

SMART BUS SHELTERS



REQUEST FOR PROPOSAL FOR CONSTRUCTION OF SMART BUS SHELTER AND E-TOILETS IN PAN CITY AREA MANGALURU CITY PHASE-2

Issued by:

Managing Director,

Mangaluru Smart City Limited,

Telephone No: 0824-2220310

Email: smartcitymangaluru@gmail.com; commissioner.mcc@gmail.com;

MCC Office, Lalbagh, Mangaluru -575003



TENDER REFERENCE : UDD/2017-18/BD/WORK_INDENT421

LAST DATE AND TIME FOR RECEIPT
OF TENDERS THROUGH E-PORTAL
AS PER E- PROCUREMENT PORTAL

TIME AND DATE OF OPENING OF
TECHNICAL BID

AS PER E- PROCUREMENT PORTAL

PLACE OF OPENING OF COVER ONE
OF TENDERS

OFFICE OF THE MANAGING DIRECTOR,
MANGALURU SMART CITY LIMITED
MCC OFFICE, LAL BAGH, MANGALURU

OFFICE OF THE MANAGING DIRECTOR, PLACE OF OPENING OF COVER TWO

OF TENDERSMANGALURU SMART CITY LIMITED
MCC OFFICE,LAL BAGH,MANGALURU

MANAGING DIRECTOR,

MANGALURU SMART CITY LIMITED,

ADDRESS FOR COMMUNICATION MCC OFFICE, LALBAGH, MANGALURU -

575003.



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SECTION 1: INVITATION FOR TENDERS (IFT)

(SHORT TERM TENDER NOTIFICATION)
(Through GOK E-Portal Only)

IFT NO:

- 1. The Managing Director, Mangaluru Smart City Limited (MSCL) invites tenders from eligible KPWD/CPWD registered class I Contractor/Construction Company/Firm having KPWD/CPWD Class I contract license (referred to as Tenderers), for the construction of works detailed in the Table below. Two Cover Tender procedure as per Rule28 of the KTPP Act shall be followed. The Tenderers are required to submit two separate sealed covers, one containing the Earnest money deposit and the details of their capability to undertake the tender (as detailed in ITT Clause 3 and 6), which will be opened first and the second cover containing the price tender which will be opened only if the tenderer is found to be qualified to execute the tendered work. The tenderers are advised to note the minimum qualification criteria specified in Clause 3 of the Instructions to tenderer to qualify for award of the contract.
- 2. Tender documents may be downloaded from *Government of Karnataka E-Procurement website https://eproc.karnataka.gov.in/eportal/index.seam* under login for Contractors:
- 3. Tenders must be accompanied by *Earnest Money Deposit* specified for the work in the Table below. *Earnest Money Deposit* which will be paid online through e-Procurement portal. Earnest money deposit will have to be in any one of the forms as specified in the E procurement portal and shall have to be *valid for 45 days beyond the validity of the tender*.
- 4. Tenders must be electronically submitted (on-line through internet) within the date and time published in e-procurement portal. First Cover (Technical Bid) of the Tenders will be opened after prescribed time and date in the e-procurement portal, in the presence of the Tenderers who wish to attend at the Office of The Managing Director, Mangaluru Smart City Limited, Mangaluru. If the office happens to be closed on the date of receipt of tenders as specified, the tenders will be received and opened on the next working date at time and venue
- 5. A *Pre-tender meeting* will be held on the *time*, *date and* Place *specified in the e- procurement portal* to clarify the issues if any, and to answer questions on any matter



that may be raised at that stage as stated in Clause 8.2 of 'Instructions to Tenderer' of the tender document.

6. Other details can be seen in the tender documents.

TABLE

Sl. No	Name of Work	Value Of Work (in Rs.)	Earnest Money Deposit (in Rs.)	Cost of Document (in Rs)*	Period of Completion
MSCL-5	CONSTRUCTI ON OF SMART BUS SHELTER AND E- TOILETS IN PAN CITY AREA, MANGALURU CITY PHASE-2	3,98,26,911	5,98,000	As per e-portal	6 (construction) + 48 (O & M) Calendar months (including monsoon)

^{*} Calculated Based On E-Procurement Portal



SECTION 2: INSTRUCTIONS TO TENDERERS (ITT)

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A General

1. Scope of Tender

1.1 The *Managing Director*, *Mangaluru Smart City Limited Mangaluru* (*referred to as Employer*) invites tenders Following Two Cover tender procedure, from eligible tenderers, for the construction of works (as defined in these documents and referred to as "the works") detailed in the Table given in the Invitation for Tenders (IFT). The Tenderers may submit tenders for any or all of the works detailed in the table given in IFT.

2. Eligible Tenderers

- 2.1 Tenderers shall not be under a declaration of ineligibility for corrupt and fraudulent practices issued by the Government of Karnataka
- 2.2 Tenders from Joint ventures are not acceptable.

3. Qualification of the Tenderer:

- 3.1 All Tenderers shall provide the requested information accurately and in sufficient detail in Section 3: Qualification information.
- 3.2 To qualify for award of this contract, each tendered in his name should have in the last five years i.e., 2012-13 to 2016-17
 - (a) Achieved in at least two financial years a minimum annual financial turnover of Rs.796.55 lakhs.
 - (b) Satisfactory completed, (at least 50% of the contract value for ongoing works) at least one similar work of **Construction of Smart Bus Shelters and E-Toilets**, preferably including Fabrication of SS and installation of Electronic Panel, and other similar components as listed in the BOQ, of value not less than **Rs.199.14 lakhs** as prime contractor
 - (c) Executed in one year (for a continuous period of) the following minimum quantities of work (80% of the BOQ Quantity)



Sl. No	Item Description	Quantity executed
1	SS bus shelters including SS benches, backlit panels, etc	19 Nos
2	E-Toilets	3 Nos
3	RCC Foundation	150 Cum

- (d) NA
- (e) **NA**

3.3 Each tenderer should further demonstrate:

(a) Availability by owning at least 50% of the required key and critical equipment for this work and the remaining 50% can be deployed on lease /hire basis for all works provided, the relevant documents (Applicants shall indicate the make, year of manufacture, capacity and working conditions of each of the equipments along with RC issued by R.T.O. / Sale deed/purchase invoice, hire/lease agreements) shall be furnished.

SL NO	Key / critical Equipment	N	Min Required		
		Owned	Lease/Hired	Unit	Total
1	Crane with Capacity not less than	2 nos owned/leased		Nos	2
1	3 ton				
2	Concrete Mixer Machine with	2 nos owned/leased No		Nos	2 owned or
2	vibrator machine and needle				leased

(b) Liquid assets and or availability of credit facilities of no less than Rs.120.00 Lakhs (Credit lines/ letters of credit/ certificates from banks for meeting the fund requirement etc.



BANKER'S CERTIFICATE

> Sd/-Senior Bank Manger, Name of the Bank,Address

- (c) In case of the death of a contractor after executing the agreement/commencement of the work, his legal heir, if an eligible registered contractor and willing, can execute and complete the work at the accepted tender rates irrespective of the cost of work
- 3.4 To qualify for a package of contracts made up of this and other contracts for which tenders are invited in this IFT, the tenderer must demonstrate having experience and resources to meet the aggregate of the qualifying criteria for the individual contracts.
- 3.5 Sub-contractors' experience and resources shall not be taken into account in determining the tenderer compliance with the qualifying criteria except to the extent stated in 3.2 (d) and (e) above.
- 3.6 Tenderers who meet the above specified minimum qualifying criteria, will only be qualified, if their available tender capacity is more than the total tender value. The available tender capacity will be calculated as under:

Assessed available tender capacity = (A*N*1.50 - B)>398.27 lakhs Where

- A = Maximum value of civil engineering works executed in any one year during the last five years (*updated to 2017-18 price level*) taking into account the completed as well as works in progress.
- N = Number of years prescribed for completion of the works for which tenders are invited



B = Value, at 2017-18 price level, of existing commitments and on-going works to be completed during the next **6 months**

Note: The statements showing the value of existing commitments and on-going works as well as the stipulated completion period, remaining period for each of the works listed should be countersigned by the Employer in charge, not below the rank of an Executive Engineer or equivalent.

- 3.7 Even though the tenderers meet the above criteria, they are subject to be disqualified if they have:
 - Made misleading or false representations in the forms, statements and attachments submitted in proof of the qualification requirements; and/or
 - Record of poor performance such as abandoning the works, not properly completing the contract, inordinate delays in completion, litigation history, or financial failures etc.; and/or
 - o Participated in the previous tender for the same work and had quoted unreasonably high tender prices and could not furnish rational justification.

4. One Tender per Tenderer:

4.1 Each tenderer shall submit only one tender for one work. A tenderer who submits or participates in more than one Tender (other than as a sub-contractor or in cases of alternatives that have been permitted or requested) will cause all the proposals with the Tenderer's participation to be disqualified.

5. Cost of Tendering:

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

6. Site visit:

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



B. Tender documents

7. Content of Tender documents

The Contractor should go through the Tender Document and submit the response /commercial / technical through e-procurement portal online after downloading the tender document.

8. Clarification of Tender Documents

8.1 A prospective tenderer requiring any clarification of the tender documents may notify the Employer in writing or by cable (hereinafter "cable" includes telex and facsimile) at the Employer's address indicated in the invitation to tender. The Employer will respond to any request for clarification which he receives earlier than 15 days prior to the deadline for submission of tenders. Copies of the Employer's response will be forwarded to all purchasers of the tender documents, including a description of the enquiry but without identifying its source.

8.2 **Pre-tender meeting:**

- 8.2.1. The tenderer or his authorized representative is invited to attend a pre-tender meeting which will take place at the office of the Employer as mentioned in the e-procurement portal.
- 8.2.2. The purpose of the meeting will be to clarify issues and to answer questions on any matter that may be raised at that stage
- 8.2.3. The tenderer is requested to submit any questions in writing or by cable to reach the Employer not later than one week before the meeting.
- 8.2.4. Minutes of the meeting, including the text of the questions raised (without identifying the source of enquiry) and the responses given will be transmitted without delay to all purchasers of the tender documents. Any modification of the tender documents listed in Sub-Clause 7.1 which may become necessary as a result of the pre-tender meeting shall be made by the Employer exclusively through the issue of an Addendum pursuant to Clause 9 and not through the minutes of the pre-tender meeting.
- 8.2.5. Non-attendance at the pre-tender meeting will not be a cause for disqualification of a tenderer.



9. Amendment of Tender documents

- 9.1 Before the deadline for submission of tenders, the Employer may modify the tender documents by issuing addenda.
- 9.2 Any addendum thus issued shall be part of the tender documents and shall be posted online in the e-procurement portal which Contractors should download.
- 9.3 To give prospective Tenderers reasonable time in which to take an addendum into account in preparing their tenders, the Employer shall extend as necessary the deadline for submission of tenders on line through e-procurement portal, in accordance with Sub-Clause 16.2 below.



C. Preparation of Tenders

10. Documents comprising the Tender

10.1 The tender submitted by the Tenderer shall be in two covers and shall contain the documents as follows:

10.1.1. First Cover: (Only online)

- (a) Earnest Money Deposit; on line payment through e-Procurement platform and in the form as specified in the e-procurement portal
- (b) Qualification Information as per formats given in Section 3;
- (c) Tender transaction fee. Online payment through e-Procurement platform.
- (d) General eligibility criteria.

10.1.2. Second Cover: (Only online)

- (a) The Tender (in the format indicated in Section 4)
- (b) Priced Bill of Quantities (Section 9); online through e-procurement portal, no hardcopy of commercials should be attached or disclosed.

and any other materials required to be completed and submitted by Tenderers in accordance with these instructions. The documents listed under Sections 3, 4, 6 and 9 shall be filled in without exception.

10.2 Tenderers submitting tenders together with other contracts stated in the IFT to form a package will so indicate in the tender together with any discounts offered for the award of more than one contract.

11. Tender prices

- 11.1 The contract shall be for the whole works as described in Sub-Clause 1.1, based on the priced Bill of Quantities submitted by the Tenderer.
- 11.2 The Tenderer shall fill in rates and prices for each item of Work described in the Bill of Quantities in the E-procurement portal.
 - Items for which no rate or price is entered by the Tenderer will not be paid for by the Employer when executed and shall be deemed covered by the other rates and prices in the Bill of Quantities. Corrections, if any, shall be made online only before the submission of the bid.
- 11.3 All duties, taxes, and other levies payable by the contractor under the contract, or for any other cause, shall be included in the rates, prices and total Tender Price submitted



by the Tenderer.

- 11.4 The rates and prices quoted by the Tenderer shall be subject to adjustment during the performance of the Contract in accordance with the provisions of Clause of the Conditions of Contract
- 11.5 The price submitted by the Tenderer shall include the cost of maintenance of the road surface, and all assets including the landscaping, for a period of five years beyond the date of completion of construction.

12. Tender validity

- 12.1 Tenders shall remain valid for a period not less than 90 days after the deadline date for tender submission specified in Clause 16. A tender valid for a shorter period shall be rejected by the Employer as non-responsive.
- 12.2 In exceptional circumstances, prior to expiry of the original time limit, the Employer may request that the Tenderers may extend the period of validity for a specified additional period. The request and the Tenderers' responses shall be made in writing or by cable. A Tenderer may refuse the request without forfeiting his earnest money deposit. A Tenderer agreeing to the request will not be required or permitted to modify his tender, but will be required to extend the validity of his earnest money deposit for a period of the extension, and in compliance with Clause 13 in all respects.

13. Earnest money deposit

13.1 Earnest Money Deposit/ Bid security

The supplier/contractor can pay the Earnest Money Deposit (EMD) in the e-Procurement portal using any of the following payment modes: (For detailed procedures visit eprocurement portal)

- 1. Credit Card
- 2. Direct Debit/ Net Banking
- 3. National Electronic Fund Transfer (NEFT)
- 4. Over the Counter (OTC) payment

The contractor shall furnish the requisite EMD only through e-payment, The Managing Director, Mangaluru Smart City Limited Mangaluru



The supplier/contractor's bid will be evaluated only on confirmation of receipt of the payment (EMD) in the Government of Karnataka central pooling a/c held at designated Bank

EMD amount will have to be submitted by the supplier/contractor taking into account the following conditions:

- a. EMD will be accepted only in the form of electronic cash (and not through Demand Draft or Bank Guarantee) and will be maintained in the Govt.'s central pooling account at Designated Bank until the contract is closed.
- The entire EMD amount for a particular tender has to be paid in a single transaction
 For details on e-Payment services refer to e-procurement portal for more details on the process.

Refund of EMD

Based on the instructions of Tender Accepting Authority (TAA) the EMD amount of the unsuccessful bidders will be refunded to the respective Bank a/c's of the supplier/contractor registered in the e-Procurement system.

- 13.2 Instruments having fixed validity issued as earnest money deposit for the tender shall be valid for 45 days beyond the validity of the tender
- 13.3 Any tender not accompanied by an acceptable earnest money deposit and not secured as indicated in Sub-Clauses 13.1 and 13.2 above shall be rejected by the Employer as non-responsive.
- 13.4 The earnest money deposit of unsuccessful Tenderers will be returned within 30 days of the end of the tender validity period specified in Sub-Clause 12.1.
- 13.5 The earnest money deposit of the successful Tenderer will be discharged when the Tenderer has signed the Agreement and furnished the required Performance Security.
- 13.6 The earnest money deposit may be forfeited:
 - a. if the Tenderer withdraws the Tender after tender opening during the period of tender validity;
 - b. if the Tenderer does not accept the correction of the Tender Price, pursuant to Clause 24; or
 - c. in the case of a successful Tenderer, if the Tenderer fails within the specified



time limit to

- (i) sign the Agreement; or
- (ii) furnish the required Security deposit

14. Format and signing of Tender

- 14.1 Tenderer shall submit the Bid electronically before the submission date and time notified in e-procurement portal.
- 14.2 The documents uploaded for the technical bid shall be typed or written in indelible ink and shall be signed by a person or persons duly authorized to sign on behalf of the Tenderer. All pages of the tender where entries or amendments have been made shall be initialed by the person signing the tender. Scanned copy of the same shall be uploaded in e-procurement



D. Submission of Tenders

15. Tenderer shall submit the Bid electronically before the submission date and time notified in e-procurement portal.

16. Deadline for submission of the Tenders

- 16.1 In online e-procurement system, tenderer shall not be able to submit the bid after the bid submission time and date as the icon or the task in the e-procurement portal will not be available.
- 16.2 The Employer may extend the deadline for submission of tenders by issuing an amendment in accordance with Clause 9, in which case all rights and obligations of the Employer and the Tenderers previously subject to the original deadline will then be subject to the new deadline.

17. Late Tenders

17.1 In online e-procurement system, you shall not be able to submit the bid after the bid submission time and date as the icon or the task in the e-procurement portal will not be available.

18. Modification and Withdrawal of Tenders

Tender has all the time to modify and correct or upload any relevant document in the portal till Bid submission date and time, as published in the e-procurement portal.



E- Tender opening and evaluation

19. Opening of First Cover of all Tenders and evaluation to determine qualified Tenderers:

- 19.1 The Employer will open online the First Covers of all the Tenders received through e-procurement portal, in the presence of the Tenderers or their representatives who choose to attend at the date, time and the venue specified in the e-procurement portal. In the event of the specified date of Tender opening being declared a holiday for the Employer, the Tenders will be opened at the appointed time and location on the next working day.
- 19.2 Not Applicable
- 19.3 The Tenderers names, the presence or absence of earnest money deposit (amount, format and validity), the submission of qualification information and such other information as the Employer may consider appropriate will be announced by the Employer at the opening.
- 19.4 The Employer shall prepare minutes of the Tender opening, including the information disclosed to those present in accordance with Sub-Clause 19.3
- 19.5 NA
- 19.6 The Employer will evaluate and determine whether each tender (a) meets the eligibility criteria defined in ITT Clause 2; (b) is accompanied by the required earnest money deposit as per stipulations in ITT Clause and (c) meets the minimum qualification criteria stipulated in ITT Clause 3. The Employer will draw out a list of qualified Tenderers.

20. Opening of Second Cover of qualified Tenderers and evaluation:

- 20.1 The Employer will inform all the Qualified Tenderers the time, date and venue fixed for the opening of the Second Cover containing the priced Tenders. The Employer will open online the Second Covers of Qualified Tenderers at the date, time and the venue specified in the e-procurement portal, in the presence of the Tenders or their representatives who choose to attend. In the event of the specified date of Second Cover opening being declared a holiday for the Employer, the Second Covers will be opened at the appointed time and location on the next working day.
- 20.2 Not Applicable



- 20.3 The Tenderers' names, the Tender prices, the total amount of each Tender, and such other details as the Employer may consider appropriate, will be announced by the Employer at the opening.
- 20.4 The employer shall prepare minutes of the tender opening including the information disclosed to those present in accordance with the sub clause 20.3

21. Process to be confidential

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

22. Clarification of Tenders

- 22.1 To assist in the examination, evaluation, and comparison of Tenders, the Employer may, at his discretion, ask any Tenderer for clarification of his Tender, including breakdowns of unit rates. The request for clarification and the response shall be in writing or by cable, but no change in the price or substance of the Tender shall be sought, offered, or permitted.
- 22.2 Subject to sub-clause 22.1, no Tenderer shall contact the Employer on any matter relating to its Tender from the time of the Tender opening to the time the contract is awarded. If the Tenderer wishes to bring additional information to the notice of the Employer, it should do so in writing.
- 22.3 Any effort by the Tenderer to influence the Employer in the Employer's Tender evaluation, Tender comparison or contract award decisions may result in the rejection of the Tenderers' Tender.

23. Examination of Tenders and determination of responsiveness

- 23.1 Prior to the detailed evaluation of Tenders, the Employer will determine whether each Tender; (a) has digitally signed; and; (b) is substantially responsive to the requirements of the Tender documents.
- 23.2 A substantially responsive Tender is one which conforms to all the terms, conditions,



and specifications of the Tender documents, without material deviation or reservation. A material deviation or reservation is one (a) which affects in any substantial way the scope, quality, or performance of the Works; (b) which limits in any substantial way, inconsistent with the Tender documents, the Employer's rights or the Tenderer's obligations under the Contract; or (c) whose rectification would affect unfairly the competitive position of other Tenderers presenting substantially responsive Tenders.

23.3 If a Tender is not substantially responsive, it will be rejected by the Employer, and may not subsequently be made responsive by correction or withdrawal of the nonconforming deviation or reservation.

24. Correction of errors

24.1 The Tenderer can do Modification/corrections/changes to their bids till the last time and date of submission of bid in e-Procurement Portal only

25. Evaluation and comparison of Tenders

- 25.1 The Employer will evaluate and compare only the Tenders determined to be substantially responsive in accordance with Clause 23.
- 25.2 The Employer reserves the right to accept or reject any variation, deviation, or alternative offer. Variations, deviations, and alternative offers and other factors which are in excess of the requirements of the Tender documents or otherwise result in unsolicited benefits for the Employer shall not be taken into account in Tender evaluation.
- 25.3 The estimated effect of the price adjustment conditions under Clause 41 of the Conditions of Contract, during the implementation of the Contract, will not be taken into account in tender Evaluation
- 25.4 If the tender of the successful tenderer is seriously unbalanced in relation to the Employer's estimate of the cost of the work to be performed under the contract, the Employer may require the Tenderer to produce detailed price analysis for any or all items of the Bill of Quantities, to demonstrate the internal consistency of those prices with the construction methods and schedule proposed. After evaluation of the price analyses, the Employer may require that the amount of the performance security set forth in Clause 29 be increased at the expense of the successful Tenderer to a level sufficient to protect the Employer against financial loss in the event of default of the successful under the contract.



F. Award of Contract

26. Award criteria

26.1 Subject to Clause 27, the Employer will award the Contract to the Tenderer whose Tender has been determined to be substantially responsive to the Tender documents and who has offered the lowest evaluated Tender Price, provided that such Tenderer has been determined to be (a) eligible in accordance with the provisions of Clause 2, and (b) qualified in accordance with the provisions of Clause 3.

27. Employer's right to accept any Tender and to reject any or all Tenders

27.1 Notwithstanding Clause 26, the Employer reserves the right to accept or reject any Tender, and to cancel the Tender process and reject all Tenders, at any time prior to the award of Contract, without thereby incurring any liability to the affected Tenderer or Tenderers or any obligation to inform the affected Tenderer or Tenderers of the grounds for the Employer's action.

28. Notification of award and signing of Agreement

- 28.1 The Tenderer whose Tender has been accepted will be notified of the award by the Employer prior to expiration of the Tender validity period by, e-mail or facsimile or e-procurement portal or through letter. This letter (hereinafter and in the Conditions of Contract called the "Letter of Acceptance") will state the sum that the Employer will pay the Contractor in consideration of the execution, completion, and maintenance of the Works by the Contractor as prescribed by the Contract (hereinafter and in the Contract called the "Contract Price").
- 28.2 The notification of award will constitute the formation of the Contract, subject only to the furnishing of Security deposit in accordance with the provisions of Clause 29.
- 28.3 The Agreement will incorporate all agreements between the Employer and the successful Tenderer. It will be kept ready for signature of the successful Tenderer in the office of Employer within 30 days following the notification of award along with the Letter of Acceptance. Within 20 days of receipt, the successful Tenderer will sign the Agreement and deliver it to the Employer.
- 28.4 Upon the furnishing by the successful Tenderer of the Performance Security, the Employer will promptly notify the other Tenderers that their Tenders have been unsuccessful.



29. Security deposit

- 29.1 Within 20 days of receipt of the Letter of Acceptance, the successful Tenderer shall deliver to the Employer a Security deposit in any of the forms given below for an amount equivalent to 5 % of the Contract price plus additional security for unbalanced tenders in accordance with Clause 25.5 of ITT and Clause 44 of the Conditions of Contract. For all works:
 - Cash or
 - Banker's cheque/demand draft,/pay order in favour of the Managing Director,
 Mangaluru Smart City Limited Mangaluru Payable At Mangaluru.
 - A bank guarantee in the form given in section 10; or
 - Specified small savings instruments pledged to the Managing Director, Mangaluru Smart City Limited Mangaluru Payable At Mangaluru.
 - Fixed deposit receipts pledged in the name of the Managing Director, Mangaluru Smart City Limited Mangaluru Payable At Mangaluru.
- 29.2 If the security deposit is provided by the successful Tenderer in the form of a Bank Guarantee, it shall be issued either by a Nationalized/Scheduled bank.
- 29.3 The security deposit if furnished in demand draft can, if requested, be converted to interest bearing securities at the cost of the contractor.
- 29.4 Failure of the successful Tenderer to comply with the requirements of Sub-Clause 29.1 shall constitute sufficient grounds for cancellation of the award and forfeiture of the Earnest money deposit.

30. Advance Payment and Security:

30.1 The Employer will provide an advance payment on the contract price as stipulated in the Conditions of Contract, subject to the maximum amount as stated in the Contract Data.

31. Corrupt or Fraudulent practices

- 31.1 The Government of Karnataka (GOK) requires that the Tenderers/Suppliers/Contractors, observe the highest standard of ethics during the procurement and execution of such contracts. In pursuance of this policy, GOK:
 - (a) will reject a proposal for award if it determines that the Tenderer recommended for award has engaged in corrupt or fraudulent practices in competing for the contract in question;
 - (b) will declare a firm ineligible, either indefinitely or for a stated period of time, to



be awarded a GOK contract if it at any time determines that the firm has engaged in corrupt or fraudulent practices in competing for, or in executing, a GOK contract.

31.2 Furthermore, Tenderers shall be aware of the provision stated in sub-clause 50.2 of the Conditions of Contract.



SECTION 3: OUALIFICATION INFORMATION

The information to be filled in by the Tenderer hereunder will be used for purposes of computing Tender capacity as provided for in Clause 3 of the Instructions to Tenderers. This information will not be incorporated in the Contract.

1.1	Constitution or legal status of Tenderer	[Attach copy]
	Place of Registration	
	Principal place of business:	(Attach Copy)

- 1.2 Total value of works executed and payments received in the last five years
 - 2012 13_____
 - 2013 14 _____
 - 2014 15 _____
 - 2015 16 _____
 - 2016 17 _____
- 1.3 Work performed as Prime Contractor (in the same name) on works of similar nature over during the five years specified in 1.2 above.

Project Name	Name of Emplo yer	Description of Work	Contract Number	Value of contract Rs Lakhs	Date of issue of Work	Specified period of completion	Actual date of completion	Remarks explainin g reasons for delay in completi on of work
1	2	3	4	5	6	7	8	9



1.4 Quantities of work executed as prime contractor (in the same name) during the last five years specified in 1.2 above:

Year	Name of Work	Name of Employer	Quantity of work performed (As per Section 3 Qualification of the Tenderer Clause 3.2 (c)	Remarks (Indicate contract reference)
1	2	3	4	5
2012-13				
2013-14				
2014-15				
2015-16				
2016-17				

1.5 Information on works for which Tenders have been submitted and works which are yet to be completed as on the date of this Tender.

(A) Existing commitments and on-going works:

Descriptio n of Work	Place & State	Contract No. & Date	Name & Date Address of Employer	Value of Contract (Rs. Lakhs)	Stipulate d period of completi on	Value of works remainin g to be complete d (Rs. Lakhs)	Anticip ated date of complet ion
1	2	3	4	5	6	7	8

(B) Works for which Tenders already submitted:

Description of Work	Place & State	Name & Date Address of Employer	Estimated value of works (Rs. Lakhs)	Stipulated period of completion	Date when decision is expected	Remarks if any
1	2	3	4	5	6	7



1.6 The following items of equipment are considered essential for successfully carrying out the works. The tenderer should furnish all the information listed below.

Item of Equipment	Requirement No. Capacity	Owned	Owned and available Number/Capacity Age/Condition	Remarks
(as specified in clause 3.3a)				

- 1.7 Reports on the financial standing of the tenderer, such as profit and loss statements and auditor's reports for the last five years;
- 1.8 Qualification and experience of the key technical and management personnel in permanent employment with the tenderer and those that are proposed to be deployed on this contract, if awarded.

				Years of	
Position*	Name	Qualifications	Years of experience	experience in the	
FOSITION	Name	Qualifications	(general)	proposed	
				position	
Site Engineer- 2		Graduate in Civil	10 years	Zvaars	
Nos		Engineering	10 years	3years	
Site Engineer -1		Graduate in			
Nos		Electrical	10 years	3 years	
		Engineering			
Quality control		Graduate/Diploma			
Engineer – 1		in Civil	10years	6 years	
Nos		Engineering			
Site Supervisors-		Diploma in Civil	6 years	2 voors	
2 Nos		Engineering	6 years	3 years	

- Minimum requirement
- 1.9. Name, address, and telephone, telex, and fax numbers of the Tenderers' bankers who may provide references if contacted by the Employer.
- 1.10 Evidence of access to financial resources to meet the qualification requirement specified in ITT Clause 3.3 (b): Cash in hand, Letter of Credit etc. List them below and attach certificate from the Banker in the suggested format as under:



1.11 Deleted

1.12 Information on litigations in which the Tenderer is involved:

Other Party (ies)	Employer	Details of dispute	Amount involved	Remarks showing present status
1	2	3	4	5

1.13 The proposed methodology and program of construction, backed with equipment planning and deployment, duly supported with broad calculations and quality control procedures proposed to be adopted, justifying their capability of execution and completion of the work as per technical specifications within the stipulated period of completion as per milestones.



SECTION 4: FORMS OF TENDER, LETTER OF ACCEPTANCE, NOTICE TO PROCEED WITH THE WORK AND AGREEMENT FORM

Form of Tender
Description of the Works
Tender
To : Address :
GENTLEMEN,
We offer to execute the Works described above in accordance with the Conditions of Contract accompanying this Tender for the Contract Price of
This Tender and your written acceptance of it shall constitute a binding contract between us. We understand that you are not bound to accept the lowest or any tender you receive.
The advance payment required is RsLakhs We undertake that, in competing for (and, if the award is made to us, in executing) the above contract, we will strictly observe the laws against fraud and corruption in force in India namely "Prevention of Corruption Act 1988".
We hereby confirm that this Tender complies with the Tender validity and Earnest money deposit required by the Tender documents.
We attach herewith our current income-tax clearance certificate.
Authorized Signature:
Name & Title of Signatory:
Name of Tenderer Address:

CONTRACTOR



Letter of Acceptance

(letterhead paper of the Employer)

da
To:
[name and address of the Contractor]
Dear Sirs,
This is to notify you that your Tender dated for execution of thefor the Contract Price of Rupees (
) [amount in words and figures], as corrected and modified in accordance with the Instructions to Tenderers is hereby accepted by our Agency.
You are hereby requested to furnish Security deposit plus additional security for unbalanced tenders in terms of Clause 25.5 of ITT, in the form detailed in Clause 29.1 of ITT for an amount of Rs.——— within 20 days of the receipt of this letter of acceptance valid up to 30 days from the date of expiry of Defects Liability Period i.e. up to 37 months from the date of Agreement (12 months for working period + 24 for Defective liability period + 1 month) and sign the contract, failing which action as stated in Para 29.4 of ITT will be taken.
Yours faithfully,
Authorized Signature
Name and Title of Signatory
Name of Agency

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Issue of Notice to proceed with the work

Name of Agency



Agreement Form

Agreement

This agreement, made the	day of	20
between	(hereina	fter called "the
Employer") of the one part and		
		[name
and address of contractor] (hereinafter called	1 "the Contractor") of the other p	oart.
Whereas the Employer is desirous that the C	ontractor execute	
i.e. (hereinafter called "the Works") a	and the Employer has accepted	the Tender by the
Contractor for the execution and completion	of such Works and the remedy	ring of any defects
therein at a contract price of Rupees		

NOW THIS AGREEMENT WITNESSETH as follows:

- 1. In this Agreement, words and expression shall have the same meanings as are respectively assigned to them in the Conditions of Contract hereinafter referred to, and they shall be deemed to form and be read and construed as part of this Agreement.
- 2. In consideration of the payments to be made by the Employer to the Contractor as hereinafter mentioned, the Contractor hereby covenants with the Employer to execute and complete the Works and remedy any defects therein in conformity in all aspects with the provisions of the Contract.
- 3. The Employer hereby covenants to pay the Contractor in consideration of the execution and completion of the Works and the remedying the defects wherein the Contract Price or such other sum as may become payable under the provisions of the Contract at the times and in the manner prescribed by the Contract.
- 4. The following documents shall be deemed to form and be read and construed as part of this Agreement, viz:
 - i) Letter of Acceptance;
 - ii) Notice to proceed with the works;
 - iii) Contractor's Tender;
 - iv) Contract Data;
 - v) Conditions of contract (including Special Conditions of Contract);
 - vi) Specifications;
 - vii) Drawings;
 - viii) Bill of Quantities; and
 - ix) Any other document listed in the Contract Data as forming part of the contract.

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In witness whereof the parties thereto have caused this Agreement to be executed the day a year first before written.	and
The Common Seal of	
was hereunto affixed in the presence of:	
Signed, Sealed and Delivered by the said	
in the presence of:	
Binding Signature of Employer	
Binding Signature of Contractor	



SECTION 5: CONDITIONS OF CONTRACT

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CONDITIONS OF CONTRACT

A. GENERAL

1. **Definitions**

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

Bill of Quantities means the priced and completed Bill of Quantities forming part of the Tender.

Compensation events are those defined in Clause 38 hereunder.

The **Completion Date** is the date of completion of the Works as certified by the Employer in accordance with Sub Clause 46.1.

The **Contract** is the contract between the Employer and the Contractor to execute, complete and maintain the Works. It consists of the documents listed in Clause 2.2 below.

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

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

The **Contractor's Tender** is the completed Tender document submitted by the Contractor to the Employer.

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

Days are calendar days; **months** are calendar months.

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

The <u>Defects Liability Period</u> is the period named in the Contract Data and calculated from the Completion Date which is 24 months for this tender.



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

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

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

The **Intended Completion Date** is the date on which it is intended that the Contractor shall complete the Works. The Intended Completion Date is specified in the Contract Data. The Intended Completion Date may be revised only by the Employer by issuing an extension of time.

Materials are all supplies, including consumables, used by the contractor for incorporation in the Works.

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

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

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

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

A SUBCONTRACTOR----- DELETED-----

A **Variation** is an instruction given by the Employer which varies the Works. The **Works** are what the Contract requires the Contractor to construct, install, and turn over to the Employer, as defined in the Contract Data.

2. Interpretation

2.1 In interpreting these Conditions of Contract, singular also means plural, male also means female or neuter, and the other way around. Headings have no significance. Words have their normal meaning under the language of the Contract unless

Mangaluru Smart City Limited (MSCL)



specifically defined. The Employer will provide instructions clarifying queries about the Conditions of Contract.

- 2.2 The documents forming the Contract shall be interpreted in the following order of priority:
 - (1) Agreement
 - (2) Letter of Acceptance, notice to proceed with the works
 - (3) Contractor's Tender
 - (4) Contract Data
 - (5) Conditions of Contract
 - (6) Specifications
 - (7) Drawings
 - (8) Bill of quantities and
 - (9) Any other document listed in the Contract Data as forming part of the Contract.

3. Law governing contract

3.1 The law governing the Contract is the Laws of India supplanted by the Karnataka Local Acts.

4. Employer's decisions

4.1 Except where otherwise specifically stated, the Employer will decide contractual matters between the Employer and the Contractor.

5. Delegation

5.1 The Employer may delegate any of his duties and responsibilities to other people after notifying the Contractor and may cancel any delegation after notifying the Contractor.

6. Communications

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

7. This Clause is deleted



8. Other Contractors

8.1 The Contractor shall cooperate and share the Site with other contractors, public authorities, utilities, and the Employer.

9. Personnel

- 9.1 The Contractor shall employ the technical personnel (of number and qualifications) as may be stipulated by GOK from time to time during the execution of the work. The technical staff so employed shall be available at site as may be stipulated by the Employer.
- 9.2 If the Employer asks the Contractor to remove a person who is a member of the Contractor's staff or his work force stating the reasons, the Contractor shall ensure that the person leaves the Site within seven days and has no further connection with the work in the Contract.

10. Employer's and Contractor's risks

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

11. Employer's risks

- 11.1 The Employer is responsible for the excepted risks which are:
 - (a) rebellion, riot commotion or disorder unless solely restricted to employees of the Contractor or his Sub-Contractors arising from the conduct of the Works; or
 - (b) a cause due solely to the design of the Works, other than the Contractor's design; or
 - (c) any operation of the forces of nature (in so far as it occurs on the Site) which an experienced contractor:
 - (i) could not have reasonably foreseen; or
 - (ii) could reasonably have foreseen, but against which he could not reasonably have taken at least one of the following measures;
 - (A) prevent loss or damage to physical property from occurring by taking appropriate measures or
 - (B) insure against such loss or damage

12. Contractor's risks

12.1 All risks of loss of or damage to physical property and of personal injury and death



which arise during and in consequence of the performance of the Contract other than the excepted risks are the responsibility of the Contractor.

13. Insurance:

- 13.1 The Contractor shall prior to commencing the works, effect and thereafter maintain insurances, in the joint names of the Employer and the Contractor, (cover from the first working day after the Start Date to the end of Defects Liability Period), in the amounts stated in the Contract Data:
 - (a) for loss of or damage to the Works, Plants and Materials and the Contractor's equipment;
 - (b) for liability of both Parties for loss, damage, death and injury to third parties or their property arising out of the Contractor's performance of the Contract including the Contractor's liability for damage to the Employer's property other than the Works and
 - (c) for liability of both Parties and of any Employer's representative for death and injury to the Contractor's personnel except to the extent that liability arises from the negligence of the Employer, any Employer's representative or their Employees.
- 13.2 Policies and certificates for insurance shall be delivered by the Contractor to the Employer for his approval before the Start Date. All such insurance shall provide for compensation to be payable to rectify the loss or damage incurred. All payments received from insurers relating to loss or damage shall be held jointly by the Parties and used for the repair of the loss or damage or as compensation for loss or damage that is not to be repaired.
- 13.3 If the Contractor fails to effect or keep in force any of the insurances referred to in the previous sub-clauses or fails to provide satisfactory evidence, policies or receipts, the Employer may without prejudice to any other right or remedy, effect insurance for the cover relevant to such default and pay the premiums due and recover the same as a deduction from any other monies due to the Contractor. If no payments is due, the payment of the premiums shall be a debt due.
- 13.4 Alterations to the terms of insurance shall not be made without the approval of the Employer.
- 13.5 Both Parties shall comply with any conditions of the insurance policies.



14. Site Investigation Reports:

14.1 The Contractor, in preparing the tender, shall rely on any site investigation reports referred to in the Contract data, supplemented by any information available to the Tenderer.

15. Queries about the Contract Data

15.1 The Employer will clarify queries on the Contract Data.

16. Contractor to construct the Works

16.1 The Contractor shall construct the Works in accordance with the Specification and Drawings.

17. The Works to be completed by the Intended Completion Date

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

18. Approval by the Employer:

- 18.1 The Contractor shall submit Specification and drawings showing the proposed Temporary Works to the Employer, who is to approve them if they comply with the Specifications and Drawings.
- 18.2 The Contractor shall be responsible for the design of Temporary Works
- 18.3 The Employer's approval shall not alter the Contractor's responsibility for design of the Temporary Works.
- 18.4 The Contractor shall obtain approval of third parties to the design of third parties to the design of the temporary Works where required.
- 18.5 All Drawings prepared by the Contractor for the execution of the temporary or permanent Works, are subject to prior approval by the Employer before their use.



19. Safety

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

20. Discoveries

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

21. Possession of the Site

21.1 The Employer shall give possession of all parts of the Site to the Contractor. If possession of a part is not given by the date stated in the Contract Data the Employer is deemed to have delayed the start of the relevant activities and this will be Compensation Event.

22. Access to the Site

22.1 The Contractor shall allow the Employer and any person authorized by the Employer access to the Site, to any place where work in connection with the Contract is being carried out or is intended to be carried out and to any place where materials or plant are being manufactured / fabricated / assembled for the works.

23. Instructions

23.1 The Contractor shall carry out all instructions of the Employer which comply with the applicable laws where the Site is located.

24. Procedure for resolution of Disputes:

- 24.1 If the Contractor is not satisfied with the decision taken by the Employer, the dispute shall be referred by either party to Arbitration within 30 days of the notification of the Employer's decision.
- 24.2 If neither party refers the dispute to Arbitration within the above 30 days, the Employer's decision will be final and binding.
- 24.3 The Arbitration shall be conducted in accordance with the arbitration procedure stated in the Special Conditions of Contract.



B. TIME CONTROL

25. Program

- 25.1 Within the time stated in the Contract Data the Contractor shall submit to the Employer for approval a Program showing the general methods, arrangements, order, and timing for all the activities in the Works.
- 25.2 The Employer's approval of the Program shall not alter the Contractor's obligations. The Contractor may revise the Program and submit it to the Employer again at any time. A revised Program is to show the effect of Variations and Compensation Events.

26. Extension of the Intended Completion Date

- 26.1 The Employer shall extend the Intended Completion Date if a Compensation Event occurs or a Variation is issued which makes it impossible for Completion to be achieved by the Intended Completion Date.
- 26.2 The Employer shall decide whether and by how much to extend the Intended Completion Date within 21 days of the Contractor asking the Employer for a decision upon the effect of a Compensation Event or Variation and submitting full supporting information.

27. Delays ordered by the Employer

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

28. Management meetings

- 28.1 The Employer may require the Contractor to attend a management meeting. The business of a management meeting shall be to review the progress achieved and the plans for remaining work.
- 28.2 The responsibility of the parties for actions to be taken is to be decided by the Employer either at the management meeting or after the management meeting and stated in writing to be distributed to all who attended the meeting.



C. QUALITY CONTROL

29. Identifying defects

29.1 The Employer shall check the Contractor's work and notify the Contractor of any Defects that are found. Such checking shall not affect the Contractor's responsibilities. The Employer may instruct the Contractor to search for a Defect and to uncover and test any work that the Employer considers may have a Defect

30. Tests

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

31. Correction of defects

- 31.1 The Employer shall give notice to the Contractor of any Defects before the end of the Defects Liability Period, which begins at Completion and is defined in the Contract Data. The Defects Liability Period shall be extended for as long as Defects remain to be corrected.
- 31.2 Every time notice of a Defect is given, the Contractor shall correct the notified Defect within the length of time specified by the Employer's notice.

32. Uncorrected defects

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



D. COST CONTROL

33. Bill of Quantities (BOQ)

- 33.1 The BOQ shall contain items for the construction, installation, testing, and commissioning work to be done by the Contractor.
- 33.2 The BOQ is used to calculate the Contract Price. The Contractor is paid for the quantity of the work done at the rate in the BOQ for each item

34. Variations

- 34.1 The Employer shall have power to order the Contractor to do any or all of the following as considered necessary or advisable during the progress of the work by him
 - (a) Increase or decrease of any item of work included in the Bill of Quantities (BOQ);
 - (b) Omit any item of work;
 - (c) Change the character or quality or kind of any item of work;
 - (d) Change the levels, lines, positions and dimensions of any part of the work;
 - (e) Execute additional items of work of any kind necessary for the completion of the works; and
 - (f) Change in any specified sequence, methods or timing of construction of any part of the work.
- 34.2 The Contractor shall be bound to carry out the work in accordance with any instructions in this connection, which may be given to him in writing by the Employer and such alteration shall not vitiate or invalidate the contract.
- 34.3 Variations shall not be made by the Contractor without an order in writing by the Employer, provided that no order in writing shall be required for increase or decrease in the quantity of an item appearing in the BOQ so long as the work executed conforms to the approved drawings.
- 34.4 The Contractor shall promptly request in writing to the Employer to confirm verbal orders and the officer issuing oral instructions shall confirm it in writing within 30 days, failing which the work shall be carried out as though there is no variation. In case variation is approved it shall be accompanied by BOQ failing which the contractor shall be responsible for deviation if any. Further approval of Govt has to be obtained for the variation exceeding 5 %.



35. Payments for Variations

- 35.1 Payment for increase in the quantities of an item in the BOQ up to 25% of that provided in the Bill of Quantities shall be made at the rates quoted by the Contractor.
- 35.2 For quantities in excess of 125% of the tendered quantity of an item as given in the BOQ, the Contractor shall be paid at the rate entered in or derived from in the Schedule of Rates (applicable for the area of the work and current at the time of award of contract) plus or minus the overall percentage of the original tendered rates over the current Schedule of Rates prevalent at the time of award of contract.
- 35.3 If there is no rate for the additional, substituted or altered item of the work in the BOQ, efforts would be made to derive the rates from those given in the BOQ or the Schedule of Rates (applicable for the area of the work and current at the time of award of contract) and if found feasible the payment would be made at the derived rate for the item plus or minus the overall percentage of the original tendered rates over the current Schedule of Rates prevalent at the time of award of contract
- 35.4 If the rates for additional, substituted or altered item of work cannot be determined either as at 35.1 or 35.2 or 35.3 above, the Contractor shall be requested to submit his quotation for the items supported by analysis of the rate or rates claimed, within 7 days.
- 35.5 If the Contractor's quotation is determined unreasonable, the Employer may order the Variation and make a change to the Contract Price which shall be based on Employer's own forecast of the effects of the Variation on the Contractor's costs.
- 35.6 If the Employer decides that the urgency of varying the work would prevent a quotation being given and considered without delaying the work, no quotation shall be given and the Variation shall be treated as a Compensation Event.
- 35.7 Under no circumstances the Contractor shall suspend the work on the plea of non-settlement of rates for items falling under this Clause.

36. Submission of bills for payment

- 36.1 The Contractor shall submit to the Employer monthly bills of the value of the work completed less the cumulative amount paid previously.
- 36.2 The Employer shall check the Contractor's bill and determine the value of the work executed which shall comprise of (i) value of the quantities of the items in the BOQ



completed and (ii) valuation of Variations and Compensation Events.

36.3 The Employer may exclude any item paid in a previous bill or reduce the proportion of any item previously paid in the light of later information.

37. Payments

- 37.1 Payments shall be adjusted for deductions for advance payments, other than recoveries in terms of the contract and taxes, at source, as applicable under the law. The Employer shall pay the Contractor within 60 days of submission of bill. The contractor shall be liable to pay liquidated damages for shortfall in progress.
 - For progress beyond the agreed programme payment is subject to availability of the grants.
- 37.2 Items of works for which no rate or price has been entered in will not be paid for by the employer and shall be deemed covered by other rates and prices in the Contract.

38. Compensation events

- 38.1 The following are Compensation events unless they are caused by the Contractor:
 - (a) The Employer does not give access to a part of the Site by the Site Possession Date stated in the Contract Data.
 - (b) The Employer orders a delay or does not issue drawings, specifications or instructions required for execution of works on time.
 - (c) The Employer instructs the Contractor to uncover or to carry out additional tests upon work which is then found to have no Defects.
 - (d) The Employer gives an instruction for dealing with an unforeseen condition, caused by the Employer, or additional work required for safety or other reasons.
 - (e) The effect on the Contractor of any of the Employer's Risks.
 - (f) The Employer unreasonably delays issuing a Certificate of Completion.
 - (g) Other Compensation Events listed in the Contract Data or mentioned in the Contract.
- 38.2 If a Compensation Event would cause additional cost or would prevent the work being completed before the Intended Completion Date, the Contract Price shall be increased and/or the Intended Completion Date is extended. The Employer shall decide whether and by how much the Contract Price shall be increased and whether and by how much the Intended Completion Date shall be extended.



- As soon as information demonstrating the effect of each Compensation event upon the Contractor's forecast cost has been provided by the Contractor, it is to be assessed by the Employer and the Contract Price shall be adjusted accordingly. If the Contractor's forecast is deemed unreasonable, the Employer shall adjust the Contract Price based on Employer's own forecast. The Employer will assume that the Contractor will react competently and promptly to the event.
- 38.4 The Contractor shall not be entitled to compensation to the extent that the Employer's interests are adversely affected by the Contractor not having given early warning or not having cooperated with the Employer.

39. Tax

39.1 The rates quoted by the Contractor shall be deemed to be inclusive of the sales tax, labour welfare cess and other taxes that the Contractor will have to pay for the performance of this Contract. The Employer will perform such duties in regard to the deduction of such taxes at source as per applicable law.

40. Price Adjustment:

(Refer GOK Order No.FD 59 Pro.Cell 2004, Bangalore Dated 26th November 2004 AND Government order No. FD 3 PCL 2008, Bangalore, Dated :21-11-2008) As per Government order No. FD 3 PCL 2008, Bangalore dated 21.11.2008;

"If the period of execution is more than 6 months but less than or equal to 12 months for work costing more than Rs.50.00 Lakhs, star rates in respect of specified materials (Cement, Steel and Bitumen) only shall be payable to the contractor based on the all India average wholesale price index for the said materials. The star rates adjustment shall be as per the increase or decrease in the index as applied to the said materials between the last date for receiving bids and the date of execution as per the approved programme of works submitted by the contractor at the time of execution of agreement which shall mandatorily be a part of the agreement"

- 40.1 Contract price shall be adjusted for increase or decrease in rates and prices of labour, materials, fuels and lubricants in accordance with the following principles and procedures and as per formulae given in the Contract Data.
 - (a) The price Adjustment shall apply for the work done from the date of commencement up to the end of original period of completion or extensions granted by the Employer and shall not apply to work carried out beyond the stipulated period of completion for reasons attributable to the Contractor;

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- (b) Price Adjustment shall be admissible from the date of opening of tenders (original or extended)
- (c) The price adjustment shall be determined during each quarter from the formulae given in Contract Data.
- (d) Following expressions and meanings are assigned to the work done during the quarter:
 - R = Total value of work done during the quarter. It will **exclude** value for works executed under variations for which price adjustment (if any) will be worked out separately based on the terms mutually agreed.
- 40.2 To the extent that full compensation for any rise or fall in costs to the contractor is not covered by the provisions of this or other Clauses in the Contract, the unit rates included in the contract shall be deemed to include amounts to cover the contingency of such other rise or fall in costs.

41. Liquidated damages

- 41.1 The Contractor shall pay liquidated damages to the Employer at the rate per day stated in the Contract Data for each day that the Completion Date is later than the Intended Completion Date (for the whole of the works or the milestone as stated in the Contract Data). The total amount of liquidated damages shall not exceed the amount defined in the Contract Data. The Employer may deduct liquidated damages from payments due to the Contractor. Payment of liquidated damages does not affect the Contractor's liabilities.
- 41.2 If the Intended Completion Date is extended after liquidated damages have been paid, the Employer shall correct any overpayment of liquidated damages by the Contractor by adjusting the next payment of bill.

42. Advance Payments:

42.1 The Employer shall make payment to the Contractor of the amounts stated in the Contract Data by the date stated in the Contract Data, against provision by the Contractor of an unconditional bank guarantee in a form acceptable to the Employer issued by a Nationalized/Scheduled Bank in amounts equal to the advance payment. The guarantee shall remain effective until the advance payment has been repaid, but the amount of the guarantee shall be progressively reduced by the amounts repaid by the Contractor. Interest will not be charged on the advance payment.



- 42.2 The Contractor is to use the advance payment only to pay for Mobilization expenses required specifically for execution of the Works. The Contractor shall demonstrate that advance payment has been used in this way by supplying copies of invoices or other documents to the Employer.
- 42.3 The advance payment shall be repaid by deducting proportionate amounts from payments otherwise due to the Contractor, following the schedule of completed percentages of the Works on a payment basis. No account shall be taken of the advance payment or its repayment in assessing valuation of the work done, variations, price adjustments, compensation events or liquidated damages.

43. Securities:

The Security Deposit (including additional security for unbalanced tenders) shall be provided to the Employer no later than the date specified in the Letter of Acceptance and shall be issued in an amount and form and type of instrument acceptable to the Employer. The Security Deposit shall be valid until a date 90days from the date of expiry of Defects Liability Period and the additional security for unbalanced tenders shall be valid until a date 30 days from the date of issue of the certificate of completion. A 50% of Security Deposit is repaid to the Contractor after completion of DLP (24 months) to the satisfaction of Employer and another 50% of Security Deposit is repaid after completion of Maintenance Period of four years to the satisfaction of Employer.

44. Cost of Repairs:

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



E. FINISHING THE CONTRACT

45. Completion

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

46. Taking over

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

47. Final account

47.1 The Contractor shall supply to the Employer a detailed account of the total amount that the Contractor considers payable under the Contract before the end of the Defects Liability Period. The Employer shall issue a Defect Liability Certificate and certify any final payment that is due to the Contractor within 90 days of receiving the Contractor's account if it is correct and complete. If it is not, the Employer shall issue within 90 days a schedule that states the scope of the corrections or additions that are necessary. If the Final Account is still unsatisfactory after it has been resubmitted, the Employer shall decide on the amount payable to the Contractor and make payment within 60 days of receiving the Contractor's revised account.

48. As built drawings and /or Operating and Maintenance Manuals

- 48.1 If "as built" Drawings and/or operating and maintenance manuals are required, the Contractor shall supply them by the dates stated in the Contract Data.
- 48.2 If the Contractor does not supply the Drawings by the dates stated in the Contract Data, or they do not receive the Employer's approval, the Employer shall withhold the amount stated in the Contract Data from payments due to the Contractor.

49. Termination

- 49.1 The Employer may terminate the Contract if the other party causes a fundamental breach of the Contract.
- 49.2 Fundamental breaches of Contract include, but shall not be limited to the following:
 - (a) the Contractor stops work for 45 days when no stoppage of work is shown on the current Program and the stoppage has not been authorized by the Employer;
 - (b) deleted



- (c) The Contractor becomes bankrupt or goes into liquidation other than for a reconstruction or amalgamation;
- (d) deleted
- (e) the Employer gives Notice that failure to correct a particular Defect is a fundamental breach of Contract and the Contractor fails to correct it within a reasonable period of time determined by the Employer;
- (f) the Contractor does not maintain a security which is required;
- (g) the Contractor has delayed the completion of works by the number of days for which the maximum amount of liquidated damages can be paid as defined in the Contract data; and
- (h) if the Contractor, in the judgment of the Employer has engaged in corrupt or fraudulent practices in competing for or in the executing the Contract.
 For the purpose of this paragraph: "corrupt practice" means the offering, giving, receiving or soliciting of anything of value to influence the action of a public official in the procurement process or in contract execution. "Fraudulent practice" means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of the Borrower, and includes collusive practice among Tenderers (prior to or after Tender submission) designed to establish Tender prices at artificial non-competitive levels and to deprive the Borrower of the benefits of free and open competition."
- 49.3 When either party to the Contract gives notice of a breach of contract to the Employer for a cause other than those listed under Sub Clause 49.2 above, the Employer shall decide whether the breach is fundamental or not.
- 49.4 Notwithstanding the above, the Employer may terminate the Contract for convenience.
- 49.5 If the Contract is terminated the Contractor shall stop work immediately, make the Site safe and secure and leave the Site as soon as reasonably possible.

50. Payment upon Termination

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



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

51. Property

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

52. Release from performance

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



F. SPECIAL CONDITIONS OF CONTRACT

1. Labour:

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

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

2. Compliance with labour regulations:

During continuance of the contract, the Contractor and his sub contractors shall abide at all times by all existing labour enactments and rules made there under, regulations, notifications and bye laws of the State or Central Government or local authority and any other labour law (including rules), regulations, bye laws that may be passed or notification that may be issued under any labour law in future either by the State or the Central Government or the local authority. The Contractor shall keep the Employer indemnified in case any action is taken against the Employer by the competent authority on account of contravention of any of the provisions of any Act or rules made there under, regulations or notifications including amendments. If the Employer is caused to pay or reimburse, such amounts as may be necessary to cause or observe, or for nonobservance the provisions of stipulated in the notifications/bye laws/Acts/Rules/regulations including amendments, if any, on the part of the Contractor, Employer shall have the right to deduct any money due to the Contractor including his amount of security deposit. The 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.

3. Protection of Environment:

The contractor shall take all reasonable steps to protect the environment on and off the Site and to avoid damage or nuisance to persons or to property of the public or others resulting from pollution, noise or other causes arising as a consequence of his methods of



operation. During continuance of the contract, the contractor and his sub-contractors shall abide at all times by all existing enactments on environmental protection and rules made there under, regulations, notifications and bye-laws of the State or Central Government, or local authorities and any other law, bye-law, regulations that may be passed or notification that may be issued in this respect in future by the State or Central Government or the local authority.

Monitoring Requirement & Specifications

No	Monitoring Requirements	Specification	Responsible agency
1	Noise levels at the	Monitoring at all locations hourly basis	Contractor, PC
	construction sites (only during	for 24 hour period. Once every season	
	construction period)	of the year during construction period.	
2	Disposal of construction	Periodic inspection at haul roads and	PC,
	debris	sites for construction debris for safe	
		collection and disposal to identified	
		land fill sites.	
3	Traffic and Transportation	Measures for diverting the traffic during	PC in
		construction across roads within the	consultation
		ULB	with ULB and
			local police
			department
4	Domestic sewage and refuse	Check for adequacy of sanitation	PC
	management at the labor	arrangements at the labor camps	
	camps and construction sites		
5	Water Pollution	Check for:	PC, contractor
		Blockage of flowing water which may	
		lead to stagnation of water	
		• Soil erosion due to construction	
		activities leading to contamination and	
		siltation of water bodies	
		• Water contamination due to use of fuel	
		and lubricants at the construction sites.	
6	Procurement of construction	Check that procurement of construction	PC
	material	materials should be only from permitted	
		sites and quarries.	

Location of Noise monitoring shall be wherever the contractor decides to locate the equipment yard and at sensitive locations such as school, hospitals, dispensary etc. In



case of noise levels causing disturbance to the sensitive receptors, management measures as suggested in the EMP shall be carried out.

The implementation of Mitigation Measures is the responsibilities of the Contractor/PC/Client. However, it may be noted that implementation of all the measures is full responsibility of Contractor. The PC/ Client would be responsible only for monitoring/supervision/guidance, etc.

4. Arbitration (Clause 24)

4.1 The procedure for arbitration shall be as follows:

- (a) In case of dispute or difference arising between the Employer and the Contractor relating to any matter arising out of or connected with this agreement it shall be settled in accordance with the Arbitration and Conciliation Act 1996. The disputes or differences shall be referred to a Sole Arbitrator. The Sole Arbitrator shall be appointed by agreement between the parties. If the parties fail to reach such agreement/consensus then the sole arbitrator shall be appointed by the Appointing Authority, namely, Institute of Engineers, Bangalore
- (b) Arbitration proceedings shall be held at MANGALURU, Karnataka, India
- (c) The cost and expenses of arbitration proceedings will be paid as determined by the Arbitrator. However the expenses incurred by each party in connection with the preparation, presentation, etc., shall be borne by each party itself.
- (d) Performance under the contract shall continue during the arbitration proceedings and payments due the Contractor by the Employer shall not be withheld, unless they are the subject matter of the arbitration proceedings.

5. Establishment of Field laboratory (Clause 30)

The contractor shall establish the field testing laboratory within two weeks from the date of agreement as per the details provided in **Section 6: Specification**



SECTION6: CONTRACT DATA

The following documents are also part of the Contract:	Clause Reference
The Schedule of Operating and Maintenance Manuals	[48]
The Methodology and Program of Construction	[25]
Site Investigation Reports	[14]
The Schedule of Key and Critical Equipment to be deployed on the work as per agreed program of construction	[25]
The Employer is:	[1.1]
Name: Mangaluru Smart City Limited	
Address: Office of The Managing Director, Mangaluru Smart City Limited,	
MCC Office, Lalbagh, Mangaluru	
Name of authorized Representative:	
The name and identification number of the Contract is	[1.1]

The Works consist of Construction of Smart Bus Shelter and E-Toilets in Pan City Area in Mangaluru City

PROJECT BACKGROUND

Karnataka Urban Infrastructure Development & Finance Corporation Limited (KUIDFC) is the State Level Nodal Agency (SLNA) for the Smart Cities Mission in Karnataka. *Mangaluru was a proud Participant in second round of this Challenge and now aspires to translate the vision i.e. the broad components across both 'area-based' and 'pan-city' heads identified in the Smart City Proposal (SCP) into reality.*

Bus Shelters with E- Toilets is one of the projects under Mangaluru Smart City

As part of the Phase -1, 22 locations are finalized for implementation of Smart Bus Shelters. These locations were further analyzed for typology of Bus Shelters to be implemented. The implementation of E-Toilets at critical locations is also proposed as part of the Phase -1 implementation strategy. The remaining Bus Shelters shall be undertaken as part of implementation strategy for Smart Roads and future implementation phases.

3 type of Bus Shelter has been proposed as defined below:

- Type A Bus Shelter with E-Toilet, including Interactive Display and Real time indicator
- Type B Bus Shelter without E-Toilet, but including Interactive Display and Real time indicator



■ Type C –Lightweight Bus Shelter

In addition to providing the inherent purpose of sheltering from sun, wind and rain, the Proposed Bus Shelters will provide the following functions:

- a. *Provide real time transit data* like route numbers, arriving buses with their estimated arrival time.
- b. Provide interactive data to the users such as bus route maps and guides.
- c. It should be *user friendly* for elderly, children and physically challenged including tactile and braille boards for visually impaired.
- d. Provide safety by means of increasing visibility for waiting commuters
- e. Provide ICT facilities like WiFi Hotspots and mobile charging point.
- f. Provide space for advertisements.

Some of the features of E-Toilet proposed for Mangalore Smart City shall be:

- Automatic Payment Collection & Access Controls
- Alerts to Users
- Display Boards
- Sensor-based interior facilities
- Automatic Closet Washing & Platform Cleaning
- Traditional Power & UPS
- Water Tank
- External advertisement panels
- Touch free cleaning

The start date shall be the date of issue of notice to proceed with the work			[1.1]	
The Intended Completic following milestones	[17,26]			
Milestone dates Physical works to be completed Notice to proceed				
Milestone1	Foundation and Erection of Bus Shelters 4 months			
Milestone2 Installation of Electronic Panel 5 months				
Milestone3 Completion of All works in All respect 6 months				

Note: The item of works specified in the each milestone is tentative. The contractor shall furnish the realistic Bar chart / milestone prior to commencement of work and obtain the approval from the Executive Engineer in charge of the work. However the Percentage of progress specified above has to be adhered.

The Site Possession Date is: <i>Immediate</i>	[21]
The Site is located in PAN city area of Mangaluru.	[1.1]
The Defects Liability Period is 24 months	[31]

CONTRACTOR EXECUTIVE ENGINEER



Insura	nce requiremen	ts areas under:			[13]
	Type of Cover Mini		Minimum cover fo	r Insurance	
(i)			The sum stated in the Agreement plu 20%		
(ii)	Loss or damag	ge to equipment		Full replacement cost	
(iii)	Loss or damag	ge to property of Third Par	ty	Full replacement cost	
(iv)	Personal injur (a) for Third P	y or death insurance Party		Rs 5 Lakhs each	
	(b)for Contrac Employees or			In accordance with requirements applications	
G.O.	No. FD 59 I	rmula - Price Adjustmen PRO. Cell/2004 dated 2 2008, Bangalore, Dated	26-11-2004	and Government	[40]NA
AMO The m	UNT (amount)	nt of liquidated damages f		·	[41]
The a	mounts of the ac	dvance payment are:			NA[42]
Natur	e of Advance	Amount(Rs.)	Conditions	to be fulfilled	
	Mobilization 5% of the Contract price On submission of unconditional Bank Guarantee. (to be drawn before end of 20% of Contract period)				
		ent will be paid to the Connt of the above conditions)		er than 30	
Repay	ment of advanc	e payment for mobilization	n	<u>, </u>	NA[42]
The advance loan shall be repaid with percentage deductions from the interim payments certified by the Engineer under the Contract. Deductions shall commence in the next Interim Payment Certificate following that in which the total of all such payments to the Contractor has reached not less than15percent of the Contract Price or 3 months from the date of payment of first installment of advance, whichever period concludes earlier, and shall be made at the rate of 7.5% percent of the amounts of all Interim Payment Certificates until such time as the loan has been repaid, always provided that the loan shall be completely repaid prior to the expiry of the original time for completion pursuant to Clauses 17 and 26.					



The date by which "as-built" drawings (in scale as per Standards) in 3 sets are required is within 30 days of issue of certificate of completion of Whole work	[48]
The date by which Operating and Maintenance Manuals are required is within 30 days of issue of certificate of completion of Whole work	[48]
The amount to be withheld for failing to supply "as built" 60drawings or supply of Operation and Maintenance Manuals by the date required is Rs.0.4% of Contract Price	[48]
The following events shall also be fundamental breach of the contract:	[49.2]
1. The contractor has contravened Sub-clause 7.1 and Clause 9 of CC.	
The percentage to apply to the value of the work not completed representing the Employer's additional cost for completing the Works shall be 30 percent.	[50.1]

The liquidated damages for the whole of the works are

For Milestone 1: Rs 23596.00 per day [41]

For Milestone 2: Rs 31862.00 per day For Milestone 3: Rs 39827.00 per day

The maximum amount of liquidated damages for the whole of the works [41]

is 10% (ten percent) of final contract price



SECTION 7: SPECIFICATIONS

Bus Shelter (All Proto Types)

Bus shelter shall confirm to the following parameters:

- 1. Bus Shelter BS shall serve as an all-weather shade for the bus commuters.
- 2. The structure shall be designed to withstand wind load according to regulations.
- 3. The display systems can have fixed or scrolling faces with back light.
- 4. The Side Display board for all Prototypes (A, B and C) to have 1100X400mm Electronic display connected with WIFI to show schedules and bus Status. The electronic display board to be of LED Scrolling type with Oval, 4.3 x 5.1mm dia. Diffused. LED's having Amber colour.
- 5. Bus shelter shall be made of SS 304 frame work with brush steel finish, Insulated Galvalume roofing design to receive load of solar panels in future and electronic circuit to control its lighting.
- 6. The seating shall be made of SS 304 tubular sections for seat and back rest with adequate mid span support brackets and floor support. The benches shall be modular type with the each unit size of 4500mm x 600mm with a minimum backrest support of 450mm.
- 7. All the steel parts shall be SS as per the grade mentioned to withstand the local climatic conditions and aluminum parts shall be anodized or powder coated to give longer life and better quality. The material used shall be unaffected by outdoor exposure.
- 8. The materials used shall be Non-flammable.
- 9. The Foundation slab shall be made in min M25 concrete. The cast iron nuts, bolts shall be rust proof hot deep galvanized powder coated etc.
- 10. The display shall be covered using toughened glass/ acrylic, with protective frames on its edges.
- 11. The Parts used shall not be fragile and safely secured to its foundation with anchor fasteners which makes the furniture more stable and joint fasteners not visible from outside. None of the joints shall be visible from outside the furniture and it is completely sealed. Opening shall be by specialized key.
- 12. There shall be no falling parts, no sharp edges involved in the furniture all the parts shall be well fastened. The foundation used shall be designed in order to take loads from wind and persons leaning over the panel.
- 13. Dual bin system should be adopted one for recycle waste & other for dry waste. Sizes may vary as per the manufacturer, recommendations are as per the drawing shown. The system should have minimum ground footprint. Each bin shall be with minimum capacity of 70Ltrs. It should be open-able completely for ease in emptying & cleaning.
- 14. Interactive Information Panel shall be installed in Type A and Type B Bus Shelters as per the design, equipped with touch/ smart panels. The panel shall be display equipment with information area of 1400 x 1400 and touch screen LED display panel of area not less than 600-900mm with integrated 8mm toughened glass. The metal body shall be powder coated and with graphic imprints.
- 15. Advertisement Area shall be integrated within the design of the Bus Shelter. This shall be backlit type with SS box framing sides and back complete with electric supply provision. The face shall be of acrylic to prevent vandalism of the advertising panel.
- 16. Provision for installing outdoor Wi-Fi Router shall be made with integrated conduit for data cable.
- 17. Provision for installation of Robust IP bullet camera with infrared illumination for outdoor HD surveillance applications.



E-Toilets

E-Toilets, shall confirm to the following parameters;

- 1. The external wall and roof of the toilet cubicle shall be fully water tight and weather proof.
- 2. The roof of the toilet blocks shall be so designed that no water accumulation takes place.
- 3. The external finish shall be weather proof
- 4. Each toilet cubicle shall be fitted with Coin validator system for entering to the toilet.
- 5. Internal finish and assemblies of the toilet should be fully water and leak proof
- 6. Smart features like Pre Flush, Auto flush, automatic platform cleaning mechanism (to clean the toilet before and after usage) shall be provided.
- 7. Occupancy indicator with LED display shall be provided on outside of the toilet
- 8. Display boards where instructions in Hindi, English and local language shall be written for the aid of the user. Such display boards shall be distinctly visible during night hours.
- 9. In built water tank with LED indicator showing water level shall be provided.
- 10. GPS Connectivity provision, which will help in the monitoring the health status of the unit from a remote location.
- 11. Power and water backup for its users in case of sudden power outage or water discontinuation



Material Specifications for miscellaneous components

	toilet shall be conform	ning to following technical specification for miscellaneous
SI.	Items	Specification
1	Inside Area	Width: 1900 minimum, Length: 2500 minimum, Height: 2400 mm minimum all materials inside using Stainless Steel 316 grade
2	Exterior area	Exterior area measurements covered with Aluminium Composite Panels/Glass or similar aesthetic material as per design
3	Floor	Floor upper layer stainless steel AISI 316 with 3 mm thickness perforated & non slippery. Floor inner layer water proof and ventilated 1 mm stainless steel sheet with AISI 304 slopped and connected with Bio digester tank
4	Wall & Roof	Double skin insulated panels, with 1mm thick 316 grade stainless steel inside skin and exterior grade 4mm thick PVDF coated ACP outside facia. Inside hollow space shall be filled up with High density (16 kg/m3) 40 thick (EPS) Expanded Polystyrene insulation
5	Access control	Front Panel LED sign box for Coin mechanism, voice guidance system
6	Door	Flush Door with 1mm thick Stainless steel (AISI 316) on both sides with EPS insulation
7	Foot step or Ramp	Minimum 1200 mm wide in RCC with exterior grade anti skidding floor tiles
8	Locks	Locks with electric strike door opener and door closure with single way retractable door handle
9	Ventilation	Ventilation with minimum 4" Exhaust fan and wall mounted SS louvers to ensure fresh air flow inside toilet
10	Plumbing	0.5 HP Pressure Boosting Pump, CPVC Plumbing material, Spiral Cleaning Nozzle, water Tank 500 liters for single toilets
11	Electrical	600VA UPS, 60 AH Battery minimum with leakage and surge protection
12	Toilet Pan	Vandal proof Indian style / western style stainless steel 316 grade toilet pan merged with 3mm perforated floor
13	Mirror	Stainless steel Mirror panel
14	Waste Bin	stainless steel waste bin with push door to outside toilet cubicle
15	Water Tap	Chromium plated water tap with mug (fixed with SS chain) and SS health
16	Inside Lock	Tower bolt from inside to lock the door manually



17	Fan/LED light	Vandal proof Fan and LED lights (activated only when the toilet is occupied)
18	Handle/handrail	1" dia Stainless Steel Handle/handrail for aged people
19	Bag Holder	Stainless Steel Bag Holder
20	Cleaning System	Water pressure cleaning system to clean wall, toilet pan and perforated floor
21	Access Control	Coin mechanism and optional Press Button
22	Pre-wetting	Automatic Pre-wetting system with minimum water
23	After use flushing	Automatic flushing after use and its Manual overriding
24	Manual Exit	Manual exit like normal toilet door from APT
25	Emergency Exit	Manual overriding of door opening of toilet from outside in case of emergencies
26	Emergency Numbers	Emergency contact local numbers should be displayed inside
27	Self-Cleaning with pre-programmed intervals	Self-cleaning of floors and walls After pre-programmed intervals
28	Technology	IoT enabled Remote Monitoring, Desktop Application for
	Features required	Remote Monitoring
29	Plumbing pipes	CPVC
30	Pressure Boosting Pump (to generate required pressure for flushing and pressure cleaning)	0.5 HP
31	UPS (For power back up)	600VA
32	Battery (For power back up)	60AH
33	Wash basin	Stainless steel (316 grade) wash basin with sensor operated chromium plated pillar cock and sensor operated soap dispenser

FOR ITEMS NOT SPECIFIED ABOVE, WORK TO BE EXECUTED AS PER RELEVANT MORTH, IRC, KSRB DETAILED SPECIFICATION & NATIONAL BUILDING CODE & AS PER RELEVANT BUREAU OF INDIAN STANDARD SPECIFICATIONS

CONTRACTOR

EXECUTIVE ENGINEER

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SECTION 8: DRAWINGS

Following Drawings have been attached separately in e-procurement Portal

No.	Drawing no	Drawing Title
1	WTE_2292_00_A_1.01	TYPE A – BUS SHELTER PLAN SECTION AND ELEVATION
2	WTE_2292_00_A_1.02	TYPE A – 3D RENDERING
3	WTE_2292_00_B_2.01	TYPE B – BUSSHELTER PLAN SECTION AND ELEVATION
4	WTE_2292_00_B_2.02	TYPE B – 3D RENDERING
5	WTE_2292_00_C_3.01	TYPE C – BUSSHELTER PLAN SECTION AND ELEVATION



SECTION 9: BILL OF QUANTITIES

Sl. No.	Description of work	Quantity	TI34	sanctioned	Rate (rs.)		Amount	
SI. NO.			Unit		In figures	In words	(rs.)	
	Refer E Procure	ment Portal						
Total Tender Price (in Figures)								
(In Word	(In Words)							

Note:

- Item of which no rate or price has been entered in will not be paid for by the Employer when
- 1) executed and shall be deemed covered by the other rates and prices in the Bill of Quantities (refer: ITB Clause 7.2 and CC Clause 33.2)
- 2) Unit rates and prices shall be quoted by the tenderer in Indian Rupees.
- Where there is a discrepancy between the rate in figures and words, the lower of the two will govern [ITB Clause 20.1(a)]
- Where there is a discrepancy between the unit rate and the line item total resulting from multiplying the unit rate by quantity, the unit rate quoted shall govern [ITB Clause 20.1(b)]



SECTION 10:

EARNEST MONEY DEPOSIT/BID SECURITY (BANK GUARANTEE) (Section 13 of Instruction for Tenderers (ITT))

WHEREAS,	[name of	of Tenderer] hereinafter called "the
Tenderer") has submitted his Tender d		
of	[name of the work]	(hereinafter called "the Tender").
KNOW ALL PEOPLE by the	se presents that We _	[name of bank]
having our registered office at	(herei	nafter called "the Bank") are bound
unto[nam		
sum of Rs(A	Amount of EMD) for	which payment well and truly to be
made to the said Employer the Bank bi	nds itself, his successo	ors and assigns by these presents.
SEALED with the Common Se	eal of the said Bank thi	sday of20
THE CONDITIONS of this obligation	are:	
(1) If after Tender opening the validity specified in the ir		the bid during the period of Tender
• •		stance of his Tender by the Employer
during the period of Tende	-	number of his Tender by the Employer
	<u>*</u>	Agreement in accordance with the
Instructions to Tende		rigitement in decordance with the
		Security Deposit, in accordance with
the Instruction to Ter		, ,
We undertake to pay to the Enwritten demand, without the Employed demand the Employer will note that occurrence of one or any of the three controls.	er having to substantia the amount claimed	by him is due to him owing to the
This Guarantee will remain in days) after the deadline for submission to Tenderer or e-procurement portal of extension(s) to the Bank is hereby wait the Bank not later than the above date.	ion of Tender as such r as it may be extended wed. Any demand in re	ed by the Employer, notice of which
DATE	Signature of the Ban	k Manager with seal
WITNESS	(signature, nam	e, and address)
*45 days after the end of the Tender va	alidity period.	



SECTION 11: FORMAT OF BANK GUARANTEE FOR SECURITY DEPOSIT

То:	[name of Employer]				
_	[Address of Employer]				
	[name and address of Contractor] (hereinafter called "the r") has undertaken, in pursuance of Contract NoDated				
furnish y	AND WHEREAS it has been stipulated by you in the said Contract that the Contractor shall ou with a Bank Guarantee by a recognized bank for the sum specified therein as security for see with his obligations in accordance with the Contract;				
A	AND WHEREAS we have agreed to give the Contractor such a Bank Guarantee;				
of the Co Rupees_ pay you, of	NOW THEREFORE we hereby affirm that we are the Guarantor and responsible to you, on behalf intractor, up to a total of Rs[Amount of guarantee][in words], and we undertake to upon your first written demand and without cavil or argument, any sum or sums within the limits[amount of guarantee] as aforesaid without your needing to prove or to show or reasons for your demand for the sum specified therein.				
	We hereby waive the necessity of your demanding the said debt from the Contractor before g us with the demand.				
or of the between	We further agree that no change or addition to or other modification of the terms of the Contract Works to be performed there under or of any of the Contract documents which may be made you and the Contractor shall in any way release us from any liability under this guarantee, and we aive notice of any such change, addition or modification.				
Т	This guarantee shall be valid until 30 days from the date of expiry of the Defects Liability Period.				
	Signature and seal of the guarantor Name of Bank Address Date				