also mean the plural and vice versa.

1.d) Gender :

Words importing in the masculine gender shall also include the feminine gender.

2.Engineer and Engineer's Representative

2.a) Engineers Duty & Authority:

i. The Engineer shall carry out the Duties specified in the Contract

- ii. The Engineer may exercise the authority specified in or necessarily to be implied from the Contract, provided, however, that if the Engineer is required under the terms of the appointment by the Employer, to obtain the specific approval from the Employer before exercising any such authority, particulars of such requirements shall be set out in Special conditions of Contract. Provided further that any requisite approval shall be deemed to have been given by the Employer for any such authority exercised by the Engineer.
- iii. Except as expressly stated in the Contract, the Engineer shall have no authority to relieve the Contractor of any of his obligations under the Contract.
- iv. The Engineer may from time to time in writing delegate to the Engineer's representative any of the powers or authorities vested in the Engineer and shall furnish to the Contractor a copy of all such written delegations of powers and authorities. Any written instruction or approvals given by the Engineer's Representative to the contractor with the terms of such delegation (but not otherwise) shall be binding on the Contractor as if given by the Engineer.
- v. The Engineers representative shall be appointed by and be responsible to the Engineer and shall carry out the duties and exercise such authority as may be designated to him by the Engineer under the clause 2.a.(iv).
- vi. The Engineer may from time to time delegate to the Engineers representative. The duties and authorities vested in the Engineer and he may at any time revoke such delegation.
 Any such delegation or revocation shall be in writing and shall not take effect until a copy thereof has been delivered to the Employer and Contractor.

2.b) Duties & Powers of the Engineers Representative:

i. The duties of the representative of the Engineer are to check, watch and supervise the work and to test and examine any material to be used or workmanship employed in connection with the works. He shall have no authority to relieve the Contractor of any of his duties or obligations under the contract nor to except as expressly provided here under or elsewhere in the contract to order any work involving delay or any extra payment by the Municipal Corporation nor to make any variation of or in the works without written approval, consent or orders/direction of Engineer.

ii. Communications given by the Engineers Representative to the Contractor in accordance with any delegations shall have the same effect and shall be binding on the contractor as though it had been given by the Engineer, Provided that :

- a. Failure of the representative of the Engineer to disapprove any work or material shall not prejudice the power of the Engineer thereafter to disapprove such work or material and to order the pulling down, removal or breaking up thereof.
- **b.** If the Contractor questions any communication of the Engineers Representative he may refer to the matter to the Engineer who shall confirm, revise or vary the contents of such communications.

2. c) Engineer's Decision:

The whole of the work shall be under the direction of the Engineer, whose decision shall be final, conclusive and binding on all parties to the contract, on all questions relating to the construction and meaning of plans, working drawings, sections, and specification connected with the work.

2.d) Work to be in accordance with Contract:

Unless it is legally or physically impossible, the Contractor shall execute and complete the Works and remedy any defects therein in strict accordance with the Contract to the satisfaction of the Engineer.

3. Assignment and Sub-Contracting

3.a) Assignment:

The Contractor shall not assign transfer or attempt to assign, transfer the Contract or any part thereof, or any benefit or interest therein or there under otherwise than by a charge in favor of the Contractor's bankers of any Money due or to become due under this contract, without the prior written approval of the Commissioner.

3.b) <u>Sub-letting</u>:

- Unless specifically mentioned in the contract subletting will not be allowed. Subletting, where otherwise provided by the contract shall not be more than 25% of the contract price.
- Subletting of contract will be allowed only after appointment of contractor and before starting the execution of the work.
- The permitted subletting of work by the Contractor shall not establish any contractual relationship between the sub-contractor and the MCGM and shall not relieve the Contractor of any responsibility under the Contract.

3.c) Nominated Sub-Contractors:

All specialist, merchants, tradesmen and others executing any work or supplying any goods, materials, plant or services for which provisional, sums are included in the contract, who may have been or be nominated or selected by the employer or the engineer, and all persons to whom by virtue of the provision of the contract the contractor is required to subcontract shall, in the execution of such work or the supply of such goods, materials, plant or services be deemed to be subcontractor to the contractor and are referred to in this contract as "nominated Subcontractors".

The Contractor shall not be required by the Employer or the engineer, or be deemed to be under any obligation, to employ any nominated Subcontractor against whom the Contractor may raise reasonable objection, or who declines to enter into a subcontract with contractor containing provision:

- i. That in respect of the work, goods, materials, Plant or services the subject of subcontract, the nominated Subcontractor will undertake towards the Contractor such obligation and liabilities as will enable the contractor to discharge his own obligation and liabilities towards the Employer under the terms of the contract and will save harmless and indemnify the Contractor from and against the same and form all claims ,proceeding damages, costs, charges, and expenses whatsoever arising out of or in connection there with or arising out of or in connection with any failure to perform such obligations or to fulfill such liabilities and (ii)
- ii. That the nominated subcontractor will save harmless and indemnify the contractor from and against any negligence by the nominated subcontractor, his agents, workmen and servants and from and against any misuse by him or them of any Contractor's Equipment or Temporary Works provided by the Contractor for the purposes of the Contract and from all claims as aforesaid.
 - Design requirements to be Expressly stated:

If in connection with any Provisional Sum the services to be provided include any, matter design or specification of any part of the Permanent Works or of any plant to be incorporated

therein, such requirement shall be expressly stated in the Contract and shall be included in any nominated Subcontract. The nominated Subcontract shall specify the nominated Subcontractor providing such services will save harmless and indemnify the contractor from and against the same and from all claims, proceedings, damages, costs, charges and expenses whatsoever arising out of or in connection with any failure to perform such obligations or to fulfill such liabilities.

B) Payments to Nominated Sub-Contractors;

For all work executed or goods, materials plant or services supplied by any nominated Subcontractor, The Contractor shall be entitled to:

- a. The actual price paid or due to be paid by the contractor, on the instruction or engineer, and in accordance with the subcontract.
- b. In respect of labor supplied by the Contractor, the sum, if any, entered in the Bill of Quantities or, if instructed by the Engineer pursuant to clause on Use of Provisional Sums as may be determined in accordance with Clause of Valuation of variation.

In respect of all other charges and profit, a sum being a percentage rate of the actual paid or due to be paid as per clause 10 (b) calculated, where provision has been made in the bill of Quantities for a rate to be set against the relevant Provisional Sum, at the rate inserted by the contractor against that item or, where no such provision has been made, at the rate inserted by Contractor in the Appendix to Tender and repeated where provision for such is made special item provide in the Bill of Quantities for such purpose.

C) Certification of payments to nominated sub-contractors:

Before issuing any certificate under Section 12 which includes any payment in respect of work done or goods, material, plant or services supplied by any nominated sub-contractor, the Engineer shall be entitled to demand from the Contractor reasonable proof that all payments, less retentions, Included in previous certificates in respect of the work or good materials, Plant or services of such nominated Sub-Contractor have been paid or discharged by the Contractor. If the Contractor fails to supply such proof then, unless the Contractor:

a) satisfies the Engineer in writing that he has reasonable cause for withholding or refuse to make such payments and

b) Produces to the Engineer reasonable proof that he has so informed such nominated Subcontractor in writing,

The Employer shall be entitled to pay to such nominated Subcontractor direct, upon certificate of Engineer, all payments, less retentions, provided for in the nominated Subcontract, which the Contractor has failed to make to such nominated Subcontractor and to deduct by way of set-off the amount so paid by the Employer from any sums due or to become due from the Employer to the Contractor.

Provided that, where the Engineer has certified and the Employer has paid direct as aforesaid ,the Engineer shall, in issuing any further certificate in favor of the Contractor, deduct from the amount thereof the amount so paid, direct as aforesaid, but shall not withhold or delay issue of the certificate itself when due to be issued under the terms of contract

3.d) JOINT VENTURE (JV) FIRMS

- 1. Joint Venture should be allowed only when the number of identifiable different works is more than one and/or the estimated cost of tender is more than Rs.100 Crores. JV shall also be allowed for complex technical work below Rs.100 Crores with the approval of concerned AMC
- 2. Separate identity/name shall be given to the Joint Venture firm.
- **3.** Number of members in a JV firm shall not be more than three in normal circumstances, if the work involves only one discipline (say Civil or Electrical). If number of members in JV is required to be more than three, then approval of concerned AMC needs to be sought.
- **4.** A member of JV firm shall not be permitted to participate either in individual capacity or as a member of another JV firm in the same tender.
- **5.** The tender form shall be purchased and submitted in the 'name of the JV firm or any constituent member of the JV.
- 6. Normally EMD shall be submitted only in the name of the JV and not in the name of constituent member. However, EMD in the name of lead partner can be accepted subject to submission of specific request letter from lead partner stating the reasons for not submitting the EMD in the name of JV and giving written confirmation from the JV partners to the effect that the EMD submitted by the lead partner may be deemed as EMD submitted by JV firm.
- 7. One of the members of the JV firm shall be the lead member of the JV firm who shall have a majority (at least 51%) share of interest in the JV firm. The other members shall have a share of not less than 20% each in case of JV firms with up to three members and not less than 10% each in case of JV firms with more than three members. In case of JV firm with foreign member(s), the lead member has to be an Indian firm with a minimum share of 51%.
- 8. A copy of Letter of Intent or Memorandum of Understanding (MoU) executed by the JV members shall be submitted by the JV firm along with the tender. The complete details of the members of the JV firm, their share and responsibility in the JV firm etc. particularly with reference to financial technical and other obligation shall be furnished in the agreement.
- **9.** Once the tender is submitted, the agreement shall not be modified/altered/terminated during the validity of the tender. In case the tenderer fails to observe/comply with this stipulation, the full Earnest Money Deposit (EMD) shall be forfeited. In case of successful tenderer, the validity of this agreement shall be extended till the currency of the contract expires.

- **10.** Approval for change of constitution of JV firm shall be at the sole discretion of the MCGM. The constitution of the JV firm shall not be allowed to be modified after submission of the tender bid by the JV firm except when modification becomes inevitable due to succession laws etc. and in any case the minimum eligibility criteria should not get vitiated. In any case the Lead Member should continue to be the Lead Member of the JV firm. Failure to observe this requirement would render the offer invalid.
- **11.** Similarly, after the contract is awarded, the constitution of JV firm shall not be allowed to be altered during the currency of contract except when modification become inevitable due to succession laws etc. and in any case the minimum eligibility criteria should not get vitiated. Failure to observe this stipulation shall be deemed to be breach of contract with all consequential penal action as per contract condition.
- **12.** On award of contract to a JV firm, a single Performance Guarantee shall be required to be submitted by the JV firm as per tender conditions. All the Guarantees like Performance Guarantee, Bank Guarantee for Mobilization advance, machinery Advance etc. shall be accepted only in the name of the JV firm and no splitting of guarantees amongst the members of the JV firm shall be permitted.
- 13. On issue of LOA, an agreement among the members of the JV firm (to whom the work has been awarded) has to be executed and got registered before the Registrar of the Companies under Companies Act or before the Registrar / Sub-Registrar under the Registration Act, 1908. This agreement shall be submitted by the JV firm to the MCGM before signing the contract agreement for the work. (This agreement format should invariably be part of the tender condition). In case the tenderer fails to observe/comply with this stipulation, the full Earnest Money Deposit (EMD) shall be forfeited and other penal actions due shall be taken against partners of the JV and the JV. This joint venture agreement shall have, inter-alia, following clauses:-
- **13.1 Joint and several liability** The members of the JV firm to which the contract is awarded, shall be jointly and severally liable to the Employer (MCGM) for execution of the project in accordance with General and Special conditions of the contract. The JV members shall also be liable jointly and severally for the loss, damages caused to the MCGM during the course of execution of the contract or due to no execution of the contract or part thereof.

- **13.2 Duration of the Joint Venture Agreement** -It shall be valid during the entire period of the contract including the period of extension if any and the maintenance period after the work is completed.
- **13.3 Governing Laws** The Joint Venture Agreement shall in all respect be governed by and interpreted in accordance with Indian Laws.
- **13.4 Authorized Member** -Joint Venture members shall authorize one of the members on behalf of the Joint Venture firm to deal with the tender, sign the agreement or enter into contract in respect of the said tender, to receive payment, to witness joint measurement of work done, to sign measurement books and such of the said tender/contract. A11 similar action in respect notices/correspondences with respect to the contract would be sent only to this authorized member of the JV firm.

No member of the Joint Venture firm shall have the right to assign or transfer the interest right or liability in the contract without the written consent of the other members and that of the employer in respect of the said tender/contract.

14. Documents to be enclosed by the JV firm along with the tender:

- **14.1**In case one or more of the members of the JV firm is/are partnership firm(s), following documents shall be submitted:
- 14.1.1 Notary certified copy of the Partnership Deed,
- **14.1.2** Consent of all the partners to enter into the Joint Venture Agreement on a stamp paper of appropriate value (in original).
- **14.1.3** Power of Attorney (duly registered as per prevailing law) in favor of one of the partners to sign the MOU and JV Agreement on behalf of the partners and create liability against the firm.
- **14.2**In case one or more members is/are Proprietary Firm or HUF, the following documents shall be enclosed:
- **14.2.1** Affidavit on Stamp Paper of appropriate value declaring that his Concern is a Proprietary Concern and he is sole proprietor of the Concern OR he is in position of "KARTA" of Hindu Undivided Family and he has the authority, power and consent given by other partners to act on behalf of HUF.
- **14.3**In case one or more members is/are limited companies, the following documents shall be submitted:
- **14.3.1** Notary certified copy of resolutions of the Directors of the Company, permitting the company to enter into a JV agreement, authorizing MD or one of the Directors or Managers of the Company to sign MOU, JV Agreement, such other documents required to be signed on behalf of the Company and

enter into liability against the company and/or do any other act on behalf of the company.

- 14.3.2 Copy of Memorandum and articles of Association of the Company.
- **14.3.3** Power of Attorney (duly registered as per prevailing law) by the Company authorizing the person to do/act mentioned in the para (a) above.
- **14.4**All the members of the JV shall certify that they have not been black listed or debarred by MCGM from participation in tenders/contract in the past either in their individual capacity or the JV firm or partnership firm in which they were members / partners.
- 14.5Credentials & Qualifying criteria: Technical and financial eligibility of the JV firm shall be adjudged based on satisfactory fulfilment of the following criteria: Technical eligibility criteria: In case of Work involving single discipline, the Lead member of the JV firm shall meet at least 35% requirement of technical capacity as stipulated in tender document.

OR

In case of composite works (e.g. works involving more than one distinct component such as Civil Engineering works, M&E works, Electrical works, etc. and in the case of major bridges, substructure and superstructure etc.), atleast one member should have satisfactorily completed 35% of the value of any one component of the project work so as to cover all the components of project work or any member having satisfactorily completed 35% of the value of work of each component during last seven financial years.

In such cases, what constitutes a component in a composite work shall be clearly defined as part of the tender condition without any ambiguity.

Financial eligibility criteria: The contractual payments received by the JV firm or the arithmetic sum of contractual payments received by all the members of JV firm in any one of the previous three financial years and shall be at least **100% of the estimated value** of the work as mentioned in the tender.

4. Contract Documents

4.a) Language/s:

The language of the Contract shall be English and all correspondence, drawings etc. shall conform to the English language.

4.b) Contract Documents:

The documents forming the contract are to be taken as mutually explanatory of one another. Unless otherwise provided in the contract, the priority of the documents forming the contract shall be, as follows:

- 1) Contract Agreement (if completed)
- 2) The letter of Acceptance
- 3) The Bid:
- 4) Addendum to Bid; if any
- 5) Conditions of contract-Part-II: Conditions of Particular Application.
- 6) Conditions of Contract-Part I :General Condition
- 7) The priced bill of Quantities:
- 8) The Specification:
- 9) Detailed Engineering Drawings
- 10) GCC
- 11) All correspondence documents between bidder and MCGM.

4.c)Custody of Drawings:

- i. Custody of drawings: The Drawings shall remain in the sole custody of Engineer, but two copies thereof, shall be furnished to the Contractor free of charge. The Contractor shall provide and made at his own expense any further copies required by himand the Engineer for the bonafide cause. At the completion of the Contract, the Contractor shall return to the Engineer all drawings provided under the Contract.
- **ii. One copy of drawing to be kept on site:** One copy of the drawings, furnished to the Contractors as aforesaid, shall be kept by the Contractor on the site and the same shall at all reasonable times be available for inspection and use by the Engineer and the Engineer's Representative and by any other persons authorized by the Engineer in writing.
- **iii. Disruption of Progress**: The Contractor shall give written notice to the Engineer whenever planning or progress of the works is likely to be delayed or disrupted unless any further drawings or order, including a direction, instruction or approval, is issued by the Engineer within reasonable time. The notice shall include details of the drawing or order required and of why and by when it is required and of any delay or disruption likely to be suffered if it is late.

- iv. Delays and Cost of delay of drawings: If by reason of any failure or inability of the Engineer to issue within a time reasonable in all the circumstances any drawing or order requested by the Contractor in accordance with the sub-clause(iii) of this condition the Contractor suffers delay and / or incurs cost then the Engineer shall take such delay into account in determining any extension of time to which the Contractor is entitled under sub-clause (d) of Clause 8 hereof and the Contractor shall be paid the amount of such cost as shall be reasonable.
- v. Failure to submit Drawings by Contractor: If the failure or the inability of the Engineer to issue any drawings or instructions is caused in whole or in part by the failure of the Contractor to submit specification or drawings or other documents which is required to submit under the contract, the Engineer shall take such failure by the contractor into account when making his determination in accordance with condition 4c(iv)hereof.
- vi. Copyright: The copyright of all drawings and other documents provided by the Contractor under the Contract shall remain vested in the Contractor or his subcontractors as the case may be the Employer shall have a license to use such drawings and other documents in connection with the design, construction, operation and maintenance of the Works. At any time the Employer shall have further license without additional payment to the Contractor to use any such drawings or documents for the purpose of making any improvement of the works or enlargement or duplication of any part thereof, provided that such improvement, enlargement or duplication by itself or in conjunction with any other improvements, enlargements or duplications already made in accordance with the further license does not result in the duplication of the whole of the works.

4.d) Engineer to have power to issue further drawings or instructions:

The Engineer shall have the power and authority from time to time and at all times to make and issue such further drawings and to give such further instructions and directions as may appear to him necessary or proper for the guidance of the contractor and the good and sufficient execution of the works according to terms of the specifications and Contractor shall receive, execute, obey and be bound by the same, according to the true intent and meaning thereof, as fully and effectually as though the same had accompanied or had been mentioned or referred to in the specification, and the Engineer may also alter or vary the levels or position of nature of works contemplated by the specifications, or may order any of the works contemplated thereby to be omitted, with or without the substitution of any other works in lieu thereof, or may order any work or any portion of work executed or partially executed, to be removed, changed or altered, added if needful, may order that other works shall be substituted instead thereof and difference of expense occasioned by any such diminution or alteration so ordered and directed shall be added to or deducted from the amount of this Contract, as provided under condition no.10(a) hereinafter.

No work which radically changes the original nature of the Contract shall be ordered by the Engineer and in the event of any deviation being ordered which in the opinion of the Contractor changes the original nature of Contract he shall nevertheless carry it out and disagreement as to the nature of the work and the rate to be paid therefore shall be resolved in accordance with condition no.13d.

The time for completion of the Works, shall be in even of any deviations resulting in additional cost over the contract price being ordered, be extended or reduced reasonably by the Engineer. The Engineer's decision in this case shall be final.

4.e) Discrepancies in drawings or specifications:

The drawings and specifications are to be considered as mutually explanatory of each other, detailed drawings being followed in preference to small scale drawings and figured dimensions in preference to scale and special conditions in preference to general conditions. The preference of documents will be as per condition 4(b). Should any discrepancies, however, appear, or should any misunderstanding arise as to the meaning and import of the said specifications or drawings, or as to the dimensions or the quality of the materials or the due and proper execution of the Works, or as to the measurement or quality and valuation of the Works, or as to the measurement or quality and valuation of the Works, or as extra thereupon the same shall be explained by the Engineer, and his explanation shall, subject to the final decision of the Commissioner in case a reference be made to him under condition no.13(d) be binding upon the Contractor and Contractor shall execute the Works according to such explanation (subject to aforesaid) and shall also do all such Works and required things as may be necessary for the proper completion of Works as implied by the drawings and specifications, even though such Works and things are not specifically shown and described in the said drawings and specifications.

Provided always that if in the opinion of the Engineer compliance with any such instructions shall involve the Contractor in any expenses which by reason of any such ambiguity or

discrepancy, the Contractor did not and had reasons not to anticipate the extra charges if any shall be paid in accordance with conditions 10(a).

The time for completion of the Works, shall be in even of any deviations resulting in additional cost over the contract price being ordered, be extended or reduced reasonably by the Engineer. The Engineer's decision in this case shall be final.

4.f)Official Secrecy:

The Contractor shall of all the persons employed in any works in connection with the contract that the India Official Secrets Act 1923 (XIX of 1923) applies to them and will continue to apply even after execution of the said works and they will not disclose any information regarding this contract to any third party. The contractor shall also bring into notice that, any information found to be leaked out or disclosed the concern person as well as the Contractor will be liable for penal action; further the Corporation will be at liberty to terminate the contract without notice.

4.g)Subsequent Legislation :

If on the day of submission of bids for the contract, there occur changes to any National or State stature, Ordinance, decree or other law or any regulation or By-laws or any local or other duly constituted authority or the introduction of any such National or State Statute, Ordinance, decree or by which causes additional or reduced cost to the Contractor, other than under Clause 10 in the execution of contract, such additional or reduced cost shall, after due consultation with the Contractor, be determined by the concerned Engineering Department of MCGM and shall be added to or deducted from the Contract Price with prior approval of competent authority and the concerned Engineering Department shall notify the Contractor accordingly with a copy to the Employer. Notwithstanding the foregoing, such additional or reduced cost shall already taken into account in the indexing of any inputs to the Price Adjustment Formulae in accordance with the provisions of Clause 10 b.

MCGM reserve the right to take decision in respect of addition/reduction of cost in contract.

4h)Contract Execution

All required documents for execution of the contract shall be submitted within 30 days from the date of issue of letter of acceptance. If the documents are not submitted within the stipulated time a penalty of Rs 5000/- per day will be applicable to the contractor. All contract documents need to be duly affixed with stamp duty properly signed along with evidence/proof of payment of security/contract deposit/ within 30 days from the date of letter of acceptance received by him.

Obligation of MCGM

- i. The concerned department shall submit the contract which is verified by Accounts department, to Municipal Secretary Office for common seal in 45 days from the receipt of those papers in the office
- ii. Municipal Secretary office will complete the process of affixing common seal in next 30 days.
- iii. If the contractor has complied with all the contractual obligations and the contract verified by the accounts department and forwarded to Municipal Secretary office for affixing common seal. It shall be treated as deem executed after 30 days of submission and no payment shall be withheld for want of contractual obligations.

4i) No Claim To Any Payment Or Compensation Or Alteration In Or Restriction Of Work

(a) If at any time after the execution of contract documents, the Engineer shall for any reason whatsoever, desires that the whole or any part of the works specified in the Tender should be suspended for any period or that the whole or part of the work should not be carried out, at all, he shall give to the Contractor a Notice in writing of such desire and upon the receipt of such notice, the Contractor shall forthwith suspend or stop the work wholly or in part as required after having due regard to the appropriate stage at which the work should be stopped or suspended so as not to cause any damage or injury the work already done or endanger the safety thereof, provided that the decision of the Engineer as to the stage at which the work or any part of it could be or could have been safely stopped or suspended shall be final and conclusive against the contractor.

The Contractor shall have no claim to any payment or compensation whatsoever by reason of or in pursuance of any notice as aforesaid, on account of any suspension, stoppage or curtailment except to the extent specified hereinafter.

(b) Where the total suspension of Work Order as aforesaid continued for a continuous period exceeding 90 days the contractor shall be at liberty to withdraw from the contractual obligations under the contract so far as it pertains to the unexecuted part of the work by giving 10 days prior notice in writing to the Engineer within 30 days of the expiry of the said period of 90 days, of such intention and requiring the Engineering to record the final measurement of the work already done and to pay final bill. Upon giving such Notice, the Contractor shall be deem to have been discharged from his obligations to complete the remaining unexecuted work under his contract. On receipt of such notice the Engineer shall proceed to complete the measurement and make such payment as may be finally due to the contractor within a period of 90 days from the receipt of such Notice in respect of the work already done by the contractor. Such payment shall not in any manner prejudice the right of the contractor to any further compensation under the remaining provisions of this clause.

(c) Where the Engineer required to Contractor to suspend the work for a period in excess of 30 days at any time or 60 days in the aggregate, the Contractor shall be entitled to apply to the Engineer within 30 days of the resumption of the work after such suspension for payment of compensation to the extent of pecuniary loss suffered by him in respect of working machinery remained ideal on the site of on the account of his having an to pay the salary of wages and labour engaged by him during the said period of suspension provided always that the contractor shall not be entitled to any claim in respect of any such working machinery, salary or wages for the first 30 days whether consecutive or in the aggregate or such suspension or in respect of any such suspension whatsoever occasion by unsatisfactory work or any other default on his part, the decision of the Engineer in this regard shall be final and conclusive against the contractor.

4j. <u>The limit for unforeseen claims</u>

Under no circumstances whatever the contractor shall be entitled to any compensation from MCGM on any account unless the contractor shall have submitted a claim in writing to the Eng-in-change within 1 month of the case of such claim occurring.

5. General Obligations of Contractor

5.a) Inspection of site and sufficiency of tender:

 The Contractor shall inspect and examine the site and its surrounding and shall satisfy himself before submitting his tender as to the nature of the ground and subsoil (so far as is practicable), the form and nature of the site, the quantities and nature of the work and materials necessary for the completion of the works and means of access to the site, the accommodation he may require and in general shall himself obtain all necessary information as to risk, contingencies and other circumstances which may influence or affect his tender. He shall also take into consideration the hydrological and climatic conditions.

- The Employer shall make available to the Contractor data on hydrological and sub-surface conditions as obtained by or on his behalf from investigations relevant to the works but the Contractor shall be responsible for his own interpretation thereof. The contractor shall engage his investigating agency with prior approval of the Engineer from the approved list of such agencies by MCGM or Govt at his cost initially before commencing actual work and which shall be reimbursed immediately subject to satisfaction of the Engineer for faithful compliance and submission of required data regarding such investigation within specified time.
- The Contractor shall be deemed to have satisfied himself before tendering as to the correctness and sufficiency of his tender for the works and of the rates and prices quoted in the schedule of works / items / quantities, or in Bill of Quantities, which rates and prices shall, except as otherwise provided cover all his obligations under the Contract and all matters and things necessary for proper completion and maintenance of the works. No extra charges consequent on any misunderstanding.
- Not Foreseeable Physical Obstructions or Conditions : If, however, during the execution
 of the Works the Contractor encounters physical obstructions or physical conditions, other
 than climatic conditions on the Site, which obstructions or conditions were, in his opinion, not
 foreseeable by an experienced contractor, the Contractor shall forthwith give notice thereof
 to the Engineer. On receipt of such notice, the Engineer shall, if in his opinion such
 obstructions or conditions could not have been reasonably foreseen by an experienced
 contractor, after due consultation with the Contractor, determine:
 - any extension of time to which the Contractor is entitled under Clause 8 (f) and
 - The amount of any costs which may have been incurred by the Contractor by reason of such obstructions or conditions having been encountered, which shall be added to the Contract Price.

and shall notify the Contractor accordingly. Such determination shall take account of any instruction which the Engineer may issue to the Contractor in connection therewith, and any proper and reasonable measures acceptable to the Engineer which the Contractor may take in the absence of specific instructions from the Engineer. However such costings shall be got approved by the competent authority as governed vide rules prevailing with authority.

5. b)Office for the Engineer (Works costing upto Rs.50 Lakhs)

The Contractor shall at his own cost and to satisfaction of the Engineer provide a small temporary office, at the work-site which will include tables, chairs and lockers for keeping the records. He shall also make necessary arrangements for drinking water, telephone with a pre-requisite of e-governance and electronic communication. These offices are not to be allowed on public roads without the written instruction of the Engineer. These offices should be preferably located within 50 to 500 m of the worksite. In case the office is more than 500m away from the worksite, the contractor is to provide conveyance for Municipal Staff.

5. c) Office for the Engineer (Works costing above Rs.50 lakhs)

The Contractor shall at his own cost and to satisfaction of the Engineer provide a temporary office at the work-site which will include tables, chairs and lockers for keeping the records. He shall also make necessary arrangements for drinking water, latrines, with doors, windows, locks, bolts and fastenings sufficient for security for the Engineer, and his subordinates, as close to the works from time to time in progress as can be conveniently arranged, and shall at his own cost furnish the office with such chairs, tables, lockers, locks and fastenings as may be required by the Engineer, and no expense of any kind in connection with the erection or upkeep of the offices or fittings shall be borne by the Corporation, but all such work shall be carried out by the Contractor and the expenses thereof defrayed by him. The Contractor shall also make water connections and fit up stand pipe with a bib tap at each office. The latrines and the water connections shall be subject to all the conditions herein elsewhere laid down for temporary water connection and latrines generally with all requisite equipments for e-governance and electronic and digital communication. These offices are not to be allowed on public roads without the written instruction of the Engineer. These offices should be preferably located within 50 to 500 m of the worksite. In case the office is more than 500m away from the worksite, the contractor is to provide conveyance. Also, for staff working beyond working hours the contractor has to provide conveyance.

Permission for provision and removal of office on completion of work: The tenderer shall obtain permission for provision of site office, cement go-down, store, etc. on payment of necessary cost implication. The cement go-down, Watchman cabins, etc. shall be provided as directed and shall be removed by the Tenderers on completion of the work at their cost. It is binding on the Tenderer to fulfill requirements of Environmental Authorities. The location of such office shall be finalized and got approved from the Engineer before erection/commencement work.

<u>5. d) Contractor's office near works</u>: The Contractor shall have an office near the works at which notice from the Commissioner or the Engineer may be served and shall, between the hours of sunrise and sunset on all working days, have a clerk or some other authorized person always present at such office upon whom such notices may be served and service of any notices left with such clerk or other authorized person or at such office shall be deemed good service upon the Contractor and such offices shall have pre-requisite facilities for e-governance.

5.e) Works to be carried out:

The work to be carried out under the Contract shall, except as otherwise provided in these conditions, include all labour, materials, tools, plant, equipment and transport which may be required in preparation of and for and in the full and entire execution and completion of the works. The descriptions given in the schedule of works / items / quantities, and the Bills of Quantities shall, unless otherwise stated, be held to include waste on materials, carriage and cartage, carrying in, return or empties, hoisting, setting, fitting and fixing in position and all other

labour necessary in and for the full and entire execution and completion as aforesaid in accordance with good practice and recognized principles.

5 f) Security Deposit:

The security deposit shall mean and comprising of I) Contract Deposit and II) Retention Money.

5.f.i) Contract Deposit – The successful tender, here after referred to as the contractor shall pay an amount equal to two (2) percent of the contract sum shall be paid within thirty days from the date of issue of letter of acceptance.

5.f.ii) Retention Money – The contractor shall pay the retention money an amount equal to five (5) percent of the contract sum which will be recovered from the contractors every bill i.e. interim / running / final bill. The clause of retention money will not be applicable M. & E. works.

5.f.iii) Additional Security Deposit

The additional security deposit will be applicable when a rebate of more than of 12 % at the rate of with no maximum limit. The ASD is calculated as follows:

Additional security deposit = (X) x office estimated cost,

Where X=percentage rebate quoted above 12%

The ASD shall be paid online in the ASD tab for bidders in e-tendering system before submission of the bid.

5.f.iv) Performance Guarantee

The successful tender, here after referred to as the contractor shall pay in the form of "Performance Guarantee" at different rates for different slabs as stated below:

Offer	PG applicable %
For premium, at par and	PG= 0.92% x contract sum
rebate less than 12%	applicable for rebate of 12%
	P.G. = {0.92% x contract sum
	applicable for rebate of 12% } +(X) x
For offer below rebate	contract sum
of <mark>12%</mark>	where
	X= percentage rebate quoted
	more than 12%

Note: Contract sum shall mean amount after application of rebate/premium as quoted by the contractor with contingencies only and excluding price variation.

The PG shall be paid in one the following forms.

- I) Cash (In case guarantee amount is less than Rs.10,000/-
- II) Demand Draft (In case guarantee amount is less than Rs.1,00,000/-)

- III) Government securities
- IV) Fixed Deposit Receipts (FDR) of a Schedule Bank.

V) An electronically issued irrevocable bank guarantee bond of any Schedule bank or f in the prescribed form given in Annexure.

Performance Guarantee is applicable over and above the clause of Security Deposit. Performance Guarantee will have to be paid & shall be valid till the defect liability period or finalization of final bill whichever is later.

This deposit will be allowed in the form of I to V as mentioned above and shall be paid within 15 days after receipt of Letter of Acceptance.

Note: Following exceptions shall be adopted for 'Demolition Tenders':

- Irrespective of the offer (Rebate/ at par/ premium), ASD shall be differed and only PG of 10% of contract sum be taken from the successful bidder on award of contract only.
- MCGM departments shall ensure to incorporate specific condition regarding above in bid document and e-tender notice.

5.f.v) Refund of Security Deposit

I. Refund of Contract Deposit

The Contract Deposit shall be released within 30 days after completion of 3rd year of DLP (in case of 5 years DLP) and after issue of 'Defect Liability Certificate' (in case of 1 or 2 or 3 years DLP) subject to no recoveries are pending against the said work, provided that the Engineer is satisfied that there is no demand outstanding against the Contractor. No claim shall be made against the Balance Contract Deposit after the issue of Defects Liability Certificate.

II. Refund of Retention Money

One-half (50%)of the Retention Money shall be released within 30 days of issue of 'Certificate of Completion' with respect to the whole of the Works. In the event the Engineer issues a Taking-over Certificate for a section or part of the Permanent Works, only such proposition thereof as the Engineer determines (having regard to the relative value of such section or part of the Works) shall be considered by the Engineer for payment to the Contractor.

The balance Retention Money shall be released within 30 days after completion of 3rd year of DLP (in case of 5 years DLP) and after issue of 'Defect Liability Certificate' (in case of 1 or 2 or 3 years DLP) provided that the Engineer is satisfied that there is no demand outstanding against the Contractor. In the event of different Defects Liability Periods have been specified or become applicable to different sections or parts of the

Permanent Works, the said moneys will be released within 30 days on expiration of the latest of such Defects Liability Periods.

Payment of the above mentioned 50% is exclusive of the amounts to be withheld as stated in and that amount shall be paid as per condition stated therein.

III. Refund of Additional Security Deposit

The additional security deposit shall be released within 30 days of issue of 'Certificate of Completion' with respect to the whole of the Works. In the event the Engineer issues a Taking-over Certificate for a section or part of the Permanent Works, only such proposition thereof as the Engineer determines (having regard to the relative value of such section or part of the Works) shall be considered by the Engineer for payment to the Contractor.

IV. Refund of Performance Guarantee

The Deposit on account of performance guarantee shall be released within 30 days of completion of Defects Liability Certificate subject finalization of final bill whichever is later and no recoveries are pending against the said work, provided that the Engineer is satisfied that there is no demand outstanding against the Contractor.

Summary of time of Refund of deposit is tabulated as follows:

a) Time of Refund for works having 5 years DLP

Deposits refunded after completion	After 3 yrs of DLP	After Completion of DLP
ASD + 50% of RM	CD+50% of RM	PG

b) Time of Refund for works having 1 or 2 or 3 years DLP

Deposits refunded after completion	After Completion of DLP
ASD + 50% of RM	CD+50% of RM+PG

5.f.vi.) Cost of Securities: The cost of complying with the requirements of clause 5f(i), 5f(ii) and 5f(iii) and 5f(iv) shall be borne by the Contractor.

5.(f)(vii) Action when whole of security deposit is forfeited:

In any case in which under any Clause of this contract, the contractor shall have rendered himself liable to pay compensation amounting to the whole of this security deposit whether paid in one sum or deducted by instalments or in the case of abandonment of the work owning to serious illness or death of the contractor or any other cause, the Engineer on behalf of the Municipal Commissioner shall have power to adopt any of the following process, as he may deem best suited to the interest of MCGM -

(a) To rescind the contract (for which recession notice in writing to the contractor under the head of Executive Engineer shall be conclusive evidence) and in that case, the security deposit of the contract shall stand forfeited and be absolutely at the disposal of MCGM.

(b) To carry out the work or any part of the work departmentally debiting the contractor with the cost of the work, expenditure incurred on tools and plant, and charges on additional supervisory staff including the cost of work-charged establishment employed for getting the unexecuted part of the work completed and crediting him with the value of the work done departmentally in all respects in the same manner and at the same rates as if it had been carried out by the contractor under the terms of his contract. The certificate of the Executive Engineer as to the costs and other allied expenses so incurred and as to the value of the work so done departmentally shall be final and conclusive against the contractor.

(c) To order that the work of the contractor be measured up and to take such part thereof as shall be un-executed out of his hands, and to give it to another contractor to complete, in which case all expenses incurred on advertisement for fixing a new contracting agency, additional supervisory staff including the cost of work charged establishment and the cost of the work executed by the new contract agency will be debited to the contractor and the value of the work done or executed through the new contractor shall be credited to the contractor in all respects and in the same manner and at the same rates as if it had been carried out by the contractor under the terms of his contract. The certificate of the Executive Engineer as to all the cost of the work done by the new contractor and as to the value of the work so done shall be final and conclusive against the contractor.

In case the contract shall be rescinded under Clause (a) above, the contractor shall not be entitled to recover or be paid any sum for any work therefor actually performed by him under this contract unless and until the Executive Engineer shall have certified in writing the performance of such work and the amount payable to him in respect thereof and he shall only be entitled to be paid the amount so certified. In the event of either of the courses referred to in Clause (b) or (c) being adopted and the cost of the work executed departmentally or through a new contractor and other allied expenses exceeding the value of such work credited to the contractors amount of excess shall be deducted from any money due to the contractor, by MCGM under the contract or otherwise, howsoever, or from his security deposit or the sale proceeds thereof provided, however, the contractor shall have no claim against MCGM even if the certified value of the work done departmentally or through a new contractor exceeds the certified cost of such work and allied expenses, provided always that whichever of the three courses mentioned in clauses (a), (b) or (c) is adopted by the Executive Engineer, the contractor shall have no claim to compensation for any loss sustained by him by reason of his having purchase or procured any materials or entered in to any engagements or made any advance on account of or with a view to the execution of the work or the performance of the contract.

5.f.(viii) Contract may be rescinded and security deposit forfeited for bribing a public officer or if contractor becomes insolvent

If the contractor assigns or sublets his contracts or attempt so to do, or become insolvent or commence any proceeding to get himself adjudicated and insolvent or make any composition with his creditors, or attempt so to do or if bribe, gratuity, gift, loan, perquisite, reward or advantage, pecuniary or otherwise, shall either directly or indirectly be given promised or offered by the contractor or any of his servants or agents through any public officer, or person in the employ of MCGM/Govt. in any way relating to his office or employment, or if any such officer or person shall become in any way directly or indirectly interested in the contract the Engineer Incharge may thereupon, by notice in writing rescind the contract and the Security Deposit of the Contractor shall thereupon stand forfeited and be absolutely at the disposal of MCGM and the same consequences shall ensure as if the contract had been rescinded under above clause **5.f.(vii)** hereof; and in addition the contractor shall not be entitled to recover or be paid for any work therefore actually performed under the contract.

5.f.(ix) For The Unsatisfactory Progress Of Any Particular Portion Of The Work:

If the progress of any particular portion of the work is unsatisfactory, the Executive Engineer shall not withstanding that the general progress of the work is in accordance with the conditions mentioned in the *appropriate clause* be entitled to take action for forfeiture of security deposit after giving the contractor 10 days notice in writing. The contractor will have no claim for compensation, for any loss sustained by him owing to such action.

5.g) Levels:

All levels referred to in connection with these works are based on the plane known as the Mumbai Town Hall Datum (T.H.D).

5.h) Use of Municipal Land:

i. The Contractor shall not be permitted to enter on (other than for inspection purposes) or take possession of site until instructed to do so by the Engineer in writing. The portion of the site to be occupied by the Contractor shall be defined and / or marked on the site plan, failing which these shall be indicated by the Engineer and the Contractor shall on no account be allowed to extend his operations beyond these areas. The Contractor will be allowed to use such land, free of charge, for the purpose of sheds, offices thereon for themselves and for the Engineer and his subordinates and shall remove the same from the ground on the completion of the works, or when required to do so, by the Engineer after receiving 7 days' notice. He shall make good any damage which may have been done and restore to good condition anything which

may have been disturbed during the period of his occupation. The contractor shall be allowed to use the land for labour employed on the job for emergency situation

He shall not use or allow to be used any such ground, sheds or offices, or any portion of the site of the works, for any other purpose than the carrying out of works under this Contract. In the event of there being on plot or ground or insufficiency of ground belonging to the Corporation available for the above purpose, the Contractor shall provide other such ground at his own cost. The Contractor shall in any case pay all taxes which may have to be paid in respect of all ground, sheds or offices used as above, and all the license fees, etc. that may be used as above, and all the license fees, etc. that may be demanded for the storage or otherwise of the various articles as per rules in force. The Contractor shall provide, if necessary or if required on the site all temporary accesses thereto and shall later, adopt and maintain the same as required from time to time and shall take up and clear them away as and when no longer required and make good all damage done to the site.

ii) Save in so far as the Contract may prescribe:

(a) The extent of portions of the site of which the Contractor is to be given possession from time to time.

(b) The order in which such portions shall be made available to the Contractor.

(c) And, subject to any requirement in the contract as to the order in which the Works shall be executed, the Employer will, with the Engineer's notice to commence the Works, give to the Contractor possession of so much of the site and

(d) Such access as, in accordance with the Contract, is to be provided by the Employer as may be required to enable the Contractor to commence and proceed with the execution of the Works in accordance with the program referred to in Clause 8h if any, and otherwise in accordance with such reasonable proposals as the Contractor shall, by notice to the Engineer make. The Employer will, from time to time as the Works proceed, give to the Contractor possession of such further portions of the Site as may be required to enable the Contractor to proceed with the execution of the Works with due dispatch in accordance with such program or proposals, as the case may be.

iii)**Failure to give possession:** If the Contractor suffers delay and / or incurs costs from failure on the part of the Employer to given possession in accordance with the terms of Sub Clause 5h, the Engineer shall determine :

(a) any extension of time to which the Contractor is entitled under Clause 8d and

(b) The amount of such costs, which shall be added to the Contract Price, and shall notify the Contractor accordingly.

5.i)Water Supply for Municipal Work .:

Water made available to the Contractor from either nearest municipal main or other municipal source of lakes or wells shall be charged to the contractors as per prevailing water charges.

The Contractor will have to make his own arrangements to get at his cost necessary water connection from the Municipal mains, if available. It is, however, agreed that if in the opinion of the Hydraulic Engineer, water is used improperly or wasted, the Hydraulic Engineer may cause the un-metered supply of water to be discontinued and the water will be supplied to the Contractor through a metered connection. He will be charged at the prevailing rates for the quantity of water which in the opinion of the Hydraulic Engineer, has been used in excess of a reasonable quantity required to be used on that work.

The Contractors will be charged for all the cost connected with taking any connections with the mains that may be required for the purpose of the work, and for afterwards cutting off such connections, besides the usual Municipal charges for the use of the meters, if any, fixed by the water department in case of improper use or wastage of water. In the event of the meter getting damaged, or found to be out of order, inaccurate or tampered with, the excess quantity of water chargeable due to misuse will be assessed on the discharging capacity of the water connection.

In case the Contractor finds the water supply to be inadequate for the construction of the work, the balance quantity of water shall be procured by the contractor and the cost of procuring, pumping and conveyance of the balance quantity of water shall be entirely borne by the contractor.

In case municipal water mains are not available nearby, contractors attention is invited to Clause 5 given here before. In such cases, the contractor shall have to make his own arrangements for procuring, pumping and conveyance of water at his cost.

The Contractor may be allowed to use water from the Municipal hydrants subject to such terms and conditions as shall be laid down by the Hydraulic Engineer. The payment for use of water from municipal hydrants shall be entirely borne by the Contractors.

The Engineer may, however, allow use of water from other sources, viz. lakes, wells, etc. for construction purposes only in consultation with the Hydraulic Engineer provided such permission is requested sufficiently in advance. In all these cases the Contractor shall have to make his own arrangements for pumping and conveyance of water. The payment for use of water from such sources shall also be entirely borne by the Contractor.

5.j)Pumping out Water.:

The Contractor will be required to provide and work at his own cost all pumps, engines and machinery requisite to keep the trenches for the sewer, drains or foundations and all other excavations clear of water, whether subsoil water, storm waste or leakage from tanks, wells, drains, sewers, water mains, tide water etc. so that there may be no accumulation of such water and no setting out may be done, no masonry may be laid, no concrete deposited, no joints made and no measurements taken in water. The pumping shall be continued so long after the execution of any portion of the Work as the Engineer may consider necessary for the work to set. For the purpose of keeping the excavations as dry as possible the work would, if necessary be divided into sections or separate portions as per best engineering practices and temporary dams will have to be put up by the Contractor, sumps for the suction pipes to work in, will have to be excavated by the Contractor at such distances apart and to such depths as the as per best engineering practices. When the work progresses other sumps must, from time to time, be

excavated by the Contractor, disused sumps being filled up by him with dry rubble carefully hand packed to the satisfaction of the Engineer. The Contractor will not be paid extra for any temporary dams or sumps or their removal or refilling nor will such works be taken into measurement in any way, unless otherwise provided.

The Contractor shall not allow any accumulation of water either from the Discharge of his dewatering pumps or his water connections on site of his work. The Contractor shall make proper provision for leading the pumped discharge to the nearest water entrance, storm water drain, manholes, or water course by means of a wooden or G.I. channel or hose pipe. Under no circumstances the discharge will be allowed to flow, along a paved surface. If an accumulation is unavoidable, it shall be treated with insecticides to the satisfaction of the Engineer. In case of failure to do this on the part of Contractor such accumulation shall be treated by the Municipal Corporation at the risk and cost of the Contractor.

The contractors should note that under no circumstances any payment for pumping out water finding its way into trenches, hill cutting, excavated pits, works site etc. from whatever sources will be permissible unless otherwise specifically in the tender.

5.k) Contractors' staff:

The Contractor shall employ in and about the execution of works only such persons as are skilled and are experienced in their several trades and the Engineer shall be at liberty to object to and require the Contractor to remove from the works any person, employed by the Contractor in or about the execution of the works, who in the opinion of the Engineer misconducts himself or is incompetent or negligent in the proper performance of his duties and such person shall not be again employed upon the works without permission of the Engineer.

5.I)Contractors' Supervision:

The Contractor shall himself supervise the execution of works or shall appoint gualified personnel with prior approval by the Engineer to act in his stead. If, in the opinion of the Engineer the Contractor has himself not sufficient knowledge and experience to be capable of receiving instructions or cannot give his full attention to the works, the Contractor shall at his own expense, employ as his accredited agent an Engineer or a suitably qualified and experienced person approved by the Engineer. The name of the agent so appointed, along with the qualifications, experience and address shall be communicated to the Engineer. The agent shall be a responsible person adequately authorized by the Contractor to take decision on site and to spend money if required for procuring material and labour etc. to carry out emergency works in the interest of the contract Work, if so required by the Engineer. Orders given to Contractor's agent shall be considered to have the same force as if these had been given to the Contractor himself. If the Contractor fails to appoint a suitable agent as directed by the Engineer, the Engineer shall have full powers to suspend the execution of the works until such date as a suitable agent is appointed and the Contractor shall be held responsible for the delay so caused to the works. If approval of the representative is withdrawn by the Engineer, the contractor shall, as soon as practicable, having regard to the requirement of replacing him as hereinafter mentioned. He, after receiving notice of such withdrawal, remove the representative from the Works and shall not thereafter employ him again on Works in any capacity and shall replace him by another representative approved by the Engineer.

5.m)Setting out the works:

The Engineer shall supply dimensioned drawings, level and other information necessary to enable the Contractor to set out the works. The Contractor shall provide all setting out apparatus at his own cost, such as leveling instruments in good working condition and appliances, all pegs, ranging rods, long measuring rods, marked meters, and decimeters and each meter and decimeter numbered, posts and sight-rails, boning rods, moulds, templates, etc. together with any reasonable number of laborers that may be required and set out the work and be responsible for the accuracy of the same in relation to original points, lines and levels of reference given by the Engineer in writing The Contractor shall amend at his own cost and to the satisfaction of the Engineer any error found at any stage which may arise through inaccurate setting out unless such error is based on incorrect data furnished in writing by the Engineer, in which case the cost of rectification shall be borne by the Municipal Corporation. The Contractor shall protect and preserve all bench marks used in setting out the works till the end of Defects Liability period unless the Engineer directs its early removal. The Contractor should also be keep leveling instrument in good working condition throughout the period of construction work on site.

5.n) Precautions for works in thorough-fares:

a)While the execution of any work is in progress in any street or thoroughfare the Contractor at his own cost shall make adequate provision for the passage of traffic, for securing safe access to all premises approached from such street or thoroughfare, and for any drainage, water supply, or means of lighting or any other utility service which may be interrupted by reason of execution of the work. Whenever it may be necessary to stop the traffic in any street or thoroughfare permission must first be obtained from the Engineer and the Contractor shall then put up such barriers and adopt such other measures or take precautions as may be necessary or as the Engineer may direct for regulation of traffic. The work shall in such cases be executed night and day or for as long a period as practicable if so ordered by the Engineer, and with such speed and vigour as he may require, so that the traffic may be impeded for as short a time as possible. The Contractor shall remove the barriers as soon as the necessity for them has ceased. Care shall be taken by the Contractor to cause the least possible obstruction to traffic during the progress of the work.

b) The contractor shall use every reasonable means to prevent any of the roads or bridges communicating with or on the routes from the site from being damaged or injured by any traffic of the contractor or any of his subcontractors and, in particular, shall select routes, choose and use vehicles and restrict and distribute loads so that any such extraordinary traffic as will inevitably arise from moving of materials, Plant, Contractor's equipment or Temporary works from and to the site shall be limited, as far as reasonably possible and so that no unnecessary damage or injury may be occasioned to such roads and bridges.

Save in so far as the Contract otherwise provides, the Contractor shall be responsible for and shall pay the cost of strengthening any bridges or altering or improving any road communicating with or on the routes to the site to facilitate the movement of Contractors equipment or Temporary Works and the Contractor shall indemnify and keep indemnified the Employer against all claims for damage to any such road or bridge caused by such movement; including

such claims as may be made directly against the employer, and shall negotiate and pay all claims arising safely out of such damage.

If it is found necessary for the Contractor to move one or more loads of heavy constructional equipment, materials or pre-constructed units or parts of units of work over roads, highways, bridges on which such oversized and overweight items are not normally allowed to be moved, the Contractor shall obtain prior permission from the concerned authorities. Payments for complying with the requirements, if any, for protection of or strengthening of the roads, highways or bridges shall be included in his contract price.

Where the nature of Works is such as to require the use by the Contractor of waterborne transport the forgoing provisions of this Clause shall be construed as though "road included a lock, dock, sea wall or other structure related to waterway and "vehicle" included craft and shall have effect accordingly. Any non-compliance to these precautions will attract penalties as per condition 14 (a).

5.o) Maintenance of underground utility services:

All the underground utility services such as water pipes, gas pipes, drains, sewers, cables, etc. which may be met up in or about any excavation, shall if the Engineer deem it practicable, be properly maintained and protected by the Contractor himself or through other agency by means of shoring, strutting, planking over, padding or otherwise as directed by the Engineer during the progress of the work without claiming any extra charges. Any damage to these underground utility services shall be immediately remedied by the Contractor or by other agency at its own cost, failing which the Engineer may with or without notice adopt such measures as he may deem necessary at the risk and cost of the Contractor.

If on the other hand, the Engineer considers it impracticable for the Contractor to maintain any such underground utility services and that the exigencies of the work necessitate, the breaking down, removal or diversion of the said utility services, the cost of such breaking down, removal or diversion including that of rebuilding, replacing, diverting and reinstating of any such utility services shall be paid to the Contractor if done by him. However, the cost of providing pumps, chutes or other appliances as the Engineer may direct for the raising or temporary passage of the water or sewage and the cost of pumping out or removing as often as the Engineer may direct, any water or sewage which may escape from any such underground utility services, shall be borne by the Contractor.

5.p) Fencing, watching and lighting:

The Contractor shall provide and maintain at his own expense all lights, guards, fencing and watching when and where necessary or as required by the Engineer for the protection of the safety and convenience of those employed on the works or the public. In the event of failure on the part of the Contractor, the Engineer may with or without notice to the Contractor put up a fence or improve a fence already put up or provide and / or improve the lighting or adopt such other measures as he may deem necessary, and all the cost of such procedures as may be

adopted by the Engineer shall be borne by the Contractor. In addition the Engineer may impose such fines or penalty as the Engineer may deem reasonable, under Clause 14a.

5.q) <u>Treasure Trove Fossils etc:</u>

All fossils, coins, articles of value or antiquity and structural and other remains things of geological or archaeological interest discovered in or upon the site shall be absolute property of the Municipal Corporation and the Contractor shall duly preserve them and shall take precautions to prevent his workmen or any other person from removing or damaging any such articles or thing and shall immediately upon discovery thereof and before removal acquaint the Engineer with such discovery and shall from time to time deliver the same to such person or persons as the Engineer may from time to time appoint to receive the same at the expense of the Corporation.

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

(a) any extension of time to which the Contractor is entitled under clause 8(d), and

(b) the amount of such costs, which shall be added to the Contract Price, and shall notify the contractor accordingly, with a copy to Employer.

Materials of any kind obtained from excavation of the site shall remain the property of the Municipal Corporation and shall be disposed off as the Engineer may direct.

5.r)Protection of trees:

Trees designated by the Engineer shall be protected from damage during the course of the work and earth level within one meter of each such tree shall not be changed. Where necessary, such trees shall be protected by temporary fencing. All such cost shall be borne by the Contractor.

5.s) Contractor to preserve peace:

The Contractor shall at all times during the progress of the work take all requisite precaution and use his best endeavors for preventing any riotous or unlawful behavior by or amongst the workers and other employed on the works and for the preservation of peace and protection of the inhabitants and security of property in the neighborhood of the works. He shall also pay the charges of such special police (if any) as the Engineer may deem necessary.

5.t)Sanitation:

The Contractor shall, at his own cost, make all necessary provisions for health and safety of his work-people. He shall, when required by the Engineer, provide proper latrines and urinals to the satisfaction of the Engineer in such numbers and in such localities as he may require, and shall

take all steps necessary to compel his work-people to resort to such latrines and urinals, and shall dismiss from his employ and remove from the works any one detected obeying the calls of nature in any place, other than the conveniences allotted for such purposes. The said latrines shall be under the superintendence and orders of the Engineer or his subordinates, and shall be served with Municipal Halalkhore service. The Contractor shall, on no account, allow any huts to be erected on Municipal property unless otherwise permitted by the Engineer in writing, to be inhabited after sunset by anyone except the watchmen required for the Works, and none of his employees, except such watchmen as aforesaid, shall sleep at night on any part of the Works. In case of any offence committed by any of the staff/workers or employees of the Contractor against any of the provisions of this condition the Contractor shall be liable to a penalty not exceeding Rupees Ten thousand per day for every such offense and the same shall be charged to the amount of the Contractor.

If the works are situated outside the limits of Greater Mumbai, rules and regulations of the local authority shall be made applicable to the Contractors and all the cost and any local taxes thereof shall be borne by the Contractor.

5.uSafety Provisions:

The Contractor shall at his own expense arrange for the safety provisions indicated in Annexure 'C' or as required by the Engineer, in respect of all labour directly or indirectly employed for performance of the Works and shall provide all facilities in connection therewith. In case the Contractor fails to make arrangements and provide necessary facilities as aforesaid, the Engineer shall be entitled to do so and recover the costs thereof from the Contractor.

5.v) Provision of first aid.:

The Contractor shall at his own cost provide and maintain at the site of works a standard first aid box as directed and approved by the Engineer for the use of his own as well as the Municipal Staff on site.

5.w) <u>Apprentices :</u>

The Contractor shall during the term of this agreement maintain as a part of his organization a system of apprenticeship for training craftsmen, as may be approved by the Engineer. Failure on the part of the Contractor to observe the stipulations of this condition shall be deemed to be a failure to employ a sufficient number of proper and efficient workmen within the meaning of Clause 2b and all the rights and remedies of the Commissioner therein provided including the power to determine the Contract shall be applicable in such case. The Contractor shall duly comply with provisions of the Apprentice Act (1961); failure or neglect to which he shall be subject to all liabilities and penalties provided by the said Act and Rules

5.x)Storage of Explosives:

The Contractor shall obtain the previous permission of the competent authority such as the Chief of Fire Services for the site, manner and method of storing explosives near the site of work. All handling of explosives, including storage, transport shall be carried out under the rules approved by The Petroleum and Explosives Safety Organisation (PESO) formerly Department of Explosives, Nagpur.

5.y) Contractor's other liabilities & Insurance:

From commencement to completion of the works, the Contractor shall take full responsibility for the care thereof and for taking precautions to prevent loss or damage and to minimize the loss or damage to the greatest extent possible and shall be liable for any damage or loss that may happen to the works or any part thereof and all Municipal Tools and Plants from any cause whatsoever (Save and except Expected Risks) and shall at his own cost repair and make good the same so that at completion, the works and all Municipal Tools and Plants shall be in good order and condition and in conformity in every respect with the requirements of the Contract and instructions of the Engineer.

In the event of any loss or damage to the works or any part thereof or to any Tool and Plant or to any material or article at the site from any of the Expected Risks of the following provisions shall have effect.

- a. The Contractor shall as may be directed in writing by the Engineer, remove from the site any debris and so much of the works as shall have been damaged, taking to the Municipal Stores such Municipal Tools & Plants articles and / or materials as may be directed.
- b. The Contractor shall, as may be directed in writing by the Engineer, proceed with the erection and completion of the works in accordance with the provisions and conditions of the Contract.
- c. There will be added to the Contract price the net amount due, ascertained in the same manner as per deviations, or as prescribed for payment, in respect of the re-execution of the works lost or damaged, the replacement of any Tools and Plants and of any materials and articles lost or damaged but not incorporated in the Works on the day when the loss or damage occurred and removal, by the Contractor as provided above of Municipal Tools and Plants, articles and / or materials to the municipal stores and of the debris and damaged works referred to therein.

Before commencing execution of the work, the Contractors shall without in any way limiting his obligations and responsibilities under this condition, insure against any damage loss or injury which may occur to any property (Private, Government and / or Municipal) or to any person (including any employee of the Municipal Corporation) by or arising out of the contract.

"All insurances to be affected by the Contractors and / or his sub-contractors shall be taken out with Directorate of Insurance, Maharashtra State only". In case, however, a particular aspect is not covered under the policy to be obtained from the Directorate of Insurance, Maharashtra State, the Contractor will be allowed to have such insurance from other insurance company with the prior permission of the Commissioner.

If required by the Engineer, the Contractor shall, without limiting the obligations and responsibilities under this condition insure that work (from commencement to completion) the Municipal Tools and Plants hired by the Contractor and all materials at site at their full value against the risk of loss or damage from whatever cause arising, other than that of the Excepted Risks. The said insurance shall be in the joint names of the Commissioner and the Contractor, and the Contractor shall deposit with the Commissioner the said policy or policies along with the receipts for premium of such insurance from time to time. All moneys payable by the insurers

under such policy or policies shall be recovered by the Municipal Corporation and shall be paid to the Contractor in installments by the Commissioner for the purpose of rebuilding or replacement or repair of the works and or goods destroyed or damaged as the case may be.

If the Contractor has a blanket insurance policy for all his works and the policy covers all the items to be insured under this condition, the said policy shall be assigned by the Contractor, in favor of the Municipal Corporation; provided, however, if any amount is payable under the policy by the insurers in respect of Works other than the works under this Contract the same maybe recovered by the Contractor directly from the insurers.

PROVIDED always that the Contractor shall not be entitled to payment under the above provisions in respect of so much loss or damage as have been occasioned by any failure on his part to perform his obligations under the Contract or not taking precautions to prevent loss or damage or minimize the amount of such loss or damage.

Where a Municipal Building part thereof is rented by the contractor or is allowed to be used by him he shall insure the entire building if the building or any part thereof is used by him for the purpose of storing or using materials of combustible nature as to which the decision of the Engineer shall be final and binding.

The Contractor shall indemnify and keep indemnified the Municipal Corporation against all losses and claims for injuries or damage to any person or any property whatsoever which may arise out of or in consequence of the construction and maintenance of the work and against all claims, demands, proceedings, damages, coasts, charges and expenses whatsoever in respect of or in relation thereto.

PROVIDED always that nothing herein contained shall be deemed to render the Contractor liable for or in respect of or to the Municipal Corporation against any compensation or damage caused by the Expected Risks.

The Contractor shall at all times indemnify the Municipal Corporation against all claims, damages or compensation under the provisions of Payment of Wages Act, 1936, Minimum Wages Act 1948, Employers Liability Act, 1938, the Workmen's Compensation Act, 1923, Industrial Dispute Act 1947, Indian Factories Act 1948 and Maternity Benefit Act 1961 or any modifications thereof and rules made there under from time to time or as a consequence or any accident or injury to any workman or other persons in or about the works, whether in the employment of the Contractor or not, save and except where such accident or injury have resulted from any act of the Municipal Corporation, their agents or servants and also against all cost, charges and expenses of any suit, action or proceedings arising out of such accident or injury and against all sum or sums which may with the consent of the Contractor be paid to compromise or compound any such claim without limiting his obligations and liabilities as above provided. The Contractor shall insure against all claims damages or compensation payable under the various acts mentioned above or any modifications thereof or any other law relating thereto. Third party policy should be valid till the end of contractual obligation of contractor for reasons attributable to the scope of work of contractor.

The aforesaid insurance policies shall provide that they shall not be canceled till the Commissioner has agreed to their cancellations.

The Contractor shall prove to the Commissioner from time to time that he has taken out all the insurance policies referred to above and has paid the necessary premium for keeping the policies alive till the expiry of the Defects Liability Period after completion of work for a period not exceeding 12 months as per directives of Directorate of Insurance, Maharashtra State.

The Contractor shall ensure that similar insurance policies are taken out by his sub-Contractors (if any) and shall be responsible for any claims or losses to the Municipal Corporation resulting from their failure to obtain adequate insurance protection in connection thereof. The Contractor shall produce or cause to be produced by his Sub-Contractor (if any) as the case may be, the relevant policy or policies and premium receipts as and when required by the Commissioner.

If the Contractor and / or his sub-Contractors (if any) shall fail to effect and keep in force the insurance referred above for any other insurance which he / they may require to effect under the terms of Contract then and in any such case the Commissioner may without being bound to effect and keep in force any such insurance and pay premium or premium as may be necessary for that purpose and from time to time deduct the amount so paid by the Municipal Corporation plus 20 percent of premium or permit amount as service charges from any money due or which may become due to the Contractor or recover the same as debt from the Contractor. All insurances to be effected by the contractor and / or his sub-contractor shall be taken out only with the insurance Company or companies approved by the Municipal Commissioner.

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

(a) Any National or State Statute, Ordinance, or other Law, or any regulation, or bye-law of any local or other duly constituted authority in relation to the execution and completion of the Works and the remedying of any defects therein, and

(b) The rules and regulations of all public bodies and companies whose property or rights are affected or may be affected in any way by the Works, and the Contractor shall keep the Employer indemnified against all penalties and liability of every kind for breach of such provision. Provided always that the employer shall be responsible for obtaining any planning, zoning or other similar permission required for the Works to proceed and shall indemnify the Contractor.

5.z) Changes in constitution: Where the contractor is a partnership firm, the prior approval in writing of the Commissioner shall be obtained before any change is made in the constitution of the firm. Where the contractor is an individual or Hindu Undivided Family business concern such approval as aforesaid shall likewise be obtained before the contractor enters into any partnership agreement where under the partnership form would have the right to carry out the work hereby undertaken by the Contractor. If prior approval as aforesaid is not obtained the contract shall be deemed to have been assigned in contravention of the condition no.13 g hereof and the same action may be taken and the same consequences shall ensure as provided for in the said condition.

5.aa) Facilities to the other Contractors :

The contractor shall, in accordance with the requirements of the Engineer, afford all reasonable facilities to other Contractors engaged contemporaneously on separate Contracts in connection

with the Works and for departmental labour and labour of any other properly authorized authority or statutory body which may be employed at the Site on execution of any work not included in the Contract or of any Contract which the Municipal Corporation may enter into in connection with or ancillary to the Works.

5.ab)Patent, Right and Royalties:

The contractor shall save harmless and indemnify the Corporation from and against all claims and proceedings for or on account of infringement of any Patent rights, design trademark or name of other protected rights in respect of any constructional plant, machine work, or material used for or in connection with the Works or any of them and from and against all claims, proceedings, damages, costs, charges and expenses whatsoever in respect thereof or in relation thereto. Except where otherwise specified, the contractor shall pay all tonnage and other royalties, rent and other payments or compensation, if any, for getting stone, sand, gravel, clay or other materials required for the works or any of them.

5.ac) Production of Vouchers:

The Contractor shall, produce all quotations, invoices vouchers and accounts or receipt etc. to prove that the materials supplied by him are in conformity with the specifications laid down in the Contract and the same are brought to the site and utilized on the said works.

5.ad) Employment of local personnel:

The contractor is encouraged to the extent practicable and reasonable to employ staff and labour with appropriate qualifications from locally or within India available man power.

5.ae) Personnel:

The Contractor shall employ the key personnel named in the schedule of key personnel (annexure E) or other personnel approved by the Engineer to carry out the functions. The Engineer will approve any proposed replacement of key personnel only if their qualifications, abilities and relevant experience are substantially equal to or better than those of the personnel listed in the schedule.

5. af) Contractor to keep site clear / Clearance of site after completion of works

i) Upon the issue of any Taking over certificate the Contractor shall clear away and remove from that part of the site to which such Taking-over Certificate relates all contractor's equipment, surplus materials, rubbish and temporary works of every kind, and leave such part of the site and works clean and in a workman like condition to the satisfaction of the Engineer. If the contractor does not clear the site within 15 days all material will be confiscated and no compensation shall be paid and the site will be cleared at risk and cost of the Contractor. A penalty of minimum Rs5000/ per day per site on part thereof shall be levied on the contractor till the requirements of this clause are complied with satisfaction of the Engineer.

ii) Contractor shall ensure that all vehicles leaving the site shall be cleared adequately to avoid spreading of dirt, dust and mud in the surrounding premises. Also, no material carried in the

vehicle shall be allowed to spill material over the sides on the roads, pavement, etc. Any noncompliance will attract penalty as per condition number 14a.

5. ag) Clearance of site after completion of works

i) Upon the issue of any Taking over certificate the Contractor shall clear away and remove from that part of the site to which such Taking-over Certificate relates all contractor's equipment, surplus materials, rubbish and temporary works of every kind, and leave such part of the site and works clean and in a workman like condition to the satisfaction of the Engineer. If the contractor does not clear the site within 15 days all material will be confiscated and no compensation shall be paid and the site will be cleared at risk and cost of the Contractor.

6.Labour:

6.a) Employment of labour:

i)The Contractor shall employ the labour in sufficient numbers to maintain the required rate of progress and of quality to ensure workmanship, of the degree specified in the Contract and to the satisfaction of the Engineer. The Contractor shall not employ in connection with the Work any child who has not completed his 15th year of age. He shall also not employ an adolescent who has not completed his 18th year unless he is certified fit for work as an adult as prescribed under clause (b) of sub-section (2) of section 69 of the Factories Act, 1948.

The Contractor shall also see that all the provisions regarding employment of yond persons covered by the Employment of Children Act, 1933 and the Factories Act, 1948 as amended from time to time shall be fully complied with. The Contractor shall also see that the provisions set for under the Minimum Wages Act and contract regulation and abolition Act, 1970 with the Maharashtra Contract Labour (Regulation and Abolition) Rules 1971 as amended from time to time are fully complied with by him and shall maintain necessary registers and records for payment of wages, overtime, etc. made to his workmen as required by the Conciliation Officer (Central), Ministry of Labour, Government of India, or such other authorized person appointed by the Central or State Government.

The Contractor shall make his own arrangement for the engagement of all labour local or otherwise.

The Contractor shall be encouraged to employ, to the extent practicable and reasonable, staff and labour from sources within India.

The Contractor shall indemnify the Municipal Corporation or any agent, servant or employee of Municipal Corporation for any lapses on the part of contractor on account of non-compliance of above referred acts.

ii)<u>Supply of Water</u> : The Contractor shall having regard to local conditions, provide on the site, to the satisfaction of the Engineer's representative, an adequate supply of drinking and other water for the use of Contractor's staff and work people.

iii) <u>Alcoholic Liquor or drugs:</u>The Contractor shall not otherwise than in accordance with statutes, ordinances and Government regulation or orders for the time being in force, import,

sell, give, barter or otherwise dispose of any alcoholic liquor or drugs, or permit or suffer any such importations, sale, gift, barter or disposal of his sub-contractor, agents or employees.

iv) <u>Arms and Ammunitions</u>: The Contractor shall not give, barter or otherwise dispose off to any person or persons, any arms or ammunitions of any kind or permit or suffer the same as aforesaid.

v)<u>Festivals and Religious Custom</u>. The Contractor shall in all dealings with labour in his employment have due regard to all recognized festivals, days of rest and customs religious or other customs.

vi)<u>Epidemics</u>In the event of any out-break of illness of an epidemic nature the contractor shall comply with and carry out such regulations, orders and requirements as may be made by the Government or the local medical or sanitary authorities for the purpose of dealing with and overcoming the same.

vii) <u>Disorderly conducts etc</u>: The Contractor shall at all times take all reasonable precautions to prevent any unlawful, riotous or disorderly conduct by or amongst his employees and for the preparation of peace and protection of persons and property in the neighborhood of the works against the same.

viii)<u>Observance by Sub-contractors</u>The Contractor shall be responsible for observance by his sub-contractors of the foregoing provisions.

ix) <u>Return of Labour etc:</u> The Contractor shall, if required by the Engineer, deliver this to the Engineer's Representative, or office, a return in detail in such form and at such intervals as Engineer may prescribe showing supervisory staff and the number of the several class of labour from time to time employed by the Contractor on the Site and such information respecting constructional plant as the Engineer's representative may require.

x)<u>Safety Engineer</u>The Contractor shall have on his staff at the Site an officer whose sole task shall be to deal with matters regarding the safety and protection against accidents of all staff, labour and Contractor's Equipment. This officer shall be qualified for this work and shall have the authority to issue instructions and shall take protective measures to prevent accidents.

xi) <u>Burial or Cremation of the Dead</u> The Contractor shall make all necessary arrangements for the transport, to any place as required for burial or cremation, of any of his expatriate employees or members of their families who may die in India. The Contractor shall also be responsible to the extent required by the local regulations, for making any arrangements with regard to burial or cremation of any of his local employed who may die while engaged upon the Works.

<u>xii) Work Permits for Foreign Personnel</u> The Government of India maintains a system of strict regulations concerning the employment and residence of foreign personnel in India.

<u>xiii) Measures Against Insect and Pest Nuisance</u> As soon as practicable after receipt of the Letter of Acceptance, the Contractor shall ascertain the current requirements of the regulations from the authorities concerned and shall ensure that such requirements are complied with in all respects.

<u>xiv</u>) Repatriation of Labour The Contractor shall be responsible for the timely acquisition and subsequent maintenance of the necessary permits for all of his employees who are required to work and/or reside in India at any time during the course of the Contract. The Contractor shall further ensure that all Sub-Contractors employed by him comply with the forgoing requirements in respect of their employees

6.b) Compliance with Labour Regulation:

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

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

SALIENT FEATURES OF SOME MAJOR LABOUR LAWS APPLICABLE TO ESTABLISHMENTS ENGAGED IN BUILDING AND OTHER CONSTRUCTION WORK.

• Workman Compensation Act, 1923:

The Act provides for compensation in case of injury by accident arising out of and during the course of employment.

• Payment of Gratuity Act, 1972:

Gratuity is payable to an employee under the Act on satisfaction of certain conditions on separation if an employee has completed 5 years service or more or on death at the rate of 15 days wages for every completed year of service. The act is applicable to all establishments employing 10 or more employees.

• Employees PF and Miscellaneous Provision Act, 1952:

The Act provides for monthly contributions by the employer plus workers @ 10% or 8.33%. The benefits payable under the Act are -

- Pension or family pension on retirement or death as the case may be.
- Deposit linked insurance on the death in harness of the worker.
- Payment of PF accumulation on retirement / death, etc.

• Maternity Benefit Act, 1951:

Act provides for leave and some other benefits to women employees in case of confinement or miscarriage etc.

• Contract labour (Regulation and Abolition) Act, 1970:

The Act provides for certain welfare measures to be provided by the contractor to contract labour and in case the contractor fails to provide, the same are required to be provided by the Principal Employers by law. The principal employer is required to take Certificate of Registration and the Contractor is required to take a License from the designated Officer. The Act is applicable to the establishment or contractor of principle employer if they employ 20 or more contract labour.

• Minimum Wages Act, 1948:

The Employer is supposed to pay not less than the Minimum Wages fixed by appropriate Government as per provisions of the act if the employment is a scheduled employment Construction of buildings, roads, runways are scheduled employments.

• Payment of Wages Act, 1936:

It lays down as to by what date the wages are to be paid, when it will be paid and what deductions can be made from the wages of the workers.

• Equal Remuneration Act, 1979:

The Act provides for payment of equal wages for work of equal nature to Male & Female workers and not for making discrimination against Female employees in the matters of transfers, training and promotions, etc.

• Payment of Bonus Act, 1965:

The Act is applicable to all establishments employing 20 or more workmen. The Act provides for payments of annual bonus subject to a minimum of 8.33% of wages and maximum of 200% of wages to employees drawing Rs.35,000/- p.m. or less. The bonus to be paid to or employees getting Rs.2,500/- p.m. above upto 3,500/- p.m. shall be worked out by taking wages as Rs.2,500/- p.m. only. The act does not apply to certain establishments. The newly set up establishments are exempted or five years in certain circumstances. Some of the State Governments have reduced the employment size from 20 to 10 for the purpose of applicability of the Act.

• Industrial Disputes Act, 1947:

The Act lays down the machinery and procedure for resolution of industrial disputes, in what situations a strike or lock-out becomes illegal and what are the requirements for laying off or retrenching the employees or closing down the establishment.

• Industrial Employment (Standing Orders) Act, 1946:

It is applicable to all establishments employing 1000 or more workmen (employment size reduced by some of the States and Central Government to 50). The Act provides for laying

down rules governing the conditions of employment by the employer or matters provided in the Act and get the same certified by the designated Authority.

• Trade Unions Act, 1926:

The Act lays down the procedure for registration of trade unions of workmen and employers. The trade unions registered under the Act have been given certain immunities from civil and criminal liabilities.

• Child labour (prohibition and regulation) Act, 1986:

The Act prohibits employment of children below 14 years of age in certain occupation and processes and provides for regulation of employment of children in all other occupations and processes. Employment of child labour is prohibited in Building and Construction Industry.

 Inter-State migrant Workmen's (Regulation of Employment and Conditions of Service) Act, 1979:

The Act is applicable to an establishment which employees 5 or more inter-state migrant workmen through an intermediary (who has recruited workmen in one state for employment in the establishment situated in another state). The inter-state migrant workmen, in an establishment to which this Act becomes applicable, are required to be provided certain facilities such as housing, medical aid, traveling expenses from home upto the establishment and back, etc.

• The Building & other Construction Workers (Regulation of Employment and Conditions of Service) Act, 1996 and the Cess Act of 1996.

All the establishments who carry on any building or other construction work and employ 10 or more workers are covered under this Act. All such establishments are required to pay cess at rate no exceeding 2% of the cost of construction as may be notified by the government. The employer of the establishment is required to provide safety measures at the Building or Construction work and other welfare measures, such as, Canteens, First-Aid facilities, ambulance, housing accommodation for workers near the workplace etc. The employer to whom the Act applies has to obtain a registration certificate from the Registering Officer appointed by the Government.

• The Factories Act, 1948:

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

xvii) E.S.I.C. Act, 1948

The tenderer shall have valid registration certificate under E.S.I.C Act 1948, if the tenderer/bidder has less than 10(ten) or more than 20(twenty) Employee/persons on his establishment and work is carried out with the help of energy. This shall be submitted on undertaking on stamp paper of Rs.100/-.

6.c) Regulation Employment Welfare:

The Contractor, which expression shall include sub-contractor or any such person or group of persons representing the contractor who are and, required to handle iron and steel materials shall register themselves as employer with the Mumbai Iron and Steel Labour Board and shall completely fulfill all the obligatory provisions of the Maharashtra Mathadi, Hamal and other Manual Workers (Regulation of Employment Welfare Act, 1969) and the Mumbai Iron and Steel Unprotected Workers (Regulation of Employment and Welfare Scheme, 1970). The consequences of failure of compliance of any of these provisions will entirely be the liability and responsibility of the Contractor.

7. Materials, Plant and Workmanship

7.a) Plant and Equipment:

The Contractor shall arrange at his own expense all tools, plant and equipment required for execution of Works. If required by the Contractor and if available the Municipal Corporation may supply such of the tools, plant and equipment as are available, to the Contractor at the rates and terms to be specified by the Engineer. No tools, plant and equipment once brought to the work site shall be removed without the written permission or order of the Engineer, until he has certified the completion of the work.

If any Tools, Plants and equipment brought on site, are in the opinion of the Engineer inefficient, bad or of inferior quality or are unsuited for the Works then such tools, plant and equipment shall not be used on the Works but shall be removed by the Contractor at his own expense within twenty four hours after the service of a written order or notice from the Engineer to that effect and fresh tools, plant and equipment be substituted in lieu of that ordered to be removed by the Engineer. The Employer will use his best endeavors in assisting the Contractor,where required, in obtaining clearance through the Customs of Contractor's equipment, material and other things required for the Works but shall not be liable to the Contractor for any loss resulting from clearance being delayed or refused.

7.b) Use of Specification B.I.S.:

In case where no particular specification is given for any article to be used under the contract, the relevant specification, where on B.I.S. exists, of the Bureau of Indian Standards. (BIS 1200) shall apply.

The contractor shall execute the whole and every part of the work the most substantial and workman like manner and both has regards material and every other respect in strict accordance with specifications. The contractor shall also confirm exactly, fully and faithfully to the designs, drawings and instructions in writing relating to the work signed by the Engineer Incharge and lodged in his office and to which the contractor shall be entitled to have access for the purpose of inspection at such office, or on the site or work during office hours. The contractor shall be entitled to receive three sets of contract drawings and working drawings as well as one certified copy of the accepted tender along with the work order free of cost.

7.c) Work to be open to Inspection and Contractor or Responsible agent to be presesnt:

All works under or incourse of execution or executed in pursuance of the contract shall at all times be open to the inspection and supervision of the Eng-in-charge and his subordinates and the contractor shall at all times during the usual working hours, at all other times, during the usual working hours and at all other times at which reasonable notice of the intention of the Eng-in-charge and his subordinates to visit the works shall have been given to the contractor, either himself be present to receive orders and instruction or have responsible agent duly accredited in writing present for that purpose. Order given to the contractors' duly authorized agent shall be considered to have the same force and effect as if they had been given to the contractor himself.

The Engineer and any person authorized by him shall at all reasonable times have access to the site and to all workshops and places where materials or plant are being manufactured. Fabricated or prepared for the works and the contractor shall afford every facility for and every assistance in obtaining the right to such access.

The Engineer shall be entitled, during manufacture, fabrication or preparation to inspect and test the material and plan to be supplied under the contract. If materials or plant are being manufactured, fabricated or prepared in workshops or places other than those of contractor, the contractor shall obtain permission for the Engineer to carry out such inspection and testing in those workshop or places. Such inspection or testing shall not release the Contractor from any obligation under the contract.

All works embracing more than one process shall be subject to examination and approval at each stage thereof and the contractor shall give due notice to the Engineer or his authorized representative when each stage is ready. In default of such notice, the Engineer shall be entitled to appraise the quality and extent thereof.

No work shall be covered up or put out of view without the approval of the Engineer or his authorized representative and the contractor shall afford full opportunity for examination and measurement of any work which is about to be covered up or out of view and for examination of foundation before permanent work is placed thereon.

The Contractor shall give due notice to the Engineer or his authorized representative whenever any such work or foundation is ready for examination and the Engineer or his representative shall without unreasonable delay, unless he consider it necessary and informs the contractor, in writing accordingly, attend for the purpose of examining and measuring such work or examining such foundations. In the event of the failure of the contractor to give such notice he shall, if required by the Engineer, uncover such work at the Contractor's expense.

The contractor shall agree with the Engineer on the time and place for the inspection or testing of any materials of plans as provided in the contract. The Engineer shall give the contractor reasonable advance notice of his intention to carry out the inspection or to attend the tests. If the Engineer, or his duly authorized representative, does not attend on the date agreed, the contractor may, unless otherwise instructed by the Engineer, proceed with the tests, which shall be deemed to have been made in the presence of the Engineer. The contractor shall forthwith forward to the Engineer duly certified copies of the test readings. If the Engineer has not attended the tests, he shall accept the said readings as correct.

If at the time and place agreed the materials or plant are not ready for inspection or testing or if, as a result of the inspection or testing referred to in this Clause, the Engineer determines that the materials or plant are defective or otherwise and not in accordance with the contract, he may reject the materials or plant and shall notify the Contractor thereof immediately. The notice shall state the Engineer's objections with reasons. The contractor shall then make good the defect or ensure that rejected materials or plant shall be made or repeated under the same terms and conditions. All costs incurred by the Employer by the repetition of the tests shall after due consultation with the Employer be determined by the Engineer and shall be recoverable from the contractor by the Employer and maybe deducted from any sums due or to become due to the contractor and the Engineer shall notify the contractor accordingly.

The Engineer shall have authority to issue instructions from time to time for (a) the removal from the site within such time or times as may be specified in the instruction of any materials or plant which is the opinion of the Engineer, are not in accordance with the contract. (b) the substitution of proper and suitable materials or plant and (c) the removal and proper re-execution notwithstanding any previous test thereof or interim payment therefore of any work which in respect of :

i) materials plant or workmanship or

ii) design by the contractor or for which he is responsible, is not, in the opinion of the Engineer, in accordance with the contract.

In case of default on the part of the contractor in carrying out such instruction within the time specified therein or, if non, within a reasonable time, the Employer shall be entitled to employer and a other persons to carry out the same and all costs consequent thereon or incidental shall, after due consultation with the Employer, be determined by the Engineer and shall be recoverable from the contractor by the Employer from any monies due or to become due to the contractor and the Engineer shall notify the contractor accordingly.

Departmental officers concerned with the works shall have powers to any time to inspect examine any part of the works and the contractor shall give such facilities as may be required for such inspection and examination.

The Engineer may delegate inspection and testing of materials or plant to an independent inspector. For this purpose such independent inspector shall be considered as an assistant of the Engineer. Notice of such appointment (not being less than 14 days) shall be given by the Engineer to the Contractor.

7.d) <u>Uncovering and making good</u>:

The Contractor shall uncover any part of the works and / or make opening in or through the same as the Engineer may from time to time direct for his verification and shall reinstate and make good such part to the satisfaction of the Engineer, if any such part has been covered up or put out of view after being approved by the Engineer and is subsequently found on uncovering to be executed in accordance with the contract, the expenses of uncovering and / or

making openings in or through, reinstating and making good the same shall be borne by the Corporation except in cases where uncovering etc is ordered by the Engineer as a reasonable consequence of previously detected defective work or its symptoms suggesting a failure to comply with the contract. In any other case all such expenses shall be borne by the Contractor.

7.d..i) Notice To Be Given Before Work Is Covered Up

The contractor shall givenot less than ten days' notice in writing to the Eng-In-Charge or his subordinate incharge of the work before covering up or otherwise placing beyond the reach of measurement any work in order that the same may be measured and correct dimension thereof taken before the same is so covered up or placed beyond the reach of measurements and shall not cover up or place beyond the reach of measurement any work without the consent in writing of the Eng-In-Charge or his subordinate incharge of the work, and if any work shall be covered up or placed beyond the reach of measurement, without such notice having been given or consent obtained the same shall be uncovered at the contractors expenses, and in default thereof no payment or allowance shall be made for such work or for the materials with which the same was executed

7.e) Materials:

• Material to be provided by the Contractor:

All materials to be provided by the Contractor shall be in conformity with the specifications laid down in the contract and the Contractor shall, furnish proof to the satisfaction of the Engineer that the materials so comply. Contractor shall produce proof viz. challans, bills, vouchers, etc. so as to ensure that the material was brought on site and quantities used as per the norms, specifications, etc.

The Contractor shall, at his own expense and without delay, supply to the Engineer samples of materials proposed to be used in the Works. The Engineer shall within seven days of supply of samples or within such further period as he may require and intimated to the contractor in writing, inform the contractor whether the samples are approved by him or not. If the samples are not approved the contractor shall forthwith arrange to supply to the Engineer for approval fresh samples complying with the specifications laid down in the contract.

The Engineer shall have full powers to require removal of any or all of the materials brought to site by the Contractor which are not in accordance with the contract specifications or which does not conform in character or quality to the samples approved by him. In case of default on the part of the Contractor in removing the rejected materials, the Engineer shall be at liberty to have them removed by other means. The Engineer shall have full powers to procure other proper materials to be substituted for rejected materials and in the event of the Contractor refusing to comply, he may cause the same to be supplied by other means. All costs, which may attend upon such removal and / or substitution shall be borne by the Contractor.

Subject as hereinafter provided in Clause 3(a), all charges on account of Octroi, terminal or sales tax and other duties on material obtained for the works from any source shall be borne by the Contractor.

The Engineer shall be entitled to have tests carried out as specified in the contract for any materials supplied by the Contractor other than those for which as stated above, satisfactory proof has already been produced, at the cost of the contractor and the contractor shall provide at his expense all facilities which the Engineer may require for the purpose.

If no tests are specified in the contract, and such tests are required by the Engineer the contractor shall provide all facilities required for the purpose and charges for these tests shall be borne by the contractor. In case of third party audit, the cost implication has to be borne by the contractor.

The cost of the materials consumed in test shall be borne by the contractor in all cases except when otherwise provided. If the materials used on works are found to be substandard in the test, then the same will be removed by the contractor and replaced by good materials at his cost.

7.f) Stock of Materials required:

The Contractor shall at his own expense provide and furnish himself with sheds and yards in such situations and in such numbers as, in the opinion of the Engineer are requisite for carrying out the Works under this contract, and the Contractor shall keep at each of the sheds and yards a sufficient quantity of materials in stock so as not to delay the carrying out of works with due expedition and the Engineer and his subordinates shall have free access to the said sheds or yards at any time for the purpose of inspecting the stock of materials so kept in hand any material or article, which the Engineer may object to, shall not be brought upon or used in the work but shall be forthwith removed from the sheds or yards by the contractor at his own cost. The contractor will however be allowed to use for the above purpose the completed portion of the buildings if available.

7.g) Photographs of the works:

No photographs of the work or any part there of or equipment employed thereon shall be taken or permitted by the contractor to be taken by any of his employees or any employees of his sub-contractor without the prior approval of the Engineer in writing and no such photographs shall be published or otherwise circulated without the approval of the Engineer in writing.

8.Suspension, Commencement and delays

8.a) Suspension of work:

- The contractor shall, on receipt of the order in writing of the Engineer, suspend the progress of the Works or any part thereof for such time and in such manner as the Engineer may consider necessary for any of the following reasons:-
 - On account of continued non-compliance of the instructions of the Engineer or any other default on the part of the contractor, or
 - For proper execution of the works or part thereof for reasons other than the default of the contractor, or
 - For safety of the works or part thereof.

The contractor shall, during such suspension, properly protect and secure the works to the extent necessary and carry out the instructions given in that behalf by the Engineer.

• If the supervision is ordered for reasons (i) and (iii) in sub-para (a) above, the contractor shall be entitled to an extension of time equal to the period of every such suspension plus a reasonable time as decided by the Engineer.

If the suspension is ordered for reasons of (i) in sub-para (a) above, the Engineer shall have powers to suspend the payment under the contract. Such suspension of payment may be continued until default shall have been rectified.

8.b) Rate of progress:

If for any reason, which does not entitle the Contractor to an extension of time, the rate of progress of the Works or any Section is at any time, in the opinion of the Engineer, shall so notify the Contractor who shall thereupon take such steps as are necessary, subject to the consent of the Engineer, to expedite progress so as to comply with the Time for completion. The Contractor shall not be entitled to any additional payment for taking such steps. If, as a result of any notice given by the Engineer under this Clause, the Contractor considers that it is necessary to do any work at night or on locally recognized days of rest, he shall be entitled to seek the consent of the Engineer so to do. Provided that if any steps, taken by the Contractor in meeting his obligations under this Clause, involve the employer in additional supervision costs, such costs, shall, after due consultation with the Employer, be determined by the Engineer and shall be recoverable from the Contractor by the Employer, and maybe deducted by the Employer from any monies due or to become due to the Contractor and the Engineer shall notify the Contractors accordingly.

8.c) <u>Restriction on Working Hours:</u>

i. No work shall be done between sunset and sunrise or on Sunday or Municipal holidays and except with the special sanction of the Engineer in writing previously obtained and the withholding of such sanctions shall be no ground of complaint on the part of the contractor or cause for compensation to him, or excuse for not completing the work within the contract period. The period within which the work has to be carried out and completed has been fixed in terms of this clause with the provision that the total number of hours of work permissible shall not exceed 48 hours in a week and in no case more than 8 hours on any working day, the actual time within which the said hours shall be worked being subject to mutual arrangements with the Contractor at the commencement of the works or from time to time as may be required and provided that all works shall be stopped for rest and meals for one hour at about mid-day exclusive of the permissible hours aforesaid for the works.

Though sanction may be accorded to the Contractor to work on days and at times otherwise normally non-permissible under this Contract, the Contractor shall be required to bear the cost for such supervision as in the opinion of the Engineer may be necessary at these times. Also he has to obtain the necessary permission from police for working at night times and otherwise normally non-permissible times.

It should be distinctly understood that the granting of permission to work extra hours or to work on Sundays and holidays will be entirely at the discretion of the Engineer and cannot be claimed by the Contractor as a matter of right.

i. If on the other hand the Engineer requires that the work shall be proceeded with on days and at times otherwise normally non-permissible under this contract the contractor shall proceed with the work but he will not be required in such cases to bear the cost of the Municipal establishment employed at the time.

The contractor at all times during the continuance of this contract shall in all his dealings with local labour for the time being employed on the works contemplated by this contract have due regard to all local festivals and religious or other customs and all disputes, matters and questions arising between the contractor and any of his agent on the one hand and any local labour on the other hand with respect to any matter or thing in any way connected with this contract shall be decided by the commissioner whose decision shall be final and binding on all parties.

8.d) Commencement Time and Extension for Delay:

The time allowed for execution for the works as specified in the contract documents shall be the essence of the contract. The execution of the works shall commence from the date specified by the Engineer in writing. If the contractor fails or neglects to commence the execution of the Works as aforesaid, the Municipal Corporation shall without prejudice to any other right or remedy will be at liberty to forfeit the security deposit absolutely.

i) Work during Monsoon: In any case where the time prescribed for completion of any work is exclusive of monsoon period. No new trench work should be started after 15th May and existing trenches are required to be reinstated by 31st May every year. The site shall be cleared in all respect including removal of surplus material on or before 10th June of every year. The monsoon period shall be deemed to be from 10th June to 30th September of the calendar year. However, if the contractor is permitted by the Engineer to work during any monsoon period, all such period shall be taken into account for the calculating the contract period on pro-rata F basis as under –

Effectiv	/e	cost of work done		No. of days of
days	=	during monsoon	Х	contract period

Total cost of contract works

In the event of the contractor failing to comply with this condition, he shall be liable to pay as compensation as stated in condition no.8e.

ii) Extension of time for Completion: In the event of –

a. force majeure such as acts of God, acts of public enemy, acts of Government, floods, epidemics, etc., or

b. abnormally bad weather, or

c. serious loss of damage by fire, or

d. civil commotion, local combination of workmen, strike or lockout of any of the traders employed on the work, or

e. delay on the part of other Contractors or tradesmen engaged by the Employer in executing Works not forming part of the Contract, or

f. the ordered variations namely the amount or nature of extra or additional work

g. reasons stated in Adverse Physical Obstructions or Conditions, Delay and Disruption to Progress, or

any other cause which, in the absolute discretion of the Engineer is beyond the Contractor's control.

Being such as fairly to entitle the Contractor to an extension of the time for completion of the works, or any section or part thereof, the Engineer shall, determine the amount of such extension and shall notify the Contractor accordingly.

iii) Contractor to provide notification and detailed particulars: Provided that the Engineer is not bound to make any determination unless the contractor has –

a) Within 28 days after such event has first arisen notified the Engineer.

b) within 28 days, or such other reasonable time as may be agreed by the Engineer, after such notification submitted to the Engineer detailed particulars of any extension of time to which he may consider himself entitled in order that such submission may be investigated at the time

iv) Interim determination of extension:-Provided also that where an event has a continuing effect such that it is not practicable for the contractor to submit detailed particulars within the period of 28 days referred to in sub clause 8(d), he shall nevertheless be entitled to an extension of time provided that he has submitted to the Engineer interim particulars at intervals of not more than 28 days and final particulars within 28 days of the end of the effects resulting from the event. On receipt of such interim particulars, the Engineer shall, without undue delay, make an interim determination of extension of time and, on receipt of the final particulars, the Engineer shall review all the circumstances and shall determine an overall extension of time in regard to the event. In both the cases the Engineer shall make his determination after due consultation with the Employer and the Contractor and shall notify the Contractor of the determination, with a copy to the Employer. No final review shall result in decrease of any extension of time already determined by the Engineer.

8.e) Compensation for delay:

If the Contractor fails to compete the works and clear the site on or before the Contract or extended date(s) / period(s) of completion, he shall, without prejudice to any other right or remedy of Municipal Corporation on account of such breach, pay as agreed compensation, amount calculated as stipulated below (or such smaller amount as may be fixed by the Engineer) on the contract value of the whole work or on the contract value of the time or group of items of work for which separate period of completion are given in the contract and of which completion is delayed for every week that the whole of the work of item or group of items of work concerned remains uncompleted, even though the contract as a whole be completed by the contract or the extended date of completion. For this purpose the term 'Contract Value' shall be the value of the work at Contract Rates as ordered including the value of all deviations ordered.

- Completion period for (originally stipulated or as extended) not exceeding 6 months : to the extent of maximum 1 percent per week.
- Completion period for (originally stipulated or as extended) exceeding 6 months and not exceeding 2 years: to the extent of maximum ½ percent per week.
- Completion period for (originally stipulated or as extended) exceeding 2 years : to the extent of maximum ¼ percent per week.

When the delay is not a full week or in multiple of a week but involves a fraction of a week the compensation payable for that fraction shall be proportional to the number of days involved.

Provided always that the total amount of compensation for delay to be paid this condition shall not exceed the undernoted percentage of the Contract Value of the item or group of items of work for which a separate period of completion is given.

- i. Completion period (as originally stipulated or as extended) not exceeding 6 months: 10 percent.
- ii. Completion period (as originally stipulated or as extended) exceeding 6 months and not exceeding 2 years : 7¹/₂ percent.
- iii. Completion period (as originally stipulated or as extended) exceeding 2 years : 5 percent.

The amount of compensation may be adjusted set off against any sum payable to the contractor under this or any other contract with the Municipal Corporation.

8.f) Action And Compensation Payable In Case Of Bad Work And Not Done As Per Specifications

All works under or in course of execution or executed in pursuance of the contract, shall at all times be open and accessible to the inspection and supervision of the Engineer-incharge, his authorized subordinates in charge of the work and all the superior officers, officer of the Vigilance Department of the MCGM or any organization engaged by the MCGM for Quality Assurance and the contractor shall, at all times, during the usual working hours and at all other times at which reasonable notice of the visit of such officers has been given to the contractor, either himself be present to receive orders and instructions or have a responsible agent duly accredited in writing, present for that purpose. Orders given to the Contractor's agent shall be considered to have the same force as if they had been given to the contractor himself.

If it shall appear to the Engineer-in-charge or his authorized subordinates in-charge of the work or to the officer of Vigilance Department, that any work has been executed with unsound, imperfect or unskillful workmanship or with materials of any inferior description, or that any materials or articles provided by him for the execution of the work are unsound or of a quality inferior to that contracted for or otherwise not in accordance with the contract, the contractor shall, on demand in writing which shall be made within twelve months of the completion of the work from the Engineer-in-Charge specifying the work, materials or articles complained of notwithstanding that the same may have been passed, certified and paid for forthwith rectify, or remove and reconstruct the work so specified in whole or in part, as the case may require or as the case may be, remove the materials or articles so specified and provide other proper and suitable materials or articles at his own charge and cost. In the event of the failing to do so within a period specified by the Engineer-in-Charge in his demand aforesaid, then the contractor shall be liable to pay compensation at the same rate as under clause 8.e of the contract (for Compensation for delay) for this default. In such case the Engineer-in Charge may not accept the item of work at the rates applicable under the contract but may accept such items at reduced rates as the Engineer in charge may consider reasonable during the preparation of on account bills or final bill if the item is so acceptable without detriment to the safety and utility of the item and the structure or he may reject the work outright without any payment and/or get it and other connected and incidental items rectified, or removed and re-executed at the risk and cost of the contractor. Decision of the Engineer-in-Charge to be conveyed in writing in respect of the same will be final and binding on the contractor.

If the penalisation amount exceeds maximum limit with respect to Clause 8.e of Standard General Conditions of Contract, then a show cause notice shall necessarily be issued to the contract as to why the contract should not be terminated. The contractor will be liable for being banned/ deregistered from business dealings with MCGM. This shall be governed by relative provision in Registration Rules of MCGM and Cl.no.15 of Standard General Conditions of Contract.

8.g) Completion Certificate:

1) As soon as work is completed, the Contractor shall give notice of such completion to the Engineer and within 28 (Twenty-eight) days of receipt of such notice the Engineer shall inspect the Works and shall furnish the Contractor with a certificate of completion indicating (a) the date of completion, (b) the defects to be rectified by the Contractor, and / or (c) items for which payment shall be made at reduced rates.

When separate period of completion have been specified for items or groups of times, the Engineer shall issue separate completion certificates for such items or group of items. No certificate of completion shall be issued, nor the works be considered to be complete till the Contractor shall have removed from the premises on which the Works has been executed, all scaffolding, sheds and surplus materials, except such as required for rectification of defects, rubbish and all huts and sanitary arrangements required for his workers on the site in connection with the execution of Works as shall have been erected by the Contractor or the workmen and cleaned al dirt from all parts of building(s) in , upon or about which the Work has been executed or of which he may have had possession for the purpose of execution thereof and cleaned floors, gutters and drains, eased doors and sashes, oiled and fastenings, labeled the keys clearly and handed them over to the Engineer or his representative and made the whole premises fit for immediate occupation or use to the satisfaction of the Engineer. If the Contractor shall fail to comply with any of the requirements of this condition as aforesaid, on or before the date of completion of works, the Engineer may at the expense of the contractor fulfill such requirements and dispose of all the surplus materials and rubbish etc. as he thinks fit and the contractor shall have no claims in respect of any such material except for any sum actually realized by the sale thereof less the cost of fulfilling the requirements and any other amount that may be due from the contractor. If the expense of fulfilling such requirement is more than the amount realizes on such disposal as aforesaid, the contractor shall forthwith on demand pay such excess.

The contractor's notice of completion as aforesaid shall have to accompanied with one set of tracings of final completion drawings of RTF and six bound sets of copies of as built drawings wherever applicable and as directed by the Engineer, failing which the notice shall be deemed to have not been issued at all.

2) If at any time before completion of the entire work, items or group of items for which separate periods of completion have been specified, have been completed, the Engineer with the consent of the contractor takes possession of any part or parts of the same (any such part or parts being hereinafter in this condition referred to as 'the relevant part') then notwithstanding anything expressed or implied elsewhere in this contract.

- (a) Within 28 days (twenty-eight days) of date of completion of such items or group of items or possession of the relevant part the Engineer shall issue a completion certificate for the relevant part provided the contractor fulfills his obligation for the relevant part as in sub-para (1) above.
- (b) The defects liability period in respect of such items and relevant part shall be deemed to have commenced from the certified date of completion of such items or relevant part as the case may be.
- (c) For the purpose of ascertaining compensation for delay under condition 8ein respect of any period during which the works are not completed the relevant part shall be deemed to form a separate item or group, with date of completion as given in the contract or as extended under condition 8dand actual date of completion as certified by the Engineer under this condition.

3) If any part of the work shall have been substantially completed and shall have satisfactorily passed any final test that maybe prescribed under the contract, the Engineer may issue a certificate of completion in respect of that part of the works before completion of the whole works and upon the issue of such certificates, the contractors shall be deemed to have undertaken to complete any outstanding works in that part of the works during the period of maintenance.

8.h) Works where PERT chart is required alongwith Tender:

The contractor shall along with the tender documents submit a network based on principles of PERT / CPM wherever applicable. Milestones and pre-requisites should also be highlighted along with broad estimates for major resources like cement, steel drawings etc. The Contractors must also specify the minimum resources he will exclusively use for this project. This will include all equipment and all category of labour.

8.i) Network Schedule & Monthly Progress Reports:

On award of the contract, the Contractor shall submit the time schedule for the Works in the form of PERT Networks or Bar-chart wherever applicable. The Engineer may approve the Schedule as submitted or suggest modifications as he thinks necessary. The Contractor shall modify the chart accordingly and obtain Engineer's approval.

The schedules shall be prepared in direct relations to the time stated in the contract documents for completion of items or groups of items of work and or the contract as a whole. It shall indicate the dates of commencement and completion of various activities of the work and may be amended as necessary by agreement between the Engineer and the Contractor.

The interim payment (running bill) payable under contract condition 12 (b)shall be paid only after the network is finally approved by the Engineer.

After the issue of the letter of commencement the Contractor shall finalize the network to the satisfaction of the Engineer. This network should be detailed with a fixed project start and finish dates and should contain no activities with duration greater than 28 days. Milestones would be so determined that at least 10 percent of the events are milestones and no two milestones are more than 3 months apart.

The finalized network may be amended from time to time, if felt necessary by the Contractor, with the approval of the Engineer. A fixed sum shall be held in abeyance at the time of the next interim payment for non-attainment of each milestone in the network and shall be released only on completion of the work after deducting the compensation for delay if there is contractor's fault as per provision in condition 8eand penalty covered under Clause 14a. The fixed sum shall be

Rs.10,000/- for all contracts over Rs.25 lakhs and upto the value of Rs.100 lakhs.

Rs.20,000/- for all contracts over Rs.1 crore and upto the value of Rs.5 crores.

Rs.35,000/- for all contracts over Rs.5 crores and upto the value of Rs.10 crores.

Rs.50,000/- for all contracts over Rs.10 crores.

If the attainment of the milestones is delayed for reason not attributable to the contractors no moneys will be held in abeyance.

The Contractors will be required to submit the monthly progress reports in the given 'Monthly Report Format' as per Annexure 'D' by the 2nd day of the following month to the Engineer with a copy to the Project Planning and Control Cell. Failure on the part of the Contractor to submit monthly report in time will attract action as per Clause 14a.

8 j)Management Meetings

Either the Engineer or the contractor may require the other to attend Management meeting. The business of a management meeting shall be to review the plans for remaining works.

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

8 k) Contractors remain liable to pay compensation :

In any case in which any of the powers conferred upon the Engineer In-charge by the **relevant clauses** in documents that form a part of contract as exercised or is exercisable in the event of any future case of default by the Contractor, he is declared liable to pay compensation amounting to the whole of his security deposit. The liability of the Contractor for past and future compensation shall remain unaffected.

In the event of the Executive Engineer taking action against these *relevant clauses*, he may, if he so desires, take possession of all or any tools and plant, materials and stores in or upon the work of site thereof or belonging to the Contractor or procured by him and intended to be used for the execution of the work or any part thereof paying or allowing for the same in account at the contract rates, or in the case of contract rates not being applicable at current market rates to be certified by the Executive Engineer, may after giving notice in writing to the Contractor or his staff of the work or other authorized agent require him to remove such tools and plants, materials or stores from the premises within a time to be specified in such notice and in the event of the Contractor failing to comply with any such requisition, the Executive Engineer may remove them at the contractors expense of sell them by auction or private sell on account of the Contractor at his risk in all respects and certificate of the Executive Engineer as to the expense of any such removal and the amount of the proceeds an expense of any such sell be final and conclusive against the Contractor.

8(I) Extension Of Time In Contracts :

Subject to any requirement in the contract as to completion of any portions or portions of the works before completion of the whole, the contractor shall fully and finally complete the whole of the works comprised in the contract (with such modifications as may be directed under conditions of this contract) by the date entered in the contract or extended date in terms of the following clauses:

a)Extension attributable to MCGM

(i) Extension Due To Modification: If any modifications have been ordered which in the opinion of the Engineer have materially increased the magnitude of the work, then such

extension of the contracted date of completion may be granted as shall appear to the Engineer to be reasonable in the circumstances, provided moreover that the Contractor shall be responsible for requesting such extension of the date as may be considered necessary as soon as the cause thereof shall arise and in any case should not be less than 30 days before the expiry of the date fixed for completion of the works.

(ii) Extension For Delay Due To MCGM: In the event of any failure or delay by the MCGM to hand over the Contractor possession of the lands necessary for the execution of the works or to give the necessary notice to commence the works or to provide the necessary drawings or instructions or any other delay caused by the MCGM due to any other cause whatsoever, then such failure or delay shall in no way affect or vitiate the contract or alter the character thereof or entitle the contractor to damages or compensation therefore, but in any such case, the MCGM may grant such extension(s) of the completion date as may be considered reasonable.

Note: For extension of time period as governed in (i) and (ii) above, any modifications in design/drawings, specifications, quantities shall be needed to be justified with recorded reasons with approval of Ch.Eng. for not anticipating the same while preparing estimates and draft tender.

(b) Extension Of Time For Delay Due To Contractor : The time for the execution of the work or part of the works specified in the contract documents shall be deemed to be the essence of the contract and the works must be completed no later than the date(s) / the programme for completion of work as specified in the contract. If the contractor fails to complete the works within the time as specified in the contract for the reasons other than the reasons specified in above as (a.i) and (a.ii), the MCGM may, if satisfied that the works can be completed by the contractor within reasonable short time thereafter, allow the contractor for further extension of time as the Engineer may decide. On such extension the MCGM will be entitled without prejudice to any other right and remedy available on that behalf, to recover the compensation as governed by Clause 8(e) of GCC.

For the purpose of this Clause, the contract value of the works shall be taken as value of work as per contract agreement including any supplementary work order/contract agreement issued.

Further, competent authority while granting extension to the currency of contract under Clause (b) of as above may also consider levy of penalty, as deemed fit based on the merit of the case. Also, the reasons for granting extension shall be properly documented.

9. Defects Liability

9.a) Defect Liability period:

The Contractor is expected to carry out the construction work in Workmen like manner so as to meet the requirement and specification for the project. It is expected that the Workmanship and materials will be reasonably fit for the purpose for which they are required.

Defects or defective work is where standard and quality of workmanship and materials as specified in the contract is deficient. Defect is defined as a failure of the completed project to satisfy the expressed or implied quality or quantity obligations of the construction contract. Defective construction works are as the works which fail short of complying with the express descriptions or requirements of the contract, especially any drawings or specifications with any implied terms and conditions as to its quality, workmanship, durability, aesthetic, performance or design. Defects in construction projects are attributable to various reasons.

Some of the defects are structural defects resulting in cracks or collapse of faulty defective plumbing, inadequate or faulty drainage system, inadequate or faulty ventilation, cooling or heating systems, inadequate fire systems etc. The defects could be various on accounts of different reasons for variety of the projects.

The Engineering In charge/Project Officer shall issue the practical completion certificate for the project. During the Defect Liability Period which commences on completion of the work, the Engineering In charge shall inform or the contractor is expected to be informed of any defective works by the Employer's representative of the defects and make good at contractor's cost with an intention of giving opportunity to the contractor of making good the defects appeared during that period. It is the contractor's obligation under the contract to rectify the defects that appear during Defect Liability Period and the contractor shall within a reasonable time after receipt of such instructions comply with the same at his own cost. The Engineering In charge/Project Officer shall issue a certificate to that effect and completion of making good defects shall be deemed for all the purpose of this contract to have taken place on the day named in such defect liability certificate.

If defective work or workmanship or design have been knowingly covered-up or conceived so as to constitute fraud, commencement of the Defect Liability Period may be delayed. The decided period may be delayed until discover actually occurs on at least the defect could have been discovered with reasonable diligence, whichever is earlier.

Dept	Type of works	DLP
Roads	For cement concrete road/ Mastic works	5 years
Bridge	Asphalt work	3 years
	Paver Block	3 years

It is proposed to have DLP as below:

	Structural work	5 years
	General works	5 years
BM/SIC/HIC	General works	3 years
	Structural works	5 years
	Waterproofing works	5 years
Ward Works	All ward level works	2 years
Other Works	Pot holes and pre-monsoon bad patch repair work	1 year
For other departments	HE, WSP, SP, SWD, Garden	3 years

- The above is illustrative. In case of any type of work not covered in above or any change in DLP, the concerned Ch.Eng. shall stipulate DLP with approval of concerned DMC/AMC.
- In case of composite works i.e. having combinations of construction activities of different disciplines, the DLPs shall be approved by AMC.

Also, in case of defect, the Engineer shall give notice to the Contractor of any Defects before the end of the Defects Liability Period, which begins at. The Defects Liability Period shall be extended for as long as Defects remain to be corrected. Every time notice of Defect/Defects is given, the Contractor shall correct the notified Defect/Defects within the duration of time specified by the Engineer's notice. The Engineer may issue notice to the Contractor to carry out removal of defects or deficiencies, if any, noticed in his inspection, or brought to his notice. The Contractor shall remove the defects and deficiencies within the period specified in the notice and submit to the Engineer a compliance report.

It is the Completion Stage when the contractor has completed all of the works and fixed all of the defects that were on the list of issue by Engineer-in-charge. When this happens, the engineer must issue a 'Certificate of Completion'. On the issue of 'Certificate of Completion', the 'Defect Liability Period 'starts. The contractor also must issue a 'Certificate statement' as an acknowledgment to the engineer not later than 14 days after the 'Certificate of Completion' has been issued. During the 'Defect Liability Period', the contractor has to obey all written instructions from the engineer to carryout repairs and fix any defects which appear in the Permanent Works. If the contractor does not ,due to his own faults finish the repair works or fix

the defects by the end of 'Defect Liability Period', the 'Defect Liability Period' will continue until all works instructed by engineer is done.

Unfulfilled Obligations: Notwithstanding the issue of the Defects Liability Certificate the Contractor and the Employer shall remain liable for the fulfillment of any obligation incurred under the provisions of the contract prior to the issue of the defects liability certificate is issued and, for the purposes of determining the nature and extent of any such obligation, the contract shall be deemed to remain in force between the parties to the contract.

9.b) Liability for defects or imperfections and rectifications thereof:

If it shall appear to the Engineer or to his representative at any time during construction or reconstruction or during the defects, liability period, that any work has been executed with unsound, imperfect or unskillful workmanship or that any material or article provided by the Contractor for execution of thereof the work is unsound or of a quality inferior to that contracted for, or otherwise, not in accordance with the contract, or that any defect, imperfections or other faults have appeared in the Work arising out of defective or improper materials or workmanship, the Contractor shall, upon receipt of notice in writing in that behalf from the Engineer forthwith rectify or remove or reconstruct the work so specified in whole or part, as the case may require or, as the case may be and / or remove the materials, or articles so specified and provide other proper and suitable materials or articles at his own expense notwithstanding that the same may have been inadvertently passed, certified and paid for, and in the event of his failing to do so within the period to be specified by the Engineer in his notice aforesaid the Engineer may rectify or remove and re-execute the Work and / or remove and replace with others the materials or articles complained of, as the case may be, by others means at the risk and cost of the Contractor.

In case of repairs and maintenance work, splashes and droppings from whitewashing, painting etc. shall be removed and surfaces cleaned simultaneously with completion of these items of work in individual rooms, quarters or premises etc. where the work in the contract. In case the Contractor fails to comply with requirement of this condition, the Engineer shall have the right to get the work done by the other means at the risk and cost of the Contractor.

The Engineer shall give three days' notice in writing to the Contractor before taking such action.

The Engineer reserves the right to decide the rates and prices of the works as executed by other means at the risk and cost of the Contractor.

The cost and expenses thereby incurred including supervision charges specified in the Annexure 'A' on the works and also such penalty as the Engineer may impose for such wrongful conduct of the Contractor (which penalty, the Engineer shall be competent to impose and against the imposition of which or the amount thereof by the Engineer an appeal shall lie only to the Commissioner within seven days of the order in that behalf of the Engineer and the decisions of the Commissioner shall be final and binding upon the Contractor) may be deducted from any money due or to become due to the Contractor, under this or any other contract between the Contractor and the Municipal Corporation.

9.c) Liability for damages and risks:

A) The Contractor shall be responsible for all risks to the work and shall make good at his own cost, all loss or damage, whether to the works themselves or to any other Municipal property, or to the lives, persons, or property of others, from whatsoever cause, arising out of, or in connection with the works, either during their progress or during the defects liability period, after completion of work for a period of not exceeding 12 months as per directives of Director of Insurance, Maharashtra State and this although all reasonable and proper precautions may have been taken by the Contractor, and in case the Commissioner or the Corporation shall be called upon to make good any such costs loss or damages, or to pay compensation (including that payable under the provision of Workmen's Compensation Act) to any person or persons sustaining damage as aforesaid by reason of any act or of any negligence or omissions on the part of the contractor, the amount, which the Commissioner may pay in respect thereof and the amount of any costs or charges (including law costs and charges) in connection with legal proceedings which he may incur in reference thereto, shall be charged to the contractor. The Commissioner shall have full power and right at his own discretion to pay or to defend or compromise any claim which may be made against the Corporation for damage or in case of threatened legal proceedings, or in anticipation of legal proceedings being instituted, consequent on the action or default of the contractor, to take such steps as he may consider necessary or desirable to ward off or mitigate the effect of such proceedings charging to the contractor, as aforesaid, any sum or sums of money which he may pay and any expenses, whether for reinstatement or otherwise which he may incur and the propriety of any payment, defense or compromise, or of the incurrence of any such expense shall not be called in question by the contractor.

The contractor shall be held responsible for any obligations, damages and fines etc. arising out of or in connection with the works either during their progress or during the defects liability period after completion of work for a period of not exceeding 12 months as per directives of Director of Insurance, Maharashtra State and shall indemnify the Municipal Corporation or the Commissioner against them and make good any such damages, fines and dues arising out of non-compliance of any regulation under the Minimum Wages Act by the contractor which may devolve on the Corporation or the Commissioner.

The Contractor shall take out a policy as per the provisions of the Workmen's Compensation Act for the purpose of ensuring compensation to the workers engaged by them.

B)Extension of Defects Liability:

The provisions of this Clause shall apply to all replacements or renewal of Works carried out by the Contractor to remedy defects and damages as if the replacements and renewals had been taken over on the date they were completed.

The Defects Liability Period for the Works shall be extended by a period equal to the period during which the Works cannot be used by reason of a defect or damage. If only part of the Works is affected, the Defects Liability Period shall be extended only for that part, however, the retention money/security deposit/performance guarantee will be refunded only after completion

of Defect Liability/warranty period of total work. In neither case shall the Defects Liability Period extend beyond 2 years from the date of taking over.

When progress in respect of the Works has been suspended under Clause 5 (u), the Contractor's obligations under this Clause shall not apply to any defects occurring more than 3 years after the Time for Completion established on the date of the Letter of Acceptance.

C) Inspection Consequent to Renewals/Replacement; If the replacement or renewals are of such a character as may affect the efficiency of the Works or any portion thereof, the Engineer may, within one month of such replacement or renewals, give to the Contractor notice in writing, requiring that such replacement or renewals be offered for inspection in which case such inspection shall be carried out by the Engineer in receipt of a 21 days notice from the Contractor, in writing.

These Conditions shall apply to, all the replacements and renewals and to all inspections occasioned thereby and carried out by the Contractor pursuant to this Clause.

D) Access to the Contractor during Defects Liability Period: Until the expiration of Defects Liability Period of the Works, the Contractor shall have access, at all reasonable working hours, at his own risk and expense, for himself or for his duly authorised representatives whose names shall have previously been communicated, in writing, to the Engineer, to all parts of the Works for the purpose of inspecting the working thereof and to records of the working and performance thereof for the purpose of inspecting the same and taking notes there from subject to the Engineer's approval, which shall not be unreasonably withheld. The Contractor may, at his own risk and expense, make any test, which he considers desirable, in consultation with the Engineer and the Employer.

E) Liability of Contractor for damages done in or outside work area :

Compensation for all damages done intentionally or unintentionally by contractor's labour whether in or beyond the limits of MCGM property including any damage caused by spreading the fire shall be estimated by the Engineer In-charge or such other officer as he may appoint and the estimate of the Engineer in-charge to the decision of the Dy. Chief Engineer on appeal shall be final and the contractor shall be bound to pay the amount of the assessed compensation on demand failing which the same will be recovered from the Contractor as damages or deducted by the Engineer In-charge from any sums that may be due or become due from MCGM to contractor under this Contract or otherwise. Contractor shall bear the expenses of defending any action or other legal proceedings that may be brought to prevent the spread of fire and he shall pay any damages and costs that may be awarded by the Court in consequence.

9 d) Contractor to search.

The Contractor shall, if required by the Engineer in writing, search under the direction of the Engineer for the cause of any defect, imperfection or fault appearing during the progress of the Work or in the period of maintenance. Unless such defect, imperfection or fault shall be one for which the Contractor is liable under the contract, the cost of the Work carried out by the

Contractor in searching as aforesaid shall be borne by the Corporation. If such defect, imperfection or fault shall be one for which Contractor is liable as aforesaid, the cost of the work carried out in searching as aforesaid shall be borne by the Contractor and he shall in such case repair, rectify and make good such defect, imperfection or fault, at his own expense in accordance with the provisions of condition no.9 b. and 9 c hereof.

10.Variation:

10.A) Rates for Extra/Excess:

- i. For Excess / Savings
 - Increase or decrease in "Bill of Quantities" of the bidding documents shall be termed as "Excess" or "Savings" correspondingly.
 - The contractors shall be entitled to the payment of Additional Quantities required for the completion of activity and works, if the activity increases or decreases within the permissible limit of 20 %.

The maximum savings in individual item upto 20 % shall be permissible.

Approval Process

Sr no.	Excess	Approving authority
1.	Upto 5 %.	Director (E S & P) / DMC.
2.	Beyond 5 % up to 15 %.	AMC.
3.	Beyond 15 %.	Hon. M.C

 In case, the projection of the "Excess" quantity goes beyond 20 % of the "Bill of Quantities" of the bidding document to complete the work activity and beyond the "Contract Cost", then all such cases shall be placed before AMC / Hon. M.C for administrative sanction before execution of "Excess" quantity.

In all such cases the following exercise shall be worked out

(i)Feasibility of foreclosing the work,

(ii)If, foreclosure is not possible the H.O.D shall justify and record the reasons in writing.

• For Underground Works

Underground works shall mean the works of foundation of buildings and other structures, works in sewerage projects, storm water drain, water supply projects and Hydraulic Engineer.

 The contractors shall be entitled to the payment of Additional Quantities required for the completion of activity and works, if the activity increases or decreases within the permissible limit of 25 %.

The maximum savings in individual item up to 20 % shall be permissible.

Sr no.	Excess	Approving authority
1.	Up to 5 %.	Director (E S & P) / DMC.
2.	Beyond 5 % up to 20 %.	AMC.
3.	Beyond 20 %.	Hon. M.C

Approval Process

For Unforeseen Works

Unforeseen works shall mean the works of bursting / leakages of water pipelines, settlement of sewage lines / manholes, settlement of storm water drains in city areas. The contractors shall be entitled to the payment of Additional Quantities required for the completion of activity and works, if the activity increases or decreases within the permissible limit of 35 %.

The maximum savings in individual item up to 30 % shall be permissible.

Sr no.	Excess	Approving authority
1.	Up to 10 %.	Director (E S & P) / DMC.
2.	Beyond 10 % up to 25 %.	AMC.
3.	Beyond 25 %.	Hon. M.C

Approval Process

 In no case, accrued savings beyond 30 % of all individual items of the "Bill of Quantities" of the bidding document shall be allowed to meet the cost of Extra / Excess / Fair items without altering / modifying or damaging the scope of work and without balancing the phase works.

ii. For Extra Items

This shall mean additional or substituted items of work activity not included in the "Bill of Quantities and Rates", however such item of work are in the prevailing "Unified Schedule of Rates" of MCGM.

- The total cost of extra items shall be permissible up to 5% of the "Contract Cost".
- These extra items shall be paid as per the rates of prevailing "Unified Schedule of Rates" of MCGM at the time of tender at rebate quoted by the contractor on contract amount or at par in case of premium quoted by the contractor on contract amount.
- iii. For Fair Items

This shall mean additional or substituted items of work activity not included in the "Bill of Quantities and Rates", and even not existing in the "Unified Schedule of Rates" of MCGM at the time of tender.

- The total cost of fair items including extra items shall be permissible up to 5 % of the "Contract Cost".
- These fair items shall be got approved by the committee framed. The engineer in charge shall work out these fair items at fair and reasonable market rates on the basis of material, labour and operations of construction equipment required to execute the item and allowing 15 % to cover profits and overhead charges on the same lines of rate analysis prepared for the items that are in "Unified Schedule of Rates" of MCGM.

In all cases covered above in respect of A, B and C, the proposals shall be routed through C.A (Finance) / C.A (WSSD).

10.b) Reimbursement refund on variation of price of labour and materials:

The Contractor shall be reimbursed or shall refund to the Corporation as he case may be the variation in the value of the work carried out from time to time, depending on whether the prices of material and labour as a whole rise or fall, and the method adopted for such computations shall be as given below, it being clearly understood that the contractor shall have no claim for being reimbursed on the ground that the price of a particular material or group of materials have risen beyond the limits of the presumptions made in the following paras, however, no price variations shall be made applicable for contracts upto 12 months:

A)Controlled materials: Price variations shall be permitted in respect of these materials the price level of which is controlled by the Government or its agency. The rate ruling on the date of submission of the tender shall be considered as the basic price of such material for adjustment. Any variation in this rate shall be considered for reimbursement to the contractor or refund to be claimed from the contractor as the case may be. The contractor shall, for the purpose of adjustment submit in original the relevant documents from the suppliers.

B) Labour and other materials: For the purpose of this contract and for allowing reimbursement of refund on account of variation of prices of (i) labour, and (ii) materials other than materials mentioned in 10a above, computation will be based on the formula enunciated below which is based on the presumptions that :

i) The general price level of labour, rises or falls in proportion to the rise or fall of consumer price index number 9 (general) for working class in Mumbai.

ii) The general price level of materials rises or falls in proportion to rise or fall of whole-sale price index as published by 'Economic Adviser to Govt. of India'.

iii) And that the component of labour is to the extent of 30 percent of 88 percent and the component of materials is to the extent of 70 percent of 88 percent of the value of the work carried out. The remaining 12 percent being the presumptive profit of the contractor.

a) Formula for Labour component:

 $VL = (0.88 \text{ R}) \times 30 \times (1 - 10)$ 100 IO

b) Formula for Material component :

 $VM = (0.88 \text{ R x } \underline{70} - \text{C}) \text{ x } \underline{(W - WO)}$

100 WO

Where –

- VL = Amount of price variation to be reimbursed or claimed as refund on account of general rise or fall of index referred to above.
- I = Consumer Price Index number of working class for Mumbai (declared by the Commissioner of Labour and Director of Employment, Mumbai) applicable to the period under reference (base year ending 2004-05 as 100 i.e. new series of indices).
- IO = Consumer price index number for working class for Mumbai (declared by the Commissioner of labour and Director of Employment, Mumbai) prevailing, on the day of 28 days prior to the date of submission of the tender.
- VM = The amount of price variation to be reimbursed or claimed as refund on account of general rise or fall of wholesale price index for period under reference.
- W = Average wholesale price index as published by Economic Adviser to Govt. of India applicable to the period under reference.
- WO = Wholesale price index as stated above prevailing on the day of 28 days prior to the date of submission of the tender.
- R = Total value of the work done during the period under reference as recorded in the Measurement Book excluding water charges and sewerage charges but including cost of excess in respect of item upto 50 percent as stated in Sub Clause 10 (a)Aand cost of extra items and provisional items of work where the rate is based on Sub Clause 10 (a)B (i)&(ii).
- C = Total value of Controlled materials used for the works as recorded in Measurement Book and paid for at original basic rate plus the value of materials used .

i) The quantity of the Controlled material adopted in working out the value of 'C' shall be inclusive of permitted wastages as / if mentioned in specifications.

ii) The basic rate for the supply of controlled material shall be inclusive of all the components of cost of materials excluding transport charges incurred for bringing the material from place of delivery to the site.

Computations based on the above formula will be made for the period of each bill separately and reimbursement will be made to (when the result is plus) and refund will claimed from (when the result is minus) the contractor's next bill. The above formulae will be replaced by the formulae in Annexure-I as and when mentioned in special conditions of contract

The operative period of the contract for application of price variation shall mean the period commencing from the date of commencement of work mentioned in the work order and ending on the date when time allowed for the work order and ending on the date when time allowed for the work order and ending into consideration, the extension of time, if any, for completion of the work granted by Engineer under the relevant clause of the conditions of contract in cases other than those where such extension is necessitated on account of default of the contractor.

The decision of the Engineer as regards the operative period of the contract shall be final and binding on the contractors.

iii) Where there is no supply of controlled items to contractor the component 'C' shall be taken as zero.

C) Adjustment after completion: If the Contractor fails to complete the works within the time for completion prescribed under Clause 8(d), adjustment of prices thereafter until the date of completion of the works shall be made using either the indices or prices relating to the prescribed time for completion, or the current indices or prices whichever is more favorable to the employer, provided that if an extension of time is granted pursuant to condition 8 (d), the above provision shall apply only to adjustments made after the expiry of such extension of time.

D) Price variation will be calculated similarly and separately for extra items and / or excess quantities and provisional sums calculated under Sub Clause 10 (b)A (i)&(ii) and Sub Clause 10 (b) B(ii) based on the above formula/formulae in Annexure-I as and when mentioned in Special conditions of contract; IO and WO being the indices applicable to the date on which the rates under Sub Clause 10 (a)A (i)&(ii) and Sub Clause 10 (a) B(iii) are fixed. **No price variation shall be admissible for FAIR items created during execution.**

E) Maximum Price Variation shall be as follows:

Time Period of Project	Maximum limit of Price	
	Variation	
Up to 12 months	No variation allowed	
Above12 months to 24	5%	
months		
Above 24 months	10%	

*Approval of AMC/MC shall be obtained before invitation of tender in case of any changes in above.

Price Variation during Extended Period of Contract :

(i) Extension Due To Modification & Extension for delay due to MCGM : The price variation for the period of extension granted shall be limited to the amount payable as per the Indices in case the indices increases or decreases, above/below the indices applicable, to the last month of the original or extended period vide clause8(I)(a)(i) and (ii) of standard GCC

(ii) Extension Of Time For Delay Due To Contractor :

(a) The price variation for the period of extension granted shall be limited to the amount payable as per the Indices in case the indices increase, above the indices applicable, to the last month of the original completion period or the extended period vide above clause.8(I)(b) of standard GCC. However, the price variation shall not be paid in any case for the extended period on account of delay due to contractor.

(b) The price variation shall be limited to the amount payable as per the indices, in case the indices decrease or fall below the indices applicable, to the last month of original / extended period of completion period vide above clause 8(I)(b) of standard GCC, then lower indices shall be adopted.

(iii) Extension of Time For Delay due to reasons not attributable to MCGM and Contractor (Reference CI.8(d) of Standard GCC):

The price variation for the period of extension granted shall be limited to the amount payable as per the Indices in case the indices increases or decreases, above/below the indices applicable, to the last month of the original period. Also, the reasons for granting extension shall be properly documented.

Note: **Price variation shall not be admissible for the FAIR items created during execution.**

11. Measurements:

11.a) Records and Measurement:

The Engineer shall except as otherwise stated ascertain and determine by measurement the value in accordance with the Contract of work done in accordance therewith.

All items having a financial value shall be entered in measurement book, level book etc. as prescribed by the Municipal Corporation so that a complete record is obtained of all the Works performed under the Contract.

Measurements shall be taken jointly by the Engineer or his authorized representative and by the Contractor or his authorized representative. Before taking measurements of any work the Engineer or the person deputed by him for the purpose shall give a reasonable notice to the Contractor. If the Contractor fails to attend or send an authorized representative for measurement after such a notice or fails to countersign or the objection within a week from the date of measurement, then in any such event measurements taken by the Engineer or by the person deputed by him shall be taken to be correct measurements of the works and shall be binding on the Contractor.

The Contractor shall, without any extra charge, provide assistance with every appliance and other things necessary for measurements.

Measurements shall be signed and dated by both parties each day (of taking measurement) on the site on completion of measurement.

11.b) Method of Measurement:

Except where any general or detailed description of the work in bills of quantities or schedule of works / items / quantities expressly shown to the contrary, bills of quantities shall be deemed to have been prepared and measurements shall be taken in accordance with the procedure set forth in the schedule of rates / specifications notwithstanding any provision in the relevant standard Method of Measurement or any general or local custom. In the case of items which are not covered by the schedule of rates / specifications, measurement shall be taken in accordance with the relevant Standard Method of Measurement Standard Standards.(BIS 1200)

12.Payments, Tax and Claims:

12.a) Provisional sum and Advances:

- 'Provisional sum' means a sum included in the contract and so designated in the Bill of Quantities for the execution of work or supply of goods, materials or services or for contingencies, which sum may be used, in whole or in part, or not at all, at the direction and discretion of the Engineer. The contract price shall include only such amounts in respect of the work, supply or service to which such provisional sum relate as the Engineer shall approve or determine in accordance with this clause.
- 2. In respect of every provisional sum the Engineer shall have power to order to execute the work, including goods, materials or services to be supplied by the contractor. The contract price shall include the value of such work executed or such goods, materials or services supplied determined in accordance with Sub Clause 10 b.

The contractor shall produce all quotations, invoices, vouchers and accounts or receipts in connection with expenditure in respect of provisional sums.

The Corporation will make advance to the contractor for the works in two installments.

The first installment shall be equal to 5% of the contract price. The payment of the first installment of loan be due after (i) execution of the form of agreement by the parties thereto. (ii) payment of Security Deposit by the Contractor and (iii) Submitting the Bank Guarantee by the

Contractor from a Bank specified in the tender for an amount equal to 7% (with includes 2% extra for the interest charges) of the Contract price. The first installment of advance loan shall be paid to the Contractor within 28 days after fulfilling all the above requirements under sub items (i) to (iii).

Payment of second installment of the advance mobilization loan upto 5 (five) percentage of the Contract price will be due within a period of 28 days from completion preliminary site establishment works such as construction of access roads to site, Engineer's office, Contractor's site office, Stores, Workshop sheds, etc. to the satisfaction of the Engineer.

After certification by the Engineer that the preliminary works are completed satisfactorily, the second installment will be released after the Contractor submits the Bank Guarantee from a Bank acceptable to the Corporation for an amount equal to7% (which includes 2% extra for interest charges) of the Contract price.

Bank Guarantee shall be submitted in the approved prescribed form. The Bank Guarantee/s for the Advance Mobilization Loan should be valid till the full recovery advance is made.

The Contractor shall use the advance payment only towards expenses for materials, preliminary site establishments works, and construction equipment and to meet expenses required specifically to carry out the works.

The above advance shall bear simple interest at 12% per annum. The interest on the amounts paid as advance is chargeable from the date the amount is paid.

RECOVERY OF ADVANCE :

Recovery of advance paid and interest against it aforesaid, shall be made by deductions from the on account of payments referred to in condition no.12 (b) in suitable percentage in relation to the progress as fixed by the Engineer so that all sums with interest shall be fully recovered by the time the work amounting to nearly 80 percent of the contract is completed. If the amount payable under any interim bill is not sufficient to cover all deductions to be made on this account and other sums deductible there , the balance outstanding shall be deducted from subsequent bills as may be necessary.

12.b) Interim Payment :

Interim bills shall be submitted by the Contractor from time to time (but at an interval of not less than one month) for the works executed. The Engineer shall arrange to have the bill s verified by taking or causing to be taken, where necessary, the requisite measurement of work.

Payment on account for amount admissible shall be made on the Engineer certifying the sum to which the Contractor is considered entitled by way of interim payment for all the work executed, after deducting there from the amount already paid, the security deposit / retention money and such other amounts as may be deductible or recoverable in terms of the contract.

On request, the contractor will be paid upto 75 percent of the value of the work carried out as an adhoc payment in the first week of next month after deducting there from recoveries on account

of advances, interest, retention money, income tax etc. The balance payment due will be paid thereafter.

No interim payment will be admitted until such time the Contractor have fully complied with the requirement of the Condition no.8 (h) and 8 (i) concerning submission and approval of Network Schedule for the works, as detailed in Condition 8 (i). A fixed sum shall be held in abeyance at the time of next interim payment for non-attainment of each milestone in the network and shall be released only on attainment of the said milestone.

An interim certificate given relating to work done or material delivered may be modified or corrected by a subsequent interim certificate or by the final certificate. No certificate of the Engineer supporting an interim payment shall of itself be conclusive evidence that any work or materials to which it relates is / are in accordance with the contract.

12.c) Payment on intermediate certificate to be regarded as advances :

No payment shall be made for any work estimated to cost less than Rupees One Thousand till after the whole of work shall have been completed and the certificate of completion given. But in the case of works estimated to cost more than Rs. One Thousand, the contractor shall on submitting a monthly bill therefor be entitled to receive payment proportionate to the part of the work than approved and passed by the Engineer In-charge, whose certificate of such approval and passing of the sum so payable shall be final and conclusive against the contractor. All such intermediate payments shall be regarded as payments by way of advance against the final payments only and not as payments for work actual done and completed and shall not preclude the Engineer In-charge from requiring any bad, unsound, imperfect or unskillful work to be removed or taken away and reconstructed or re-erected nor shall any such payment be considered as an admission of the due performance of the contract or any part thereof in any respect or the offering of any claim not shall it conclude, determine or effect in any other way, the powers of the Engineer In-charge as to the final settlement and adjustment of the accounts or otherwise, or in any other way vary or effect the contract. The final bill shall be submitted by the Contractor within one month of the date fixed for the completion of the work otherwise the Engineer In-charge's certificate of the measurements and of the total amount payable for the work shall be final and binding on all parties.

12.d) No interest for delayed payments due to disputes, etc:

It is agreed that the Municipal Corporation of Greater Bombay or its Engineer or Officer shall not be liable to pay any interest or damage with respect of any moneys or balance which may be in its or its Engineer's or officer's hands owing to any dispute or difference or claim or misunderstanding between the Municipal Corporation of Greater Bombay or its Engineer or Officer on the one hand and the contractor on the other, or with respect to any delay on the part of the Municipal Corporation of Greater Bombay or its Engineer or Officers in making periodical or final payments or in any other respect whatever.

It is distinctly understood and agreed between the parties hereto that payment for work already executed by the Contractor is not a condition precedent under this contract for the execution of the remaining work.

12.e) Receipts to be signed in firm's name by any one of the partners:

Every receipt for money which may become payable or for any security which may become transferable to the Contractor under these present shall, if signed in the partnership name by any one of the partners, be a good and sufficient discharge to the Commissioner and Municipal Corporation in respect of the money or security purporting to be acknowledged thereby, and in the event of death of any of the partners during the pendency of this contract, it is hereby expressly agreed that every receipt by any one of the surviving partners shall, if so signed as aforesaid, be good and sufficient discharge as aforesaid provided that nothing in this clause contained shall be deemed to prejudice or effect any claim which the Commissioner or the Corporation may hereafter have against the legal representatives of any partners so dying or in respect of any breach of any of the conditions thereof, provided also that nothing in this clause contained shall be deemed prejudicial or affect the respective rights or obligations of the Contractors and of the legal representatives of any deceased Contractors interest.

12.f) Overpayment and underpayment:

Whenever any claim for the payment of a sum to the Municipal Corporation rises out of or under this contract against the Contractor the same may be deducted by the Municipal Corporation from any sum then due or which at any time thereafter may become due to the Contractor under this contract and failing that under any contract with the Municipal Corporation or from any other sum due to the Contractor from the Municipal Corporation (which may be available with the Municipal Corporation) or from his security deposit / retention money, or he shall pay the claim on demand.

The Municipal Corporation reserves the right to carry out post payment audit and technical examination of the final bill including all supporting voucher, abstracts etc. The Municipal Corporation further reserves the right to enforce recovery of any over payment when detected.

If as a result of such audit and technical examination any overpayment is discovered in respect of any work done by the Contractor or alleged to have been done by him under the Contract, it shall be recovered by the Municipal Corporations from the Contractor by any or all of the methods prescribed above or if underpayment is discovered the amount shall be duly paid to the Contractor by the Municipal Corporation.

Provided that the aforesaid right of the Municipal Corporation to adjust overpayment against amount due to the Contractor under any other contract with Municipal Corporation shall not extend beyond the period of five years from the date of payment of the final bill or in case the final bill is a 'Minus' bill, from the date of the amount payable by the Contractor under the 'Minus' bill is communicated to the Contractor. However, to adjust overpayment/recovery from the contractor MCGM reserves the rights to recover these payments at any point of time against any other contract with Municipal Corporation and shall not be limited to any prescribed time limits

Any amount due to the Contractor under this contract for underpayment may be adjusted against any amount then due or which may at any time thereafter become due before payment is to the Contractor, from him to Municipal Corporation on any other contract or account whatsoever.

12.g) Payment of final bill:

Final joint measurement alongwith the representatives of the contractor should be taken recorded and signed by the Contractors. Contractors should submit the final bill within 1 month of physical completion of the work.

If the contractor fails to submit the final bill within 1 month, the MCGM staff will prepare the final bill based on the joint measurement within next 3 months.

Engineer's decision shall be final in respect of claims for defect and pending claims against contractors.

No further claims should be made by the Contractor after submission of the final bill and these shall be deemed to have been waived and extinguished. Payment of those items of the bills in respect of which there is no dispute and of items in dispute, for quantities and rates as approved by the Commissioner shall be made within a reasonable period as may be necessary for the purpose of verification etc.

After payment of the final bill as aforesaid has been made, the contractor may, if he so desires, reconsider his position in respect of a disputed portion of the final bills and if he fails to do so within 84 days, his disputed claim shall be dealt with as provided in the contract.

A percentage of the retention money, over and above the actual retention money as indicated below shall be held back from payments till the finalization of final bill to be submitted as per above and will be paid within 30 days of acceptance of the final bill.

Sr.no.	Amount of Contract Cost	Minimum Payable Amount in final bill			
1	Upto Rs.5 Crs.	Rs.10 Lacs or final bill whichever is more			
2	Upto Rs.25 Crs.	Rs.1 Crore or final bill amount whichever is more			
3	Upto Rs. 50 Crs.	Rs.2 Crores or final bill amount whichever is more			
4	Upto Rs.100 Crs.	Rs.4 Crore or final bill amount whichever is more			
5	More than Rs.100 Crs	Rs.7 Crore or final bill amount whichever is more			

The contractor have to submit the bill for the work carried out within 15 days from the date of completion of the work to the respective executing department. If the contractor fails to submit their bills to concerned executing department, penalty or action as shown below will be taken for each delayed bill:-

After 15 days from the date of Equal to 5% of bill amount completion/running bill upto certain date, upto

next 15 days i.e. upto 30 days	
Next 15 days upto 45 days from the date of completion/running bill upto specified date	Equal to 10% of bill amount
If not submitted witin 45 days from the date of completion/ R.A. bill	Bill will not be admitted for payment.

12.h) Income-Tax:

The Contractor shall pay Indian Income-Tax on all payments made to him under the Contract, other than reimbursements made to him by the Corporation to cover payment by Contractor of minor custom duties, etc. or any other payment which the contractor may make on the Corporation's behalf. Under the provisions of Sec. 194-c of the Indian Income Tax Act, the Corporation is required to deduct Tax with surcharge, if applicable, at source at prevailing rates from the gross amount of each bill submitted. Any expatriate site staff or staff not normally residents of India, employed by the Contractor shall pay personal Income Tax on all money earned and paid in India. The contractor shall perform such duties in regard to such deductions thereof as may be imposed on him by such laws and regulations.

12.i)Currency of Payment:

The Tenderer shall indicate the tender prices in Indian Rupees.

12.j) Taxation Payments of Bills and other claims:

Regarding taxation the prices quoted by the Contractor shall include all customs duties, import duties, excise duties, business taxes, income and other taxes that may be levied in accordance to the laws and regulation in force as of the date 28 days prior to dead line for submission of tenders on the Contractor's Equipment materials and supplies (Permanent, temporary and consumables) to be used on or furnished under the contract and on the services to be performed under the contract. Nothing in the contract shall relieve the contractor from his responsibility to pay any tax that may be levied in the Employer's country on profits made by him in respect of the contract.

The contractor shall perform such duties in regard to such deductions thereof as may be imposed on him by such laws and regulations.

All charges on account of Octroi, terminal or Sales Tax and other duties on material obtained for the works from any source including the tax applicable as per Maharashtra Sales Tax Act on the transfer of property in the goods involved in the execution of works contract (re-enacted) Act, 1991 etc. shall be borne by the Contractor.

Except as otherwise specifically provided in the contract, the contractor shall be liable and responsible for the payment, of all taxes, such as excise duty, custom duty, sales tax, Value Added Tax including the purchase tax, consignment tax, work contract tax, service tax, entry tax or any other similar tax in the state concerned, turnover tax, toll tax, octroi charges, royalty,

labour cess, levy and other tax(es) or duty(ies) which may be specified by local/state/ central government from time to time on all material articles which may be used for this work. The rates quoted by him in the tender in bill of quantities shall be inclusive of all taxes, duties, levies etc. Under the provisions of the Maharashtra Sales Tax Act, the Employer is required to deduct "Work Contract Tax" at source at the rates prevailing at the time of payments.

The payment of bills and other claims arising out of the contract will be made by RTGS/NEFT/CBS/ECS/Cheque in the name of Contractors payable to the account and Name of Bank informed by the successful contractors. Successful Tenderers, therefore, have to furnish the information as regards, the Name and complete address of their Bank, its branch and their Bank Account no. etc. They will also have to submit fresh information when there is any change in this regard.

12.K) Submissions of final completion drawings:

On completion of the work, the contractors shall furnish wherever applicable free of cost 1 set of R.T.F of final completion drawings and 6 bound sets of copies of drawings, showing all the details checked and signed by the Engineer within one month of completion of works. The payment of final bill shall be made to the contractors after receipt of above sets. In case the contractor fails to submit the completion drawings, compensation at the rate of Rs.5000/- per drawing or minimum Rs 50,000 whichever is more shall be recovered from the final bills.

13. Settlement of Disputes:

13.a) Termination of contract for death:

If the Contractor is an individual or a proprietary concern and the individual or the proprietor dies and if the Contractor is a partnership concern and one of the legal representative of the individual Contractor or the proprietor of the proprietary concern and in case of partnership, the surviving partners, are capable of carrying out and completing the contract, the Commissioner shall be entitled to cancel the contract as to its uncompleted part without the Corporation being in any way liable to payment of any compensation to the estate of the deceased Contractor and or to the surviving partners of the Contractor's firm on account of the cancellation of the contract. The decision of the Commissioner that the legal representative of the deceased Contractor or surviving partners of the Contractor's firm cannot carry out and complete the contract shall be final and binding on the parties. In the event of such cancellation the Commissioner shall not hold estate of the deceased Contractor and or surviving partners of the Contractor's firm liable in damages for not completing the contract.

13.b) Urgent Works:

If any Urgent Work (in respect whereof the decision of the Engineer shall be final and binding) becomes necessary and the Contractor is unable or unwilling at once to carry it out, the Engineer may be his own or other work people, carry it out as he may consider necessary. If the urgent work shall be such as the Contractor is liable under the contract to carry out at his expense all expense incurred on it by the Municipal Corporation shall be recoverable from the Contractor and be adjusted or set off against any sum payable to him.

13.c) Foreclosure of contract in full or in Part:

If at any time after acceptance of the tender the Commissioner shall decide to abandon or reduce the scope of the works or any part of the works to be carried out, he shall inform the Contractor in writing to that effect and the Contractor shall have no claim to any payment or compensation or otherwise whatsoever, on account of any profit or advantage which he might have derived from the execution of the works in full but which he did not derive in consequence of the foreclosure of the whole or part of the works.

The Contractor shall be paid at the contract rates full amount of works executed at site, and in addition reasonable amount as certified by the Engineer for the value of such Material (which material thereupon become the property of the Corporation) and also such further allowances as the Engineer may think reasonable and fair in respect of (a) any expenditure incurred by the contractor towards preliminary works etc. and (b) other reasonable and proper engagement the contractor may have entered into for carrying out the work, (c) such compensation as considered equitable under the circumstances.

13.d) Settlement of Disputes:

If any dispute or differences of any kind whatsoever other than those in respect of which, the decision of any person is, by the Contract, expressed to be final and binding) shall arise between the Employer and the Contractor or the Engineer and the Contractor in connection with carrying out of the Works (Whether during the progress of the Works or after their completion and whether before or after the termination, abandonment or breach of the Contract) it, the aggrieved party may refer such dispute within a period of 7 days to the concerned Addl. Municipal Commissioner who shall constitute a committee comprising of three officers i.e. concerned Deputy Municipal Commissioner or Director (ES&P), Chief Engineer other than the Engineer of the Contract and concerned Chief Accountant. The Committee shall give decision in writing within 60 days.

Appeal on the Order of the Committee may be referred to the Municipal Commissioner within 7 days. Thereafter the Municipal Commissioner shall constitute a Committee comprising of three Addl. Municipal Commissioners including Addl. Municipal Commissioner in charge of Finance Department. The Municipal Commissioner within a period of 90 days after being requested to do so shall give written notice of committee's decision to the Contractor. Save as herein provided such decision in respect of every matter so referred shall be final and binding upon both parties until the completion of the works, and shall forthwith be given effect to by the Contractor who shall proceed with the works with due diligence, whether he requires arbitration as hereinafter provided or not. If the Commissioner has given written notice of 90 days from receipt of such notice the said decision shall remain final and binding upon the Contractor.

13.e) Arbitration and Jurisdiction:

If the Commissioner shall fail to give notice of the decision as aforesaid within a period of 90 days after being requested as aforesaid, or if the Contractor be dissatisfied with any such

decision, then and in any such case the Contractor may within 90 days after receiving notice of such decision or within 90 days after the expirations of the first named period of 90 days(as the case may be) require that the matter or matters in dispute be referred to arbitration as hereinafter provided. All disputes or differences in respect of which the decision (if any) of the Commissioner has not become final and binding as aforesaid shall be finally settled by arbitration as follows:

Arbitration shall be effected by a single arbitrator agreed upon the parties. The arbitration shall be conducted in accordance with the provisions of the Arbitration Act, 1996 or any statutory modifications thereof, and shall be held at such place and time within the limits of Brihan Mumbai as the arbitrator may determine. The decision of the arbitrator shall be final and binding upon the parties hereto and the expense of the arbitration shall bepaid as may be determined by the arbitrator. Performance under the Contract shall, if reasonably be possible, continued during the arbitration proceedings and payment due to the Contractor by the Employer shall not be withheld unless they are the subject matter of arbitration proceedings. The said arbitrator shall have full power to open up, review and revise any decision, opinion, direction, certification or valuation of the Commissioner and neither party shall be limited in the proceedings before such arbitrator to the evidence or arguments put before the Commissioner for the purpose of obtaining his said decision. No decision given by the Commissioner in accordance with the foregoing provisions shall disqualify him from being called as a witness and giving evidence before the arbitrator on any matters whatsoever relevant to the disputes or difference referred to the arbitrator as aforesaid.

All awards shall be in writing and for claims equivalent to 5,00,000 or more such awards shall state reasons for amounts awarded. The expenditure of arbitration shall be paid as may be determined by arbitrator.

In case of any claim, dispute or difference arising in respect of a contract, the cause of action thereof shall be deemed to have arisen in Mumbai and all legal proceedings in respect of any claim, dispute or difference shall be instituted in a competent court in the City of Mumbai only

13.f) Details to be Confidential:

The Contractor shall treat the details of the Contract as private and confidential, save in so far as may be necessary for the purposes thereof, and shall not publish or disclose the same or any particulars thereof in any trade or technical paper or elsewhere without the previous consent in writing of the Employer or the Engineer. If any dispute arises as to the necessity of any publication or disclosure for the purpose of the contract the same shall be referred to the Employer whose determination shall be final.

13.g)Cancellation of contract in full or in part:

If the Contractor:

• At any time makes default in proceeding with the work with due diligence and continues to do so after notice in writing of fourteen days from the Engineer, or

- Commits default in complying with any of the terms and conditions of contract and does not remedy it within fourteen days after a notice in writing is given to him in that behalf by the Engineer, or
- Fails to complete the Works or items with individual dates of completion, on or before the date(s) of completion, and does not complete them within the period specified in a notice given in writing in that behalf by the Engineer, or
- Shall offer or give or agree to give to any person in Municipal Corporation's Service or to any
 other person on his behalf any gift or consideration of any kind as an inducement or reward
 for doing or forbearing to do or for having done or forborne to do any act in relation to the
 obtaining or execution of this or any other contract for the Municipal Corporation, or
- Shall obtain a contract with the Municipal Corporation as a result of ring tendering or other non-bonafide methods of competitive tendering or
- Being an individual or a firm, any partner thereof, shall at any time be adjudged insolvent or have a receiving order or order for administration of his estate made against him or shall take any proceedings for liquidation or composition (other than voluntary liquidation for the purpose of amalgamation or reconstruction) under any insolvency act for the time effects or force or make any conveyance of assignment of his effects or composition or arrangement for the benefit of his creditors or purport so to do, or if any application be made under any Insolvency Act for the time being in force for the sequestration of his estate or if a trust deed be executed by him for his creditors, or
- Being a company, shall pass a resolution or the court shall make an order for the liquidation
 of his affairs, or a receiver or a manager on behalf of the debenture holders shall be
 appointed or circumstances shall arise which entitle the Court or debenture holders to
 appoint a receiver or a Manager, or
- Shall suffer an execution being levied on his goods and allow it to be continued for a period of 21 days, or
- Assigns, transfers, sublets (engagement of labour on a piece work basis or labour with materials not to be incorporated in the work, shall not be deemed to be sub-letting) or attempts to assign, transfer or sublet the entire works or any portion thereof without the prior written approval of the Commissioner, the Commissioner may, without prejudice to any other right or remedy which shall have accrued or shall accrue thereafter to the Municipal Corporation by written notice cancel the contract as a whole or only such items of work in default from the contract.

The Commissioner shall on such cancellation have powers to -

- take possession of site and any materials, constructional plant, implements stores, etc. thereon and / or
- Carry out the incomplete work by any means at the risk and cost of the Contractor.

On cancellation of the contract in full or in part the Engineer shall determine what amount, if any, is recoverable from the Contractor for completion of works or part of the works or in case the works or part of works is completed, the loss or damage suffered by the Municipal Corporation, in determining the amount, credit shall be given to the Contractor for the value of the work executed by him upto the time of cancellation, the value of the Contractor's material taken over and incorporated in the work, and use of construction equipment belonging to the Contractor.

Any excess expenditure incurred or to be incurred by the Municipal Corporation in completing the works or part of the works or excess loss or damages suffered or may be suffered by the Municipal Corporation as aforesaid after allowing such credit shall be recovered from any money due to the Contractor on any account and if such moneys are not sufficient the Contractor shall be called upon in writing to pay the same within thirty days. If the Contractor fails to pay required sum within the aforesaid period of 28 days, the Engineer shall have right to sell any or all of the Contractor's unused materials, constructional plant, implements, temporary buildings, etc. and apply the proceeds of sale thereof towards the satisfaction of any sums due from the Contractor under the contract, and if thereafter there be any balance outstanding from the Contractor, it shall be recovered in accordance with provision of the contract.

Any sums in excess of the amounts due to the Municipal Corporation and unsold materials constructional plant, etc. shall be returned to the Contractor, provided always that if cost or anticipated cost of completion by the Municipal Corporation of the works or part of the works is less than the amount of which the Contractor would have been paid had he completed the works or part of the works, benefit shall not accrue to the Contractor.

Without prejudice to the generally of the foregoing, the amount deposited by the Contractor as security deposit shall be absolutely aforesaid to the Corporation for such failure, or breach or determination of contract.

13 h) Frauds and Corrupt Practices:

The Contractor and their respective officers, employees, agents and advisers shall observe the highest standard of ethics during the execution of the works until the settlement of final bill. Notwithstanding anything to the contrary contained herein, the Employer may terminate aContractor without being liable in any manner whatsoever to the Contractor if it determines that the Contractor has, directly or indirectly or through an agent, engaged in corrupt practice, fraudulent practice, coercive practice or undesirable practice during the works execution.

Without prejudice to the rights of the Employer under Clause 13 (h) hereinabove, if aContractor is found by the Employer to have directly or indirectly or through an agent, engaged or indulged in any corrupt practice, fraudulent practice, coercive practice or undesirable practice during the execution of Works, such Contractor shall not be eligible to participate in any tender or RFQ issued by the Employer during a period of 10 (ten) years from the date such Contractor is found by the Employer to have directly or indirectly or through an agent, engaged or indulged in any corrupt practice, fraudulent practice, coercive practice or undesirable practice, as the case may be.

• **corrupt practice**" means the offering, giving, receiving, or soliciting, directly or indirectly, of anything of value to influence the actions of any person connected with the Works (for avoidance of doubt, offering of employment to, or employing, or engaging in any manner whatsoever, directly or indirectly, any representative of the Employer who is or has been

associated in any manner, directly or indirectly, with the Works or before or after the execution thereof, at any time prior to the expiry of one year from the date such official resigns or retires from or otherwise ceases to be in the service of the Employer, shall be deemed to constitute influencing the actions of a person connected with the Works.

- "fraudulent practice" means a misrepresentation or omission of facts or suppression of facts or disclosure of incomplete facts, in order to influence the Works ;
- "coercive practice" means impairing or harming or threatening to impair or harm, directly or indirectly, any person or property to influence any person's participation or action in the Works.

14. Notices

14 a) Instructions and notices:

Subject as otherwise provided in this contract all notice to be given on behalf of the Municipal Corporation and all other actions to be taken on its behalf may be given or taken by the Engineer or any officer for the time being entrusted with the functions, duties and powers of the Engineer.

All instructions notices and communications etc. under the contract shall be given in writing and if sent by registered post to the last known place or abode or business of the Contractor shall be deemed to have been served on the date when in the ordinary course of post these would have been served to him.

The Contractor or his agent shall be in attendance at the site(s) during all working hours and shall supervise the execution of the works with such additional assistance in each trade as the Engineer may consider necessary. Orders given to the Contractor's agent shall be considered to have the same force as if they had been given to the Contractor himself.

The Engineer shall communicate or confirm his instruction to the Contractor in respect of the execution of work in a 'Works site order Book' maintained in the office of the Engineer and the Contractor or his authorized representative shall confirm receipt of such instructions by signing the relevant entries in this book. If required by the Contractor he shall be furnished a certified true copy of such instruction(s).

If the Contractor fails to comply with the instruction(s) of the Engineer, the Engineer may impose the penalty of Rs.5000/- (Rupees Five Thousand) or equivalent cost for re-doing the faulty work, whichever is more, for each of such defaults. This penalty will not prejudice the right of the Municipal Commissioner or the Engineer to claim compensation.

14.b)Notices to Local Bodies :

The Contractor shall comply with and give all displays required under any Governmental authority, instrument, rule or order made under any Act of Parliament, State Laws or any regulation or Bye-laws of any local authority or public utility concern relating to works. He shall before making any variation from the contract drawings necessitated by such compliance give to the Engineer a notice given reasons for the proposed variations and obtain the Engineer's instructions thereon. The Contractor shall pay and indemnify the Municipal Corporation against any liability in respect of any fees or charges payable under Act of Parliament, State Laws or any Governmental Instrument, Rule or Order and any Regulations or Bye-laws of any local authority or public utility concern in respect of the works.

15 PENAL ACTION

15.1 PENALTIES

In addition to any penal action under general conditions of individual contracts, a contractor/s may be liable under these Rules to one or more of the following penalties:

- a. Warning (7.1.1)
- b. Fine (7.1.1)
- c. Demotion (7.1.2)
- d. Banning / De-registration (7.1.3.)
- e. Suspension of Registration pending inquiry (7.1.4)
- f. Debarring (7.1.5)

15.1.1. WARNING / FINE

A contractor/s will be liable to a warning and / or fine for -

- a. Non-compliance of any provision of these rules,
- b. Failure to comply with any clause or direction under these Rules or failure to comply with any condition of tenders / contracts and
- c. Inadequate progress / performance under a contract.

For the first default of any type mentioned above, a warning letter/notice will be issued. For each subsequent default of the types in (a), (b) & (c) above, the minimum penalty will be imposed to the contractor as per the penalties mentioned in the contract document under general condition of contract or special condition of contract. Higher amount of fine may be levied by the competent authority i.e. defined under Engineer of the Project, for the reasons to be recorded.

15.1.2 DEMOTION

A contractor/s is liable to be demoted to any of the lower classes of registration on one or more of the following grounds -

a. Specific failure or default in execution of individual works, in respect of physical

progress or quality in such works,

- b. Deterioration in financial or technical ability / capacity and
- c. Repeated failure to properly fill in tender document/s, fully and correctly or delay in execution of formal contract documents

Note: Demotion from the lowest class of registration will amount to banning/deregistration of registration for the period specified. In such cases, the registration of the contractor/s will stand restored after the period of demotion/banning/de-registration.

15.1.3 BANNING - DE-REGISTRATION

Banning / Deregistration will be for a specific period or permanent banning / Deregistration.

A contractor/s is liable to be Banned / De-registered on one or more of the following grounds: -

- a) If security considerations including question of loyalty to the MCGM so warrant,
- b) If the proprietor of the firm, its employee, partner or representative is convicted by a court of law following of investigation or under normal process of law for offences involving moral turpitude in relation to business dealings viz. Conviction by court of law,
- c) If there is strong justification for believing that the proprietor or employee, or representative of the firm has been guilty of malpractices such as bribery, corruption, fraud substitution of tenders, interpolation, misrepresentation, evasion or habitual default in payment of any tax levied by law,
- d) If the firm continuously refuses to return MCGM or State Govt. dues without showing adequate cause, and MCGM is satisfied that this is not due to a reasonable dispute which would attract proceedings in arbitration or court of law,
- e) If the firm employs a MCGM or State Govt. servant, dismissed/removed on account of corruption, or employs a non-official convicted for an offence involving corruption or abetment of such an offence, in a position where he could corrupt Govt. Servants,
- f) Persistent and intentional violation of important conditions of contract. Not attaining required quality of work and non-execution of works as per terms and conditions of contract. Constant non-achievement of milestone on insufficient and imaginary grounds and non-adherence to quality specifications despite being pointed out,
- g) An attempt to cheat MCGM, an attempt to secure a contract through unfair means or bringing to bear outside influence, an attempt to secure unauthorized copies of Municipal records and documents in relation to any tender / contract or any other official matter, an attempt to tamper with Municipal record and documents, threatening, misbehaving with or physical attack on any Municipal employee/ Officer,
- h) An attempt to instigate or collude with other contractor/s with a view to securing undue advantage,
- i) Any of the grounds mentioned in clause Demotion, if it is deemed serious enough

15.1.4 SUSPENSION OF REGISTRATION PENDING INQUIRY

Whenever any Show Cause Notice is issued to the contractor/s calling for the explanation on the alleged lapses by him, the registration of contractor/s may be banned / suspended up to the arrival of final outcome of the said Show cause notice, depending

on the seriousness of the reasons for which show cause notice is issued. Show cause notice shall be issued by the officer not below the rank of Executive Engineer in charge of the concerned work / project of MCGM. Director (E. S. & P.) or concerned Deputy Municipal Commissioner is the competent authority to ban / suspend the registration pending inquiry in such cases. Circular of Banning / suspension of registration till further orders shall be circulated to all departments of MCGM by Head of the executing department i.e. Chief Engineer of concerned department / Assistant Commissioner of the concerned Ward.

The registration of the contractor/s will be restored depending on the final outcome of the process of the said Show Cause Notice and circular to that effect shall be issued by concerned Head of the Department

15.1.5 DEBARRING

Debarring is the penal action to be initiated against the Contractors who are carrying out works for M.C.G.M. and are not registered with M.C.GM. All other criteria and procedure of penal action (i.e. observed for suspension, banning, demotion, deregistration) will remain similar as mentioned in penal action clause 7.

15.2 AUTHORITY

- **15.2.1** On the basis of reports received, concerned Chief Engineer (including City / Hydraulic Engineer) in case of central agencies and Assistant Commissioner in case of Ward Offices of MCGM will be competent, either suo-motu or, to issue warning and/or impose fine and order of demotion to contractor/s. The power to issue warning or impose any fine can also be exercised by the Executive Engineer concerned in-charge of construction in accordance with General Contract Condition specified in tender.
- **15.2.2** On the basis of report/s received from concerned Chief Engineer or Assistant Commissioner, the Director (E.S. & P.) or concerned Deputy Municipal Commissioner will be competent, either suo-motu, or to impose any of the penalties mentioned in clause 7.1 on the contractor/s.
- **15.2.3** On the basis of report/s, the Municipal Commissioner or any of the Additional Municipal Commissioners will be competent, either suo-motu, or to impose any of the penalties mentioned in clause 7.1 on the contractor/s.

15.3 PROCESS

15.3.1 Before initiating action for demotion / banning / suspension / de-registration, the competent authority not below the rank of Executive Engineer in charge of the concerned work/project of MCGM, shall issue a Show Cause Notice to the contractor/s, as to why penal action should not be taken against the said contractor/s. The notice period shall not be less than 15 days and shall be counted from the date of receipt of the notice by the contractor/s and can be extended, for adequate reasons (to be recorded), by the officer who issued the said notice, up to a period of 30 days (including the initial period).

- **15.3.2** If the contractor/s fails to give satisfactory clarification within the period stipulated in the show cause notice (or, the extended period, if any), the concerned Chief Engineer / Assistant Commissioner shall either take a final decision regarding the demotion with specific time period or permanently or make detailed report with recommendations for suspension / banning / de-registration to the Director (E. S. & P.) or concerned Deputy Municipal Commissioner / Additional Municipal Commissioner / Municipal Commissioner shall give personal hearing to contractor/s or his/their authorized representative on his request in writing, along with his/their letter of clarification.
- **15.3.3** The competent authority i.e. Dir. (E. S. & P.) / concerned Deputy Municipal Commissioner / A.M.C. / Municipal Commissioner, shall give personal hearing to contractor/s or his/their authorized representative on his request in writing along with his/their letter of clarification, before taking final decision on banning / de-registration of the contractor/s with specific time period or permanently.
- 15.3.4 As far as practicable, the competent authority i.e. Chief Engineer / Assistant Commissioner of that concerned department or Dir. (E.S. & P.) / concerned Deputy Municipal Commissioner / A.M.C. / Municipal Commissioner, shall take final decision regarding demotion / banning / de-registration within 15 days of completion of hearing of the contractor/s.
- 15.3.5 Any order of penalty passed by the competent authority i.e. Chief Engineer / Assistant Commissioner of that concerned department or Dir. (E. S. & P.) / concerned Deputy Municipal Commissioner / A.M.C. / Municipal Commissioner, under these Rules shall state the facts of the case and record the reasons for the order. In case of, suspension / banning and de-registration, the order shall also specify the name(s) of the proprietor / partner(s) / directors / power of attorney holder of the contractor/s firm/ partnership / company as well as the period of demotion / suspension / banning / de-registration in his/their order, and shall intimate the contractor/s accordingly. A circular to that effect shall be issued to all departments of MCGM by the executing department who has initiated the action.
- 15.3.6 The decision regarding demotion / banning / de-registration shall be communicated to contractor/s immediately with directions to submit the original registration certificate to the Monitoring & Registration Cell within 15 days from the date of receipt of the order regarding demotion / banning / de-registration, for taking necessary endorsement on the same. If any contractor/s does not comply with this requirement within the period of 15 days mentioned above, He / they shall be deemed to have been de-registered automatically at the expiry of the above mentioned period, even if the penalty imposed was demotion/banning/suspension for a specific period.

15.4 APPEALATE AUTHORITIES FOR PENAL ACTION

- a. In case of Demotion Director(E.S. & P.) or concerned Deputy Municipal Commissioner is the authority and,
- b. In case of banning/de-registration Additional Municipal Commissioner / Municipal Commissioner are the final authorities

15.5 **REVOCATION OF ORDER / RESTORATION OF REGISTRATION**

The Suspended / Banned / Demoted / contractor/s shall be restored to the Original Class under which contractor/s was originally registered or as per the sanction of the competent authority subject to following;

a. An order for suspension/banning/demotion/deregistration passed for a certain specified period shall be deemed to have been automatically revoked on the expiry of that specified period and it will not be necessary to issue a specific formal order of revocation, except that an order of suspension/banning/demotion/ deregistration passed on account of doubtful loyalty or security consideration shall continue to remain in force until it is specifically revoked.

OR

b. An order of suspension/banning/demotion/deregistration for reasons mentioned at aforesaid para may be revoked if, in respect of the same facts, the accused has been wholly exonerated by a court of law.

Circular regarding restoration shall be circulated to all departments of MCGM by Head of the executing department i.e. Chief Engineer of concerned department / Assistant Commissioner of the concerned Ward.

15.6 **REVIEW**

The appellate Authorities may, on representation or appeals from the firms or even otherwise review suspension/banning/demotion/deregistration orders.

15.7 EFFECT OF BANNING / SUSPENSION / DE-REGISTRATION

15.7.1 Once the order of banning / suspension / deregistration is issued, he will not be allowed to participate in any future tender process and if the contractor has already participated in tender process the bid shall be terminated at the instant stage. In case the order of banning/ suspension / deregistration is issued after the proposal is tabled before Standing Committee, the banning / suspension / deregistration order should be communicated to the Standing Committee by making a statement and the DL to MS will be withdrawn.

No contract of any kind whatsoever shall be placed with a banned / suspended / deregistered firm, including its allied firms by all Departments/offices of the MCGM after the issue of a banning order. Contracts concluded before the issue of the banning / suspension / deregistration order shall, however, not be affected by the banning / suspension / deregistration order. Contracts concluded shall mean the date of issuance of 'Letter of Acceptance'.

Even after banning / suspension / deregistration, the agency will be allowed to complete his other on-going works, unless otherwise rescinded by competent authority on grounds of breach of conditions of contract.

15.7.2 If registered contractor/s (a firm partnership or company) is de-registered/banned/ suspended, then any other registered contractor/s (a firm, partnership or company), with any partner or power of attorney holder who is also a partner or power of attorney holder of such partner or power of attorney holder of the de-registered/banned/ suspended contractor/s, shall also stand automatically de-registered/banned/ suspended,

- 15.7.3 Demotion / Banning / Suspension / Deregistration order passed in respect of a firm shall be extended to all its allied firms (see definition for details)
- 15.7.4 Proprietor / Partner/s / Director/s / Power of Attorney Holder/s of banned/suspended / deregistered firm shall not be allowed in Joint Ventures.
- 15.7.5 Demotion shall be restricted to one class immediately below the existing class of registration. Demotion from the lowest class of registration will amount to suspension of registration for the period specified
- 15.7.6 The Demotion / Banning / De-registration shall apply permanently or for the period specified in the order of Demotion / Banning / De-registration as per the sanction of competent authority i.e. Chief Engineer of that concerned department/ or Dir. (E.S. & P.) / concerned D.M.C. / A.M.C. / Municipal Commissioner, obtained by the executing department/s initiating the action.
- 15.7.7 De-registered/banned/suspended contractor/s, registered with MCGM in any class shall not be entitled to be issued any tender document/s or quotation/s for any MCGM works in any class during the period of De-registration/Banning/suspension. Further for bids in process, the contractor/s will not be considered for award of works /Contract in any class, even if the said de-registered/banned/suspended contractor/s is having registration of any other Govt. / Semi Govt. agency such as PWD/ CPWD /MJP / MHADA/MES/CIDCO etc. in any class. MCGM reserves the right to terminate the work in case of such default.
- 15.7.8 Demoted contractor/s, registered with MCGM in any class shall not be entitled to be issued any tender document/s or quotation/s for any MCGM works in any upper class during the period of Demotion even if, the said demoted contractor/s is having registration in any upper class from any other Govt. / Semi Govt. agency such as PWD/CPWD/MJP/MHADA / MES/ CIDCO etc. Further for bids in process, the contractor/s will not be considered for award of works / Contract in any upper class in such cases. MCGM reserves the right to terminate the work in case of such default.
- 15.7.8 Debarred Contractor/s (in case of Firms with outside registration) and/or contractors who penalized are by any other Govt. / Semi Govt. agency such as PWD/CPWD/MJP/MHADA/MES/CIDCO etc. shall not be entitled to be issued any tender document/s or quotation/s for any MCGM works in any class during the period of debarring. Further for bids in process, the contractor/s will not be considered for award of Works/Contract in any class, even if the said blacklisted contractor/s is having registration of MCGM or any other Govt. / Semi Govt. agency such as PWD/CPWD/MJP/MHADA/MES/CIDCO etc. in any class.

15.8 Payment upon banning / suspension / deregistration of firm

If the Contractual agency is banned / suspended / deregistered for the appropriate reasons because of a fundamental breach of Contract by the Contractor, the Engineer shall issue a certificate for value of the work done and materials ordered. Any excess expenditure incurred or to be incurred by the Municipal Corporation in completing the works or part of the works or excess loss or damages suffered or may be suffered by the Municipal Corporation due to sub-standard work shall be recovered from any money due to the Contractor on any account and if such moneys are not sufficient the Contractor shall be called upon in writing to pay the same within thirty days. If the Contractor fails to pay required sum within the aforesaid period of 30 days, the Engineer shall have right to sell any or all of the Contractor's unused materials, constructional plant, implements, temporary buildings, etc. and apply the proceeds of sale thereof towards the satisfaction of any sums due from the Contractor under the contract, and if thereafter there be any balance outstanding from the Contractor, it shall be recovered in accordance with provision of the contract.

Any sums in excess of the amounts due to the Municipal Corporation and unsold materials constructional plant, etc. shall be returned to the Contractor, provided always that if cost or anticipated cost of completion by the Municipal Corporation of the works or part of the works is less than the amount of which the Contractor would have been paid had he completed the works or part of the works, benefit shall not accrue to the Contractor.

15.9 **REFUND OF FEES**

Demoted / banned / suspended or de-registered contractor/s shall not be entitled for refund of Registration / Up-gradation / Renewal fees.

15.10 RENEWAL FOR DEMOTED CONTRACTORS

The renewal of demoted contractor/s shall be processed for original class and the penal action of demotion will continue till the specified period.

In case the validity of the suspended contractor/s falls in suspended period, the validity will be renewed after completion of suspension period, in continuation of validity of his registration without charging the penalty prescribed for renewal.

SECTION B: Safety Health & Environment

CONTRACTOR'S HEALTH, SAFETY & ENVIRONMENT PROGRAMME

1. SAFETY ORGANISATION

1.1. SHE Policy

The Contractor shall have a written health, safety and environment policy issued by the Chief Executive of the Organization, appropriate to the scale and nature of the risks involved in the contract works. A copy of the Policy shall be made available to the Employer at the time of contract in evidence of Contractor's commitment to management of employee's health and safety and compliance to Statutory and regulatory requirements. All Contractors' employees shall be familiar with the Safety Policy and their role and obligations in its implementation. The Policy shall meet the relevant statutory and regulatory requirements and the requirements of the Employer. The Policy shall periodically be reviewed for updating with respect to new and emerging legal and other requirements. SHE policy should focus and present well defined SHE objectives and targets.

1.2 Site specific SHE Plan / Procedures / Forms & Documents

Contractor will have to prepare & get SHE plan approved from the Employer's representative. Contractor will work as per OHSAS guidelines. Contractor can use Forms available with client's representative to show documentary evidence of compliance.

1.3 <u>Safety Representative</u>

- a) The Contractor shall appoint a Safety Representative (SR) meeting statutory competence requirements, with a minimum experience of five years of safety management in comparable contracts, approved by the Employer on the basis of his qualification [DIS] and experience & shall have hands-on experience on OHSAS 18000 & Environment Management System (EMS). Safety Head of Client's representative can disqualify the SR if found unsuitable. The SR shall give his whole time to the superintendence of the Health and Safety Programme of the Contractor.
- b) The Contractor shall also nominate in writing competent Safety Appointees from different disciplines to assist SR in implementation of health and safety measures in

their routine contract works. The SR shall have sufficient authority to direct Contractor's or his Subcontractor's personnel to meet health and safety requirements and to stop performance of work until such requirements are met.

1.4 <u>Employee consultations, Safety Committee and communication</u>

- a) The Contractor shall ensure full involvement of all his employees recognizing their right to consultation on health and safety matters. The Safety Appointees of the various areas, in conjunction with the SR shall be responsible for ensuring employees' involvement through routine safety inspections, hazard and risk assessment in new and changed works and their control. Contractor shall maintain appropriate operating procedures to guide these requirements. Contractor shall plan, maintain and implement annual training calendar/matrix for periodical SHE Induction & Training programs for all working level personnel.
- b) The Contractor shall also appoint a Safety Committee (SC) comprising of Safety Appointees from the various areas under the chairmanship of the Contractor's Project In charge .The committee shall meet at periodic intervals minimum monthly to discuss the status and adequacy of the safety management, and any safety concerns of the employees. The committee shall also formulate and validate the safety procedures incorporating controls to prevent or mitigate hazards and risks before submission for approval by Employer / Engineer. The minutes of SC meeting shall be submitted to the Employer / Engineer. SR shall maintain the records of the meetings. The frequency of the meetings shall be clearly defined in the SHE program and minutes of the meetings shall be submitted to Employer.
- c) The Contractor shall communicate with the help of Notice board, Posters, Sign boards to the employees regularly on job hazards applicable to their tasks in hand. Safety Appointees (SA's or any of SR's nominees.) shall hold 'Toolbox talks' for this purpose on a routine basis before undertaking any safety critical and /or non-routine activities. Weekly meetings of the Contractor and his Subcontractor attended by the SR and SA's shall include safety as a key item in the agenda to discuss hazards and risk assessments, Job safety analysis, and control procedures and to review accidents and incidents (Near-miss) for remedial measures to prevent such occurrence. The minutes of the meeting shall be submitted to the Employer / Contractor. SR shall maintain the records.

1.5 <u>Contractor's accident / Environmental incident reports</u>

"Accident" for the purpose of this clause is defined as "Undesired event giving rise to death, ill-health, injury, damage or other loss" and "Incident" is defined as "Event that gave rise to an accident or had the potential to lead to an accident". An accident

where no ill health, injury, damage or other loss occurs also referred to as "nearmiss". Incident includes near miss.

The Contractor shall report orally, to Employer and Engineer regardless of their extent, duration and severity, immediately on occurrence of all accidents resulting in:

- a) Personal injury / Dangerous Occurrence,
- b) Property damages,
- c) Fires,
- d) Spills
- e) Overflows of septic tanks and
- f) near-misses

Contractor shall submit the accident/ incident report in writing to Employer / Engineer within 24 hours of its happening in the form as prescribed by the governing statute or in the absence of which, in the form prescribed by the Engineer. Contractor shall detail in the Accident/Incident report, the particulars of the dangerous occurrence leading to the accident, lost time of absence due to accident, root cause analysis and the corrective and preventive actions to prevent such recurrence. In addition, Contractor shall include his estimate of the impact of accident on project schedule. Incidents shall also be reported in the same manner identifying root cause/s to eliminate such potential occurrence or risks

1.6. First -aid personnel and facilities

- a) The Contractor shall make available first-aiders, first-aid boxes and or first aid stations as per statutory requirements. The persons holding current certificates of competency of recognized institutions in prescribed numbers as per any governing statute and in the absence of such regulatory requirement a minimum of two firstaiders for each area of work for every hundred workmen. First-aiders' names shall be prominently displayed.
- b) The first -aid boxes shall display contents of medical and medicinal articles with quantity maintained, which shall be in accordance with governing statute. Nominated first-aider shall replenish stock promptly.

The first-aid refresher training shall be provided at least once in a year and all employees shall be encouraged to undergo first-aid training. A record shall be kept of all first aid treatments with particulars of treatment and personnel providing the treatment.

1.7 <u>Purchase and Procurement Control</u>

a) The Contractor shall maintain a procedure for control of his purchases to ensure that all safety requirements are appropriately vetted by the safety personnel during all stages of procurement including planning of specifications, inspection for acceptance and commissioning in order that threats to safety are not overlooked and appropriate attention is paid to the training of personnel in the operation of Contractor's new or changed machinery and their operation control procedures, to prevent / control risks.

b) Contractor shall exercise due diligence in appointing his subcontractors and outsourcing contract services, that no new health and safety threats are created. Contractor shall ensure personnel of subcontractors and outsourced contract services are competent in health and safety management to meet the Policy requirements. They shall be made aware of the safety rules, emergency procedures and any information that will have a bearing on the safety, health and related contractual obligations

1.8 Hazard Identification and Risk Assessment

Contractor shall ensure that his key personnel and safety personnel are trained to be competent in hazard identification, risk assessment and risk control processes. Contractor shall on a routine basis identify, evaluate and control all health and safety risks especially in the hazardous work activities to validate the previous risk assessments. Elements such as hazard identification, evaluation of risks with existing control measures in place and estimate of tolerability of the residual risks shall be an ongoing process. Any additional/New control measures shall be designed based on this process on need basis. Contractor shall make sure that specific work related risk assessment is attached to the permit while taking the permit.

2.0Health and well being of construction workers

The objective is to ensure health and safety of the workersduring construction, with effective provisions for the basicfacilities of sanitation, drinking water, safety of equipments ormachinery etc.

Following are the recommendations to be followed:

- 1. Comply with the safety procedures, norms andguidelines (as applicable) as outlined in the document Part 7 Constructional practices and safety, 2005, National Building code of India, Bureau of IndianStandards
- 2. Provide clean drinking water to all workers
- 3. Provide adequate number of decentralized latrines andurinals to construction workers.
- 4. Guarding all parts of dangerous machinery.
- 5. Precautions for working on machinery.
- 6. Maintaining hoists and lifts, lifting machines, chains, ropes, and other lifting tackles in good condition. Durable and reusable formwork systems to replace timber formwork and ensure that formwork where used is properly maintained.
- 7. Ensuring that walking surfaces or boards at height areof sound construction and are provided with safety railsor belts.
- 8. Provide protective equipment; helmets etc.

- 9. Provide adequate measures to prevent fires.
- 10. Fire extinguishersand buckets of sand to be provided in the fire-pronearea and elsewhere where ever found necessary.
- 11. Provide sufficient and suitable light for working duringNighttime.
- 12. Dangers, health hazards, and measures to protectworkers from materials of construction, transportation, storage etc.
- 13. Safety policies of the constructionfirm/division/company.

2.1 Sanitation facilities for construction workers

Sewage generated from the areas occupied by the construction laborers have to be directed into the existing sewage drain of the area. In case of non availability of the sewer system, an onsite decentralized treatment system has to be provided.

3.0 Water use during construction

3.1 Parameters for water quality

Water used shall be clean and reasonably free from injurious quantities of deleterious materials such as oils, acids, alkalis, salts and microbial growth. Generally, potable water shall be used. Where water can be shown to contain any sugar or an excess of acid, alkali or salt, that water should not be used.

3.2 Measures for reducing water demand during construction

To avoid wastage of curing water, following guidelines are to be followed:

- 1. Curing water should be sprayed on concrete structures; free flow of water should not be allowed for curing..
- 2. Concrete structures should be covered with thick cloth/gunny bags and then water should be sprayed on them. This would avoid water rebound and will ensure unstained and complete curing.
- 3. Ponds should be made using cement and sand mortar to avoid water flowing away from the flat surface whilecuring.
- 4. Water ponding should be done on all sunken slabs, thiswould also highlight the importance of having an impervious formwork.

4.0 Construction wastewater management

Wastewater generated from the site during the construction contains suspended materials, spillage and washings from the various areas which can be hazardous and should not be mixed with the sewage water or allowed to percolate into the ground. Aseparate drainage should be provided for the construction wastewater and collected in a separate basin. The water should be discharged into the sewage drain after pre treatmentincluding filtration and removal of contaminants to the standards prescribed for disposal.

5.0Noise Control

i)No horn shall be used in silence zones or during night time in residential areas except during public emergency.

ii) Sound emitting construction equipment shall not be used or operated during night time in residential areas and silence zone.

Area code	Category of Area/ Zone	Limits of dB(A)Leq	
A	Industrial Area	75	70
В	Commercial Area	65	55
С	Residential Area	55	45
D	Silence Zone	50	40

Note:-i) Day time shall mean from 6AM to 10 PM

ii) Night time shall mean from 10 PM to 6 AM

iii) Silence Zone is an area comprising not less than 100meters around hospitals, educational institutes, courts, religious places or any other area declared such by competent authority.

ANNEXURE-I

Adjustment Formulae

a) Local Currency Component

i. Price adjustment for increase or decrease in the cost due to **local labour** shall be paid in accordance with the following formula:



- V_L = increase or decrease in the cost of work during the quarter under consideration due to changes in rates for local labour
- Lo = The Consumer Price Index Numbers (General) for Mumbai (declared by the Labour Bureau, Government of India) as on the date 30 days prior to the deadline for submission of bids
- Li = The average Consumer Price Index Numbers (General) for Mumbai (declared by the Labour Bureau, Government of India) for the quarter under consideration.
- P_L = Percentage of local labour component as specified in Special conditions of contract (SCC).
- i. Price adjustment for increase or decrease in the cost of <u>cement</u> procured by the Contractor from a source within India shall be paid in accordance with the following formula:



- Vc = Increase or decrease in the cost of work during the quarter under consideration due to changes in the rates for cement.
- Co = The whole sale price index for cement as on the date 30 days prior to the deadline for submission of bids as published by the Office of the Economic Advisor, Ministry of Industry, Government of India, New Delhi.
- Ci = The average whole sale price index for cement for the quarter under consideration as by the Office of the Economic Advisor, Ministry of Industry, Government of India, New Delhi.
- Pc = Percentage of cement as specified in Special conditions of contract (SCC)

i. Price adjustment for increase or decrease in the cost of <u>reinforcing</u> <u>steel</u> procured by the Contractor from a source within India shall be paid in accordance with the following formula:



- V_S = Increase or decrease in the cost of work during the quarter under consideration due to changes in the rates for reinforcing steel.
- So = The whole sale price index for steel (Iron & Steel) as on the date 30 days prior to the deadline for submission of bids as published by the Office of the Economic Advisor, Ministry of Industry, Government of India, New Delhi.
- Si = The average whole sale price index for steel (Other Iron & Steel) for the quarter under consideration as published by the Office of the Economic Advisor, Ministry of Industry, Government of India, New Delhi.
- Ps = Percentage of steel as specified in Special conditions of contract (SCC)
- Price adjustment for increase or decrease in cost of <u>other local</u> <u>materials</u> procured by the Contractor shall be paid in accordance with the following formula:



- V_M = Increase or decrease in the cost of work during the quarter under consideration due to changes in rates for local materials other than Petroleum Oil & Lubricant.
- Mo = The whole sale price index (all commodities) as on the date 30 days prior to the deadline for submission of bids as published by the Office of the Economic Advisor, Ministry of Industry, Government of India, New Delhi.
- Mi = The average whole sale price index (all commodities) for the quarter under consideration as published by the Office of the Economic Advisor, Ministry of Industry, Government of India, New Delhi.

Pm = Percentage of local material component as specified in Special conditions of contract (SCC).

i. Price adjustment for increase or decrease in cost of <u>fuel and</u> <u>lubricants</u> procured by the Contractor from a source within India shall be paid in accordance with the following formula:



V_F = Increase or decrease in the cost of work during the quarter under consideration due to changes in rates for fuels and lubricants.

Fo = The retail price of High Speed Diesel (HSD) at the existing consumer pumps of Indian Oil Corporation (IOC) at Mumbai as on the date 30 days prior to the deadline for submission of bids.

- Fi = The retail price of HSD at the existing consumer pumps of IOC at Mumbai for the 15th day of each calendar month of guarter under consideration.
- P_F = Percentage of fuel and lubricants as specified in Special conditions of contract (SCC). (for the application of this clause the price of HSD has to be chosen to represent Fuels and Lubricants group.)
- i. Price adjustment for increase or decrease in the cost of <u>steel plates</u> <u>for pipelines</u> procured by the Contractor from a source within India shall be paid in accordance with the following formula:



V_P = Increase or decrease in the cost of work during the quarter under consideration due to changes in the rates for steel plates.

Po = The whole sale price index for Oromild Steel & Tensile Plates as on the date 30 days prior to the deadline for the submission of bids as published by the Office of the Economic Advisor, Ministry of Industry, Government of India, New Delhi.

- Pi = The average whole sale price index for Oromild Steel & Tensile Plates for the quarter under consideration as published by the Office of the Economic Advisor, Ministry of Industry, Government of India, New Delhi.
- P_P = Percentage of steel plates component for the Works as specified Special conditions of contract (SCC).
- i. Price adjustment for increase or decrease in the cost of <u>electricity</u> shall be paid or recovered in accordance with the following formula



- V_E =Increase or decrease in the cost of work during the quarter under consideration due to changes in rates for electricity.
- Eo = The group-wise index number of industrial production of electricity as on the date 30 days prior to the deadline for submission of bids as officially published in monthly RBI bulletin by Reserve Bank of India
- Ei = The group-wise index number of industrial production of electricity for the quarter under consideration as officially published in monthly RBI bulletin by Reserve Bank of India
- P_E = Percentage of electricity component as specified in Special conditions of contract (SCC)
- Price adjustment for increase or decrease in the cost of <u>mechanical</u> <u>plant and machinery</u> going into permanent works shall be paid or recovered in accordance with the following formula :



- V_T = Increase or decrease in the cost of work during the quarter under consideration due to changes in price for mechanical plant and machinery.
- To = The wholesale price index of non electrical machinery & parts as on the date 30 days prior to the deadline for submission of tenders as published by the office of the Economic Advisor, Ministry of Industry, Government of India, New Delhi.

- Ti = The average wholesale price index of non electrical machinery & parts for the quarter under consideration as published by the Office of the Economic Advisor, Ministry of Industry, Government of India, New Delhi.
- P_T = Percentage of mechanical plant and machinery component as specified in Special conditions of contract (SCC)

For extra items of works required to be executed as per Clause 10(a) and 10 (b) of Conditions of Contract, the escalation will be payable on the basis of formulae mentioned above by adopting Lo, Co, So, Mo, Fo, Po, Eo, and To prevailing on the date of first execution of the extra items.

The percentage of various components such as labour, material, fuel and lubricants to be adopted in the formulae for working out increase or decrease in cost of work, in case of extra items shall be decided while framing the rate for extra items on the basis of actuals.