

GUJARAT MINERAL DEVELOPMENT GMDC LTD
(A Govt. of Gujarat Enterprise)

CIN :L14100GJ1963SGC001206
GST :24AAACG7987P1ZT

TENDER NO. : 27/LP/WATERPROOFING WORK/2022

**Providing and laying water proofing treatment on Roof
slab of High school Building**

At

**SKV Nagar, GMDC Lignite Project Panandhro,
Tal: Lakhpat, Dist- Kutchh**

TECHNICAL BID-II

GMDC LTD
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1. Definitions

1.(1) "Contract Document" shall mean and include documents enumerated in clause 2 of this tender.

1. (2)

The words mentioned at column A in the following table Are those mentioned as such in Column B of the table mentioned below and shall include their legal representatives, assigns or successors.

A	B
Employer	Gujarat Mineral Development Corporation Limited. Ahmedabad
Contractor	Successful bidder
Architect:	As may be appointed by GMDC from time to time
Consultant	As may be appointed by GMDC from time to time
Engineer	As may be appointed by GMDC from time to time
The Clerk of Work	Same as Engineer
Engineer In-charge	Engineer of GMDC
Site In-charge	Contractor's Senior Engineer

1.(3) "The Site" shall mean the site of the Contract work including any building and erections thereon and any other land allotted by the Employer for Contractor's use.

1.(4) The term "Sub-Contractor", shall mean and include those having a direct contract with the Contractor and it includes one who furnishes material worked to a special design according to the plans or specifications of this work but does not include one who merely furnishes material not so worked.

1.(5) Written notice shall be deemed to have been duly served if delivered in person to the individual or to a member of the firm or to an office of the company for whom it is intended, or if delivered at or sent by registered mail to the last business address known to him who gives the notice.

1.(6) The term "Work" shall mean and include the activities carried out by the Contractor in terms of scope of work which includes supply of labour or material or both.

1.(7) The date of virtual completion of a project or specified area of a project means the date when construction is sufficiently completed, in accordance with the Contract Documents as modified by any change or variation orders agreed to by the parties, so that GMDC can occupy the project for the use it was intended.

2. Contract Document shall mean and include following documents:

Technical Bid and annexure thereto

Price bid

Letter of Intent

Work Order

Agreement

Tender Drawings

Day work schedule

Schedule of basic price of material

After the award of the Contract the Contractor shall without charge be supplied with all such further drawings and details as may be prepared by the Engineer and the Architect, from time to time as the work proceeds as are reasonably necessary either to explain or amplify the Contract Drawings or to enable the Contractor to carry out and complete the work in accordance with these Conditions.

None of the document herein before mentioned shall be used by the Contractor for any purpose other than this Contract.

3. Type of Contract

The Contract shall be item-rate contract. The Contractor shall be paid for the actual quantity of work done, as per drawing and measured at site, at the rates finalized by GMDC.

Contractor's rates shall remain unchanged although the actual quantities may be different from those shown in the Bill of quantities. The quoted item rates shall be inclusive of all the liabilities / responsibilities relating to contract labour laws / Insurance / Provident Funds and any statutory liability etc. and no variation in prices will be effected for that purpose.

The unit rates will be valid for a period as defined in the Contract Document.

No extra claim/compensation will be entertained for idling of manpower or machinery or both.

The rates agreed in schedule of rates shall cover for all charges and expenses.

4. Schedule of Quantities - Procurement of materials based on drawings and (not Bill of Materials)

The schedule of Quantities given in the Contract Bill are provisional and are meant to indicate the intent of the work and to provide a uniform basis for tendering. GMDC reserves the right to increase or decrease any of the quantities to any extent or to totally omit any item of work and the Contractor shall not claim any extras or damages on these grounds.

Any error in description or in quantity or omission of items from the Contract Bill shall not vitiate this Contract but shall be treated as a variation.

5. Drawings

5.(1) Tender Drawings

Tender drawings describe the general nature of works. However, there may be substantial variation in these and detailed execution drawings issued to the Contractor from time to time. Such variations will not vitiate the Contract.

5.(2) Further Drawings and Instructions

The Engineer, the Architect and GMDC shall have full power and authority to supply to the Contractor from time to time, during the progress of the works, such further drawings and instructions as shall be necessary for the purpose of the proper and adequate execution and maintenance of the Works. The Contractor shall carry out and be bound by the same.

5.(3) Disruption of Progress

The Contractor shall give written notice to GMDC or the Engineer or the Architect whenever planning or progress of the Works is likely to be delayed or disrupted unless any other drawing or order, including a direction, instruction or approval, is issued by the Engineer or the Architect or GMDC within a reasonable time. The notice shall include details of the drawings 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.

5.(4) Contract Drawings.

5.(4)A In general, the Drawings shall indicate dimensions, position and type of construction. The Specifications shall indicate the qualities and the methods. The Bill of Quantities shall indicate the quantum and the rate for each item of work. Any work indicated on the Drawings and not mentioned in the specifications or vice versa shall be deemed as though fully set forth in both. Work not specifically detailed, called for, marked or specified shall be the same as similar parts that are detailed, marked or specified.

5.(4)B The Contractor's work shall not deviate from the Drawings and the Specifications. The Engineer or GMDC's interpretation of these documents shall be final and without appeal.

5.(4)C Errors or inconsistencies discovered in the Drawings and Specifications shall be promptly brought to the attention of the Architect and/or the Engineer for interpretation or correction. Local conditions which may affect the work shall likewise be brought to the Architect and/or Engineer's attention. If at any time, it is discovered that work is being done which is not in accordance with the Contract Drawings and Specifications, the Contractor shall correct the work immediately. Corrections of defective work shall not be a basis for any claim for extension of time and or money. The Contractor shall not carry on work except with the knowledge of the Clerk-of- works.

5.(4)D Figured dimensions on the Scale Drawings and large size details shall govern the work. Large size details shall take precedence over small scale drawings. Any work done before

receipt of such details, if not in accordance with the same, shall be removed and replaced or adjusted by the Contractor, as directed without expense to GMDC. The general conditions apply with equal force to all the work including authorized extra works.

- 5.(4)E All Drawings, Bills of Quantities and Specifications and copies thereof furnished by the Engineer are his property. They shall not be used on any other work and shall be returned to the Engineer at his request on completion or termination of the Contract.

6. Engineer's Instructions

- 6.(1) The Contractor shall forthwith comply with and duly execute any works comprised in such instructions issued to him by Engineer in regard to any matter in respect of which the Engineer is expressly empowered by these Conditions to issue instructions provided always that verbal instructions, directions and explanations given to the Contractor or his work representative by the Engineer shall, if involving a variation, be confirmed in writing.

If within seven days after receipt of a written notice from the Engineer, requiring compliance with an instruction the Contractor does not comply herewith, then GMDC may employ and pay other persons to execute any work whatsoever which may be necessary to give effect to such instructions and all cost incurred with such employment shall be recoverable from the Contractor by GMDC as debt or may be deducted by him from any monies due or to become due to the Contractor under this Contract.

- 6.(2) Upon receipt of what propose to be an instruction issued to him by the Engineer, the Contractor may request the Engineer to specify in writing the provision of these conditions which empowers the issue of the said instruction. The Engineer shall forthwith comply with any such request, and if the Contractor shall thereafter comply with the said instruction, then the issue of the instruction shall be deemed for all purposes of this Contract to have been empowered by the provision of these Conditions specified by the Engineer in answer to the Contractor's request.

- 6.(3) All instructions issued by the Engineer shall be in writing. Any instruction issued orally shall be of immediate effect, but shall be confirmed in writing by the Contractor to the Engineer within seven days, and if not dissented from in writing by the Engineer to the Contractor within seven days from receipt of the Contractor's confirmation, shall take effect as from the expiration of the latter said seven days.

Provided always:

6.(3)A. That if the Engineer within seven days of giving such an oral instruction shall himself confirm the same in writing, then the Contractor shall not be obliged to confirm as aforesaid, and the said instruction shall take effect as from the date of the Engineer's confirmation and

6.(3)B. That if neither the Contractor nor the Engineer shall confirm such an oral instruction in the manner and at the time aforesaid but the Contractor shall nevertheless comply with the same, then the Engineer may confirm the same in writing at any time prior to the issue of the Final Certificate, and the said instruction shall thereupon be deemed to have taken effect on the date on which it was issued.

7. Facilities and Co-operation

In the case of works indicated on the Drawings but not included in the Contract the Contractor shall provide necessary facilities and co-operation for any Sub- contractor or supplier who may be approved by GMDC. The Contractor shall do all cutting, filling or patching of his work that may be required to make its several parts come together properly and fit it to receive or be received by work of other Contractors shown upon or reasonably implied by the Drawings and Specifications for the completed structure, and he shall make good after them as the Engineer may direct. Any cost caused by the defective or ill-timed work shall be borne by the party responsible therefore.

The Contractor shall not endanger any work by cutting, excavating or otherwise altering the work and shall not cut or alter the work of any other Contractor save with the consent of the Engineer.

8. Setting out

The Engineer shall determine any lines levels which may be required for the execution of the work and shall furnish to the Contractor by way of accurately dimensioned drawings such information as shall enable the Contractor to set out the Work at ground level.

The Contractor shall set out and level the work and shall be responsible for the accuracy of the same. He shall provide all the instruments and attendance required by the Engineer for checking the work. He shall entirely at his own cost amend to the satisfaction of the Engineer any error found at any stage which may arise through inaccurate setting.

9. Site

- 9.(1) Visit : Before tendering, the Contractor shall have visited and examined the site and satisfied himself as to the nature of the existing roads or other means of communication and the character of the soil and of the excavations, the correct dimensions of the work and the facilities for obtaining any special articles called for in the Contract Document and shall have obtained generally his own information on all matters affecting the continuation and progress of the works.

No extra charge made in consequence of any misunderstanding or incorrect information on any of these points, or on the grounds of insufficient description, will be allowed. Should the Contractor after visiting the site, find any discrepancies, omissions, ambiguities or conflicts in or among the Contract Document, or to be in doubt as to their meaning, he shall bring the questions to the Engineer's attention, not later than seven days before the last date for submission of the tender.

- 9.(2) Possession : The Contractor shall be allowed admittance to the site on the 'Date of Commencement' stated in the Contract Document and he shall thereupon and forthwith begin the work and shall regularly proceed with and complete the same on or before the 'Date of Completion' stated in the Contract Document subject nevertheless to the provision for extension of time hereafter contained.

9.(3) Treasures :Any Treasures, Coins or objects of Antiquity, which may be found at site shall be the property of GMDC and handed over to GMDC.

9.(4) Use of Site

In particular the following provisions shall be deemed to apply to the possession and use of the Site.

9(4)A The lands and other places outside the Site which are the property of or under the control of GMDC shall be used strictly in accordance with the instructions of the Engineer or Clerk of Works.

9.(4)B The Contractor shall at any time move any vehicle, machine, vessel or any other obstruction within his control that may be required by the Clerk of Works to be moved such things or such obstructions promptly on instructions being given and at his own cost unless the Clerk of Works decides otherwise.

9(4)C The Contractor shall maintain access for the inspection, operation and maintenance of any of the plant or the Works belonging to GMDC which lie within the Site or elsewhere.

9(4)D The Contractor shall not use any portion of the Site for any purpose not connected with the Works unless prior written permission of the Clerk of Works shall have been obtained.

10. Samples and Shop Drawings

10.(1) After the award of the Contract, the Contractor shall furnish for the approval of the Engineer, with such promptness as to cause no delay in his work or in that of any other Subcontractor, samples and shop drawings required by the Engineer. Samples shall be delivered as directed by the Engineer. The shop / fabrication drawings shall be prepared by the contractor at his own cost and got approved by the Engineer.

10.(2) A schedule giving dates for the submission of samples shall be included in the schedule described under clause 14.

10.(3) The Engineer shall check and approve such samples, with reasonable promptness only for conformity with the design concept of the project and for compliance with the information in the Contract Documents. The Work shall be in accordance with the approved samples.

10.(4) All samples for testing of sand, aggregate, cement, reinforcing bars, concrete blocks, timber and other materials used in construction of the buildings and services shall be supplied by the Contractor at his own cost, if the material/product is to be supplied by him. If GMDC has supplied the material/product, the cost of samples shall be borne by him.

10.(5) The Contractor shall submit to the Engineer samples of materials/products for approval sufficiently in advance of incorporating the same in the Works.

- 10.(6) The Contractor shall inform GMDC, requirement of all materials to be supplied by GMDC one month in advance before actual use of the materials for the works and shall cooperate with GMDC for procurement of the said materials.
- 10.(7) The Contractor shall prepare test specimens for different types of plaster, painting etc. at his own cost for approval by the Engineer.
- 10.(8) The Contractor shall prepare bar-bending schedules for reinforcement at his own cost on the basis of construction drawings issued to him by the Engineer.

11. Progress Chart

- 11.(1) The Contractor shall prepare progress charts and submit the same for approval of the Engineer and for his record within twenty-one days of commencement of work. The charts shall indicate the expected date of commencement and completion of each of the items of the work and shall be in a form approved by the Engineer. The chart shall also indicate the scheduling of samples, Shop Drawings and approvals.

The Contractor shall, whenever required by the Engineer, also provide in writing for his information a general description of the arrangements and method which the Contractor proposes to adopt for execution of the Works.

- 11.(2) If at any time it should appear to the Engineer that the actual progress of the Works does not conform to the programme to which consent has been given under sub- clause 14.1, the Contractor shall produce within a week's time at the request of the Engineer, a revised programme showing the modifications to such programmes necessary to ensure completion of the Work within the Time for Completion.
- 11.(3) The Contractor shall, if required any time by the Engineer, deliver to the Engineer a report in detail, in such form and at such interval as the Engineer may prescribe showing the status of work by the Contractor at site.
- 11.(4) Records

The Contractor shall, at his own cost, keep all records concerning works and progress of construction. He shall also record daily weather condition.

12. Access for Engineer to the Works

The Engineer and his representatives shall at all reasonable times have access to the Works and to the workshops or other places of the Contractor where work is being prepared for the Contract and when work to be so prepared in workshops or other places of a Sub-Contractor (whether or not a nominated Sub-Contractor as defined in clause 26 of these conditions) the Contractor shall have a term in the Sub-Contract so as to secure a similar right of access to those workshops or places for the Engineer and his representatives and shall do all things reasonably necessary to make such right effective.

13. Engineer's Status and Decisions

- 13.(1) The Engineer shall be GMDC's representative during the currency of the Contract. The Engineer shall periodically visit the site to familiarize himself generally with the progress and the quality of the work and to determine in general if the work is proceeding in accordance with the Contract Document. He shall not be required to make exhaustive or continuous on site inspections to check the quality or quantity of the work and he shall not be responsible for the Contractor's failure to carry out the construction work in accordance with the Contract Document, and he shall condemn work which fails to conform to the Contract Document. He shall have authority to act on behalf of GMDC only to the extent expressly provided in the Contract Document. He shall have authority to stop the work whenever such stoppage may be necessary in his reasonable opinion to ensure the proper execution of the Contract.

The Engineer shall be in the first instance the interpreter of the Conditions of this Contract and the judge of its performance. He shall side neither with GMDC nor with the Contractor but shall use his powers under the Contract to enforce its faithful performance by both. In case of the termination of the appointment of the Engineer GMDC shall appoint a capable and reputable Engineer against whom the Contractor shall make no reasonable objection and whose status under the Contract shall be that of the former Engineer.

- 13.(2) Decision :

The Engineer shall within a reasonable time make decisions on all claims of GMDC or the Contractor and all other matters relating to the execution and progress of the work or the interpretation of the Contract Document.

The Engineer may in his absolute discretion and from time to time issue further Drawings, Details and/or written instructions, written directions and written explanations in regard to:

- A. Variation or modifications of the design.
- B. The quality or quantity of works or the additions or omission or substitution of any work.
- C. Any discrepancy in or divergence between the Drawings and / or specifications
- D. The removal and/or re-execution of any works executed by the Contractor.
- E. The dismissal from the works of any persons employed thereon.
- F. The opening up for inspection of any work covered up.
- G. The amending and making good of any defects under Defects Liability Period.
- H. The removal from the site of any materials brought thereon by the Contractor and the substitution of any other material therefore.
- J. Assignment and sub-letting.
- K. Delay and extension time.
- L. The postponement of any work to be executed under the provision of this Contract.

- 13.(3) Dismissal :

The Contractor shall on the request of the Engineer immediately dismiss from the works any person employed thereon by him who may in the opinion of the Engineer be incompetent or misconducts himself and such person shall not be again employed on the work without the permission of the Engineer.

14. Contractors Field Organization and Equipment

14.(1) Site-in-Charge:

The Contractor shall constantly keep on his work during its progress one or more qualified and competent Site-in-Charge who will be responsible for carrying out of the works to the true meaning of the Drawings. Specifications, Schedule of the Quantities, Engineer's instructions and directions to the satisfaction of the Engineer. Any directions or instructions given to him by the Engineer shall be deemed to have been issued to the Contractor. Attention is called to the importance of requesting instructions from the Engineer before undertaking any work where Engineer's directions or instructions are required. Any such work done in advance of such instructions will be liable to be removed.

The Contractor shall submit the proposed organogram of qualified engineers proposed to be deployed for work in addition to the administrative staff, two safety engineers and a safety manager. GMDC reserves the right to accept or reject the proposed personnel.

14.(2) Equipment :

The Contractor shall provide and install all necessary hoists, ladders, scaffolding, tools, tackles, plants, all transport for labour materials and plant necessary for the proper execution and completion of the work to the satisfaction of the Engineer.

14.(3) Office Accommodation :

The Contractor shall provide erect and maintain where directed, simple watertight office accommodation for the Clerk-of-Works. This accommodation shall be well lighted and ventilated and provided with windows, doors with a lock and a Telephone. The Clerk of Works office shall be a minimum of 15 sq.mt and shall have a desk, chair and drawers for keeping drawing and tack board for displaying drawings. The accommodation has to be demolished when directed.

14.(4) Watchman :

The Contractor shall make his own security arrangements to guard the Site and premises at all times, at his own expense. The security arrangements shall be adequate to maintain strict control on the movement of material and labour. The Contractor shall extend the security arrangements to guard the material stored and/or fixed on the premises by the Sub-Contractors.

14.(5) Storage of Materials :

The Contractor shall provide, erect and maintain proper sheds for the storage and protection of the materials etc. and also for the execution of Work which may be prepared on the Site.

14.(6) Sanitary Conveniences :

The Contractor shall provide and erect all necessary sanitary convenience for the Site staff and the workmen, maintain in a clean orderly condition and clean and deodorize the ground after removal.

14.(7) Telephone :

The Contractor shall provide a separate Telephone for the works and shall pay all charges in connection with the same during the execution of the Work.

14.(8) Scaffolding, Staging, Guardrails:

The Contractor shall provide scaffolding, staging, guardrails, temporary stairs which shall be required during construction. The support for the scaffolding, staging, guardrails and temporary stairs shall be strong, adequate for the particular situation. The temporary access to the various parts of the Building under construction shall be rigid and strong enough to avoid any chance of mishaps.

14.(9) The Contractor shall inform the Engineer about his management and staff structure for the project including the name of the Site-in-Charge.

15. Royalties

All royalties or other sums payable in respect of the supply and use in carrying out the work as desired by or referred to in the Contract Bills of any patented process or inventions shall be deemed to have been included in the Contract Value, and the Contractor shall indemnify GMDC from and against all claims, proceedings, damages, costs and expenses which may be brought or made against GMDC or to which he may be put by reason of the Contractor infringing or being held to have infringed any patent rights in relation to any such processes and inventions.

16. Licenses and Permits for Materials under Government control

Licenses and Permits for all materials under Government control shall be obtained by the Contractor with the help of GMDC, if required. The Contractor shall include in his tender all transport charges and other expense likely to be incurred to bring the materials to the Site.

17. Claim for Extra

When any instruction or decision given at site involves an extra or whereby the Contractor may plan to claim an extra, it shall be the responsibility of the Contractor to inform the Engineer of the extra amount and get written authorisation from the Engineer before proceeding with the work involved.

Any modification carried out for expediting or simplifying work at the request of the Contractor or his representatives shall not be taken as the basis for claiming an extra. However, if such modification shall also involve an extra, the rate for such modification

shall be settled in advance and written authorisation obtained by the Contractor from the Engineer before proceeding with the work involved. If no such information is given by the Contractor in writing to the Engineer such modification shall not be accepted as the basis for extra charge.

The extra items would be paid on the basis of cost of material input plus cost of direct labour used "An additional 15% will be considered towards overhead and profits, (extra items rate thus derived will be inclusive of all overheads). Cost of indirect labour mobilization, equipment and supervision etc. would be part of these overheads. The rate analysis for such extra items need to be submitted in advance before commencing the job. The extra work shall be subject to prior approval.

Rates for any extra items not covered in the Bill of quantities shall be derived on pro-rata basis from the known rates available from the Contract. Rates for any extra items not covered in the Bill of quantities, shall be worked out on the basis of unit rates of labour and materials & contractors overhead and profit.

18. Deduction for uncorrected work

If the Engineer deems it expedient to correct damaged work or work is not done in accordance with the Contract, an proportionate deduction from the Contract value shall be made.

19. Unfixed goods and materials

Unfixed materials and goods intended for, delivered to and placed on or adjacent to the work shall not be removed except for use upon the work unless the Engineer has consented in writing to such removal which consent shall not be unreasonably withheld. Where the value of such materials or goods, such materials and goods shall become the property of GMDC but subject to clause 47(b) or to clause 47(c) of these conditions (if applicable) the Contractor shall remain responsible for loss or damage to the same.

20. Material and WorkmanShip Specifications

- 20(1) All materials and Workmanship shall be as per the latest relevant Standards/ Specifications of the Indian Standards Institution, unless specifically provided in these Specifications of this Contract and/or of approved type and the Contractor shall immediately remove from the works any materials and/or Workmanship which in the opinion of the Engineer are defective or unsuitable and shall substitute proper materials and/or Workmanship at his own cost. The term approval used in connection with this contract shall mean the approval of the Engineer.
- 20.(2) The Contractor shall if required submit satisfactory evidence as to the kind and quality of material.
- 20.(3) Where special makes or brands are called for they are mentioned as a standard. Others of equal quality may be used provided approval is first obtained in writing from the Engineer. Unless substitutions are requested no deviation from the Specification will be permitted. Failure to propose the substitution of any articles within 30 days after signing of the Contract will be deemed sufficient cause for denial of the request for substitution.

- 20.(4) The Contractor shall indicate and submit evidence in writing of those materials or articles called for in the Specifications that are not obtainable for installation in the work within the Time Limits of the Contract. Failure to indicate the above, within 30 days after the signing of the Contract, will be deemed sufficient cause for the denial of request for the extension of the Contract time.
- 20.(5) All material shall be delivered so as to insure a speedy and uninterrupted progress of the work. Such material shall be stored so as to cause no obstruction and so as to prevent overloading of any portion of the structure, and the Contractor shall be entirely responsible for damage or loss by weather or other cause.
- 20.(6) Within 30 days after signing the Contract, the Contractor shall submit for approval of the Engineer a complete list of all material he and his Sub-Contractors propose to use in the work, of definite brand or make which differ in any respect from those specified; also the particular brand of any articles where more than one is specified as a standard. He shall also list items not specifically mentioned in the Specifications but which are reasonably inferred and necessary for the completion of the work.
- 20.(7) For such items of work which may arise and which are not covered by the Contract Documents or by relevant Indian Standard Specifications, the decision of the GMDC / Consultant regarding specification of such work shall be final and binding to the Contractor.

Inspection

- 20 (8) All materials and Workmanship shall be subject to inspection, examination and test by the Engineer at any and all times during manufacture and/or construction. The Engineer shall have right to reject defective material and Workmanship or require its correction. Rejected Workmanship shall be satisfactorily replaced with proper material without additional charge therefore and the Contractor shall promptly segregate and remove the rejected materials from the works. If the Contractor fails to proceed at once with the replacement of rejected materials and/or the corrections of defective Workmanship, the Engineer may by contract or otherwise replaced such materials and/or correct such Workmanship and charge the cost thereof to the Contractor, or may terminate the right of the Contract to proceed further with the work.

The Contractor shall furnish promptly without additional charge all reasonable facilities, labour and materials necessary for the safe and convenient inspection and test that may be required by the Engineer.

Testing

- 20(9) The Contractor shall provide for costs of routine testing of materials.

21. Defects

- 21.(1) The Contractor shall make good at his own cost and to the satisfaction of the Engineer, all defects, shrinkages or faults, arising in the opinion of the Engineer from work or materials not being in accordance with the Drawings or Specifications or Schedule of Quantities or

the Instructions of the Engineer, which may appear within "Defects Liability Period" referred to in the Appendix.

- 21.(2) Such defects, shrinkages, faults, shall upon directions in writing of the Engineer, and within such reasonable time as shall be specified therein be amended and made good by the Contractor, at his own cost unless the Engineer shall decide that he ought to be paid for such amending and making good and in case of default GMDC may employ and pay other Contractor to amend and make good such defects, shrinkage, settlements or other faults and all damages loss and expense consequent thereon or incidental thereto shall be made good and borne by the Contractor and such damage, loss or expense shall be recoverable from him by GMDC or may be deducted by GMDC upon the Engineer's Certificate in writing from any amount due or may become due to the Contractor or GMDC may, in lieu of such amending and making good by the Contractor deduct from any moneys due to the Contractor a sum to be determine by the Engineer as equivalent to the cost of amending such work and in the event of the Retention Amount being insufficient recover the balance from the Contractor, together with any expenses GMDC may have incurred in connection therewith.

22. Virtual Completion

If at any time or times before Virtual Completion of the Work GMDC shall take possession of any part or parts of the same for handing over to the Finishing Contractor or other agency, then not withstanding anything expressed or implied elsewhere in this Contract.

- 22(1) Such part or parts shall not be deemed to be Virtually Complete.
- 22.(2) Virtual Completion of such part or parts would occur on the completion of the last part of the structure under this Contract.
- 22.(3) The Contractor shall not claim that such part or parts are complete and request refund of payment in lieu thereof.

23. Extension

Upon it becoming reasonably apparent that the progress of the Works is delayed, the Contractor shall forthwith give written notice of the cause of the delay to the Engineer, and if in the opinion of the Engineer, the completion of the Works is likely to be or has been delayed beyond the date of completion stated in the Appendix to these Conditions or beyond any extended time previously fixed under this clause.

23.1 By Force Majeure as narrated in Technical Bid Part I.

- 23.(2) By reason of any exceptionally inclement weather requiring total stoppage in work. Or
- 23.(3) By reason of loss or damage occasioned by any one or more of the contingencies referred to in clause 47(a), (b), and (c) of these conditions. Or
- 23.(4) By reason of civil commotion, local combination of workmen strike or lockout affecting any of the trades employed upon the works or any of the trades engaged in the preparation, manufacture or transportation of any of the goods or materials required for the work. Or

- 23.(5) By reason of Engineer's instructions issued under clauses 9, 30(1) or 38 (2) of these Conditions. Or
- 23.(6) By reason of the Contractor not having received in due time necessary instructions, drawings, details or levels from the Engineer for which he specifically applied in writing on a date which having regard to the date for completion stated in the Appendix to these Conditions or to any extension of time then fixed under this clause was neither unreasonably distant from nor unreasonably close to the date on which it was necessary for him to receive the same. Or
- 23.(7) By delay on the part of nominated Sub-Contractors or Nominated Suppliers which the Contractor has taken all practicable steps to avoid or reduce. Or
- 23.(8) By delay on the part of artists, tradesmen or others engaged by GMDC in executing work not forming part of this Contract. Or
- 23.(9) By reason of the opening up for inspection of any work covered up or of the testing of any of the work, in accordance with clause 36 (7) of these conditions (including making good in consequence of such opening up or testing) unless the inspection or test showed that the work is not in accordance with this Contract. Or

Then the Engineer shall so soon as he is able to estimate the length of the delay beyond the date or time aforesaid make in writing a fair and reasonable Extension of Time for completion of the works, provided always that the Contractor shall use constantly his best endeavors to prevent delay and shall do all that may reasonably be required to the satisfaction of the Engineer to proceed with the work.

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24. Payments withheld

The Engineer may withhold or on account of subsequently discovered evidence nullify the whole or a part of any certificate to such extent as may be necessary in his reasonable opinion to protect GMDC from loss on account of:

- 24.(1) Defective work not remedied.
- 24.(2) Failure of the Contractor to make payments properly to Sub-Contractor or for materials or labour.
- 24.(3) Damage to another Contractor or Sub-Contractor.
- 24.(4) Claims filed or reasonable evidence indicating probable filing of claims.

When the above grounds are removed payment shall be made for amounts withheld because of them.

25. Indemnity for Injury to Persons and Property

- 25.(1) Persons: The Contractor shall be liable for and shall indemnify GMDC including all of its officers, servants and agents from and against any liability, loss, claim or proceedings whatsoever arising under any statute or at common law in respect of personal injury to or the death of any person whomsoever arising out of or in the course of or caused by the carrying out of the works, unless due to any act or neglect of GMDC or of any person for whom GMDC is responsible.
- 25.(2) Property: Except for such loss or damages as is at the risk of GMDC under clause 47 (b) or clause 47 (c) of these Conditions (if applicable) the Contractor shall be liable for and shall indemnify GMDC against any expense, liability, loss, claim or proceedings in respect of any injury or damage whatsoever to any property real or personal in so far as such injury or damage arises out of or in the course of or by reason of the carrying out of the works, unless due to any act or neglect of GMDC or any person for whom GMDC is responsible.

26. Protection of trees and shrubs

- Trees and shrubs designated by the Engineer shall be protected from damage during the course of the work and the earth level shall not be charged within three feet of such trees. Where necessary such trees and shrubs shall be protected by means of temporary fencing.

27. Guarantee

- All required guarantees shall be submitted to the Engineer by the Contractor at the time of signing of this Contract.

28. Antiquities

- 28.(1) All fossils and other objects of interest or value which may be found on the site or in excavating the same during the progress of the work shall become the property of GMDC. The Contractor shall carefully take out and preserve all such objects and shall immediately or as soon as convenient after the discovery of such articles deliver the same into the possession of the Engineer or of the Clerk-of-Works uncleaned and as excavated.
- 28.(2) If in the opinion of the Engineer compliance with the provisions of the preceding Sub-Clause has involved the Contractor in direct loss and/or expense for which he would not be reimbursed by a payment made under any other provision in this Contract then the Engineer shall ascertain the amount of such loss and/or expense, any amount from time to time so ascertained shall be added to the Contract Sum, and if an Interim Certificate is issued after the date of ascertainment any such amount shall be added to the amount which would otherwise be stated as due in such certificates.

29. Protection and Cleaning

- 29.(1) The Contractor shall protect and preserve the work from all damage or accident providing any temporary roof, window and door coverings, boxing or other construction as required by the Engineer. This protection shall be provided for all property adjacent to the site as well as on the site.
- 29 (2) The Contractor shall properly clean the work as it progresses and shall remove all rubbish and debris from the site from time to time as is necessary and as directed. On completion the Contractor shall ensure that the premises and/or site are cleaned, surplus materials debris, sheds etc. removed, areas under floors cleared of rubbish, gutters and drains cleared, doors and sashes eased, locks and fastenings oiled, keys clearly labeled and handed to the Clerk-of-Works so that the whole is left fit for immediate occupation or use and to the satisfaction of the Engineer.

30. Tolerance

The Contractor shall exercise every care to ensure that all structural members are sufficiently plumb and true to dimensions called for on the drawings to receive prefabricated finishing elements such as doors, windows, cabinet work, ceramic work, concrete, tiles etc. Any variation may require rectification in the structural members or may involve remaking or replacing the finishing elements, fabricated to fit into the openings or spaces, as called for on the Drawings.

In case of separate Contract, the Contractor whose work does not conform to dimensions called for, shall be liable for all the expenses which may have to be incurred for rectification or replacement as may be required by the Engineer for the proper installation of the finishing elements. The Engineer's decision in this respect shall be final and binding on the parties concerned.

31. Declaration against Waiver

The condonation by GMDC or Engineer of any breach or breaches by the Contractor or a nominated sub- contractor of any of the stipulations and conditions contained in the Contract shall in no way prejudice or affect or be construed as a waiver of GMDC's rights, powers and remedies under the contract in respect of any breach or breaches as aforesaid.

32. Examination of Work before Covering Up.

- 32(1) No work shall be covered up or put out of view without the approval of the Engineer and the Contractor shall afford full opportunity for the Engineer to examine and measure any work which is about to be covered up or put out of view and to examine foundations before permanent work is placed thereon. The Contractor shall give due notice to the Engineer whenever any such work or foundations is or are ready or about to be ready for examination and the Engineer shall, without unreasonable delay, unless he considers it unnecessary and advises the Contractor accordingly, attend for the purpose of examining and measuring such works or of examining such foundations.

32.(2) Uncovering and Making Openings

The Contractor shall uncover any part or parts of the works or make openings in or through the same as the Engineer may from time to time direct and shall reinstate and make good such part or parts to the satisfaction of the Engineer. If any such part or parts have been covered up or put out of view after compliance with the requirement of sub-clause (1) of this clause and are found to be executed in accordance with the Contract, the expenses of uncovering, making openings in or through, reinstating and making good the same shall be borne by GMDC, but in any other case all cost shall be borne by the Contractor.

33. HEALTH, SAFETY AND ENVIRONMENT (HSE) MANAGEMENT

The Contractor shall have a Health and Safety Management Plan, which shall be required to be adhered to during the execution of the contract. The Health and Safety Management Plan may be modified by GMDC from time to time, during the currency of the contract, as required to address the concerns of GMDC in regard to Health and Safety.

GMDC may at any time, during the currency of the contract, replace the contractor's Health and Safety Management Plan with its own Health and Safety Management Plan / Manual. In case of such replacement by GMDC, the Contractor shall adhere to GMDC's Health and Safety Management Manual, as amended from time to time.

The Contractor shall also follow the instructions of Engineer-in-charge given to ensure compliance with the Health and Safety Management Plan/Manual. In case of failure of the Contractor to adhere to the provisions of Health and Safety Management Plan/Manual or the instructions of the Engineer-in-charge given in this regard, the next payment due to him shall not be released unless and until he complies with the provisions of the Health and Safety Management Plan/Manual or the instructions of the Engineer-in-charge in this regard, as the case may be, to the full satisfaction of the Engineer-in-charge.

Environment Management:

The Contractor shall have an Environment Management Plan, which shall be required to be adhered to during the remaining execution of the contract. The Environment Management Plan may be modified by GMDC from time to time, during currency of the contract, as required to address the concerns of GMDC in regard to Environment.

GMDC may at any time, during the currency of the contract, replace the Contractor's Environment Management Plan with its own Environment Management Manual. In case of such replacement by GMDC, the Contractor shall adhere to GMDCs Environment Management Manual, as amended from time to time.

The Contractor shall also follow the instructions of Engineer-in-charge given to ensure compliance with the Environment Management Plan/Manual. In case of failure of the Contractor to adhere to the provisions of Environment Management Plan/Manual or the instructions of the Engineer-in-charge given in this regard, the next payment due to him shall not be released unless and until he complies with the provisions of the Environment Management Plan/Manual or the instructions of the Engineer-in-charge in this regard, as the case may be, to the full satisfaction of the Engineer-in-charge.

All soil brought from outside shall be free of any contamination which is likely to pollute the subsoil and subsoil water. GMDC/Consultant reserves the right to test samples at random to ensure compliance. All soil found contaminated is liable to be rejected.