

**REQUEST FOR PROPOSAL (RFP)**  
**FOR**  
**FRONT END COLLECTION AND DISPOSAL OF**  
**MUNICIPAL SOLID WASTE FOR ZONE EAST**  
**(DMC EAST AREA) KARACHI, SINDH,**  
**PAKISTAN**



**Executive Director (Operations - I)**  
**Sindh Solid Waste Management Board**  
**(SSWMB)**  
**Government of Sindh**

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# Section-I

## Preamble

## Disclaimer

Though adequate care has been taken during preparation of this document and information provided therein, however the bidder must satisfy himself for the corrections and sufficiency of the Data. Information on any discrepancy should be intimated to this office immediately. If no information is received from any of the bidders within the time of submission date, it shall be presumed that this document is correct and complete in all respects. Solid Waste Management Board Sindh (SSWMB) reserves the right to modify, amend or supplement this document, if considered necessary in the interest of work.

## Section-I

### 1.1. Purpose of Request for Proposal (RFP)

The Sindh Solid Waste Management Board (The Procuring Agency) will be receiving funds from the Provincial Govt. towards the cost of Front End Collection and Disposal of Municipal Waste for DMC (East) Karachi and it is intended that part of the proceeds of funds will be applied to eligible payments under the contract for the works of Front End Collection and Disposal of Municipal Solid Waste of Zone East (DMC East Area) as described in this proposal/bid documents. Bidding is open to all interested eligible National and International bidders/firms and consortiums (eligible bidders are defined in RFP/Bidding Document)

The purpose of this RFP is to invite all eligible, reputed and experienced waste management firms or individuals whether National or International (a foreign bidder is entitled to bid in accordance with relevant provisions of PEC by-laws) to submit their technical/operational and financial proposal for sweeping, collection/Transportation and disposal of MSW of DMC East Karachi under **Single Stage Two Envelope** procedure, open International competitive bidding method.

### 1.2. Scope of Work / Assignments.

1. Door to door collection of garbage & revamping of bin system.
2. Sweeping of roads, streets, lane, footpath, medians and open spaces and sweeping waste collection and disposal.
3. Washing of important roads as and when required on special occasions.
4. Lifting and transportation MSW from dustbins sites & collection points to designated GTS.
5. Establishment of Scientific Monitoring and Tracking of Entire System i.e. vehicle, sanitary staff, assets etc.
6. Establishment of complaint management system.
7. Community awareness program and its implementation.

### 1.3. Brief Description of DMC East

District Municipal Corporation (East) is one of the Six DMC of Karachi City. DMC East comprises of the following zones:

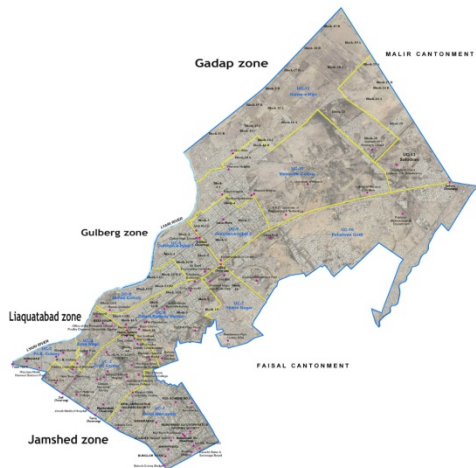
- a) Gulshan Zone.
- b) Jamshed Zone.



Total No of UC	Population forecasted in 2015 at growth of 5% Per annum	Area in Sq KM	MSW Generation Per Day (Ton)	MSW Generation Per Year (Ton)	Existing Solid Waste Collection and Transportation Vehicles	Available Human Resources (Staff)		Details at Annexure
						Office	Field	
26	3154182	119.09	883.17	322357	107	44	2187	1-11

**1.4. Map of DMC East**

**Gulshan zone**



**Jamshed zone**



**1.5. Definition & Interpretation**

- a. "Agreement" means agreement signed between the parties (SSWMB and Successful Bidder).
- b. "Client" means Sindh Solid Waste Management Board. The Procuring Agency.
- c. "Contractor" mean the bidder any entity or person, firms, company, joint venture / consortium that may provide or provides the work and services under the agreement.
- d. "Days" mean calendar days
- e. "Years" mean calendar year
- f. "RFP" means Request for Proposal prepared by the client.
- g. "Proposal" means the technical / operational proposal and financial proposal.

- h. “W&S” means the work and services to be performed by the contractor pursuant to the agreement.
- i. “Terms of Reference (TOR)” means the document in RFP which explains the objective scope of work activities, task to be performed, respective responsibilities of client and contractor and expected results and deliverables of assignments.
- j. “Bidder & Tenderer” mean any person or persons, contractor, firms, consortium of firms, joint venture submitting the bid or tender.
- k. the word “Tender” is synonymous with “bid” and the work tender document with bidding document and proposal document
- l. “contract price” means the sum stated in the letter of Acceptance/Award as payable to contractor for execution, performance and completion of works and services according to the scope of work
- m. “Client representative” means any representative of client appointed from time to time.
- n. “works” means all services to be provided and works to be done by the contractor under the contract.

**1.6. Abbreviations**

- a) MSW = Municipal Solid Waste
- b) UCs = Union Councils
- c) EPA = Environmental Protection Agency
- d) SPPRA = Sindh Public Procurement Regulatory Authority.
- e) SWM = Solid Waste Management
- f) SSWMB = Sindh Solid Waste Management Board
- g) EOBI = Employees Old Age Benefits Institution
- h) \$ = US-Dollars – Currency of United State of America.
- i) PA = Procuring Agency (Sindh Solid Waste Management Board)

**1.7. Sections of RFP/Bidding Documents**

All Sections of RFP, Annexures and Forms are integral part of RFP and considered as tender / bidding documents.

**1.8. Procuring Agency Rights to cancel any or all proposal / tender.**

The SSWMB is not bound to accept any proposal and reserves the right to annual the selection process at any time prior to agreement / award without thereby incurring any liability to the bidder. The applicant will not be entitled to make any claim from Procuring Agency due to cancellation of the tender.

## **Section II**

### **Instructions to Contractor/Bidder**

**Instructions to Contractor/Bidder**

**2.1. Information Related to the Procuring Agency**

Name : Sindh Solid Waste Management Board.  
Address : Bungalow No.D-47, Block-2, Clifton, Karachi, Pakistan.  
Phone No. : +92 21 3537 2982-4 and +92 21 35  
Fax No. : +92 21 35863029  
e-mail : [info@sswmb.gos.pk](mailto:info@sswmb.gos.pk)  
Website : [www.sswmb.gos.pk](http://www.sswmb.gos.pk)

**2.2. Language of Proposal and Correspondence**

All documents / proposals and respective correspondence shall be made / prepared in English Language.

**2.3. Method of Procurement.**

**Single Stage Two Envelope** procedure, open International competitive bidding under SPP Rules 2010 (Amended 2013)

**2.4. Period of Contract.**

Seven (07) Years after issuance of Work Order extendable for further Three (03) Year, based on the performance of contractor with mutual written consent of contractor and the client, on same terms and conditions.

**2.5. Pre-Proposal Meeting/Pre-Bid Meeting**

Pre-proposal meeting will be held on 3<sup>rd</sup> September 2015 at 1500 hours PST at the office of the SSWMB.

**2.6. Clarification, Modification of Bidding Document**

Contractor/bidder may request a clarification of RFP Documents not later than 07 days before the proposal submission date. Any request for clarification must be sent in writing to the Procuring Agency's address. The procuring agency will respond in writing including explanation to the queries to all bidders/contractors. Should the procuring agency deem it necessary to amend the

RFP as a result of a clarification, it shall be done according to the concerned clause mentioned in this section.

## **2.7. Visit of the Area of Service/site visit.**

- a. The bidders are advised to visit the area of service/site of works and its surroundings and obtain all information that may be necessary for preparing their proposal/bid, and to acquaint themselves with the area, the vehicles, offices, workshops and workforce of the existing system of Solid Waste Management of District (East). However the contractor/bidder can do so at his / her own expenses.
- b. The bidders and any of their personnel or agents will be granted permission by the procuring agency to enter upon his premises and lands for the purpose of such inspection, but only upon the express condition that the bidders, their personnel and agents, will release and indemnify the procuring agency, his personnel and agents from and against all liability in respect thereof and will not be responsible for death or personal injury, loss of or damage to property and any other loss, damage, costs and expenses incurred as a result of such inspection.
- c. All the interested firms/bidder are advised to carry out a comprehensive survey of the Zone of the project area and come up with a very practicable strategy and project proposal in order to minimize complications during implementation.

## **2.8. Utilization of Existing Workforce on SWM of DMC East (mandatory)**

- a) It is mandatory upon the contractor/bidder to utilize the transferred staff out of the existing SWM workforce of DMC East under this contract. The proposal must include the utilization plan for existing workforce.
- b) Zone wise details of staff, their grade wise salaries and cadre of service are given in Annexure 1-18. However, it should be clear that around 1000 employees (plus minus 10%) will be transferred on detailment basis to the contractor. The approximate salary paid to them by the DMC (East) would be around Pak Rs. 300 million. The bidder must keep this in mind and give a proportionate discount in the Tipping Fee proposed.

- c) The Contractor/bidder however may be allowed to select the workforce (Field & Office Staff) on the basis of fitness and willingness basis.
- d) The workforce will be provided to the contractor/bidder on detailment basis by the procuring agency for the period of contract.
- e) The contractor/bidder will pay 25% (Twenty Five Percent) detailment allowance on their running basic pay directly to the workforce provided to the contractor on the basis of their performance.
- f) The detailment allowance must be paid to each individual through his or her bank account only and not through open cheque, cross cheque or in the form of cash amount. The details of such allowance so paid must be provided to the procuring agency mentioning the Name, Father's/Husband's Name, Employee No., Amount of allowance and his/her performance at the work.
- g) The Detailment allowance shall be calculated on the basis of Running Basic Salary of the individual worker provided to contractor.
- h) The contractor will provide 48 Nos. of soaps and 24 Nos. of dusters per year to the individual workforce of grade 01 to 07 against an acknowledgement receipt, copy of which is to be provided to the procuring agency.
- i) Casual Leave as admissible under the Sindh Local Council Leave Rules will be granted to the individuals on the request in writing by any individual workforce. Detail of the same shall be provided to the procuring agency in writing.
- j) The contractor/bidder shall pay one honorarium of Rs.1,500/- to the individual of workforce of grade 01 & 02 of service cadre of Sanitary Workers, Muqaddam and Motor Coolie and one honorarium of Rs.2,000/- to the individual workforce of grade 05 to 07 of service cadre i.e. Drivers and Heavy Drivers. The honorarium is to be paid on the occasion of Eid Ul Azha.
- k) A committee will be constituted by SSWMB comprising of the officers of SSWMB and nominated persons of successful bidder for the purpose of redressal of any dispute that arises between contractor/bidder and the workforce.
- l) The cases of Earned Leave or Medical Leave requested by any individual of workforce must be sent immediately to the committee or authorized officer for necessary action. The committee or authorized officer will decide that either

detailment of such individual is cancelled or the leave is granted as per the Sindh Local Council Leave Rules. The decision of the committee shall be final and conclusive.

- m) The Contractor may reject any or some individual workforce if contractor considers that they are unwilling to work with the contractor or if not satisfied with their performance. In case the workforce made available to contractor carries out strikes contrarily to law, the contractor shall immediately inform the procuring agency of this act of misconduct by the workforce. The committee constituted by the SSWMB for the purpose to resolve issues of workforce will take appropriate action in this regard and the decision of the committee shall be conclusive and binding to the workforce and the contractor.
- n) The lien of workforce so provided to the contractor on detailment will however remain with the Parent Department or Procuring agency.
- o) The contractor must account for the costs incurred on the benefits and salaries of the workforce provided to the contractor in their financial proposal/bid cost in the manner described under the contract document or as decided by the Procuring agency before the final agreement.
- p) The contractor shall recruit and provide staff and workers in addition to the workforce of DMC East, to fulfill the requirements to take up the scope of work satisfactorily as mentioned in the contract/RFP Document.
- q) For further details regarding utilization of existing workforce of DMC East reference be made to technical specification of RFP document.

## **2.9. Utilization of Existing Solid Waste Collection and Transportation Vehicles of DMC East (Optional)**

The contractor may take over a portion of the existing fleet of MSW collection and transportation vehicles of DMC East up to 20% of the total fleet required for the work and these vehicles may be provided by the procuring agency on sale basis with following terms:

- i. The Contractor may inspect the existing fleet that DMC can spare and decide to take over.
- ii. A Joint Committee will assess the value of the vehicles and that amount will then be recovered in equal installments during first three years of the contract and adjusted in the monthly bill of the tipping fees.



- iii. In addition to these 20% vehicles from DMC (East), the contractor may acquire 10% of the total vehicles on lease but all vehicles must be revamped and improved in an environment friendly manner by the contractor on his own expense.
- iv. The contractor / bidder will however ensure balance 70% of the fleet of vehicles for new standard solid waste machinery purchased and owned by the contractor in view of the requirement as suggested in this document.

## **2.10. Utilization of Existing Facilities i.e. Workshop, Offices of DMC East**

The contractor may utilize existing offices in the area of respective UCs of the Zone and the central workshop of DMC East. However this facility shall be provided to the contractor on such terms and conditions as defined and mentioned in the contract agreement or mutually agreed.

The contractor will be responsible to keep these offices, workshop hander over to them in neat, clean and well-maintained conditions throughout the contract period.

No major addition, alteration in existing structure shall be allowed. The contractor shall be responsible for the payments of all utility bills in respect of theses offices and workshop(s) on due dates and a copy of the same shall be submitted to procuring agency.

Area, Location of workshop and offices is mentioned in the annexures or may be provided on request.

## **2.11. Amendments through Addendums**

At any time before submission of the proposal, the procuring agency may amend the RFP by issuing an addendum in writing. The addendum shall be sent to all contractor / bidders and will be binding on them. The contractors shall acknowledge receipt of all addendums issued by the procuring agency. To give reasonable time to contractor to take in to account these amendments in their proposal, the SSWMB may, if the amendment is substantial, extend the deadline for submission of proposal. Amendments so made shall form binding on the bidders and will be part of this document.

## **2.12. Cancellation of Tender before Tender Time**

If any material is found in the tender document, which is not possible to be corrected, or in case where procuring agency finds if necessary, the tender may be cancelled before last hours of submission of tender. If tender is cancelled all submitted tender documents shall be deemed to be rejected and returned to the contractors without being opened. The bidder/contractor will not be entitled to make any claim from procuring agency due to cancellation of tender.

## **2.13. Proposal Preparation /Cost of Bidding.**

The bidders shall bear all costs associated with the preparation and submission of their respective proposals/bids, and the procuring agency will in no case be responsible or liable for those costs, regardless of the conduct or outcome of the bidding process.

## **2.14. Bid submitted by a Joint Venture.**

Bids submitted by a joint venture of two (2) or more firms shall comply with the following requirements:

- (a) one of the joint venture partners, lead firm shall be nominated as being in charge; and this authorization shall be evidenced by submitting a power of attorney signed by legally authorized signatories of all the joint venture partners/firms;
- (b) the bid, and in case of a successful bid, the Form of Contract Agreement shall be signed by the authorized partner so as to be legally binding on all partners/firms;
- (c) the firm/partner-in-charge shall always be duly authorized to deal with the procuring agency regarding all matters related with and/or incidental to the execution of works as per the terms and Conditions of Contract and in this regard to incur any and all liabilities, receive instructions, give binding undertakings and receive payments on behalf of the joint venture;
- (d) all partners of the joint venture shall at all times and under all circumstances be liable jointly and severally for the execution of the contract in accordance with the contract terms and a statement to this effect shall be included in the authorization mentioned under Sub-Para (a) above as well as in the Form of Bid and in the Form of Contract Agreement (in case of a successful bid);
- (e) a copy of the agreement entered into by the joint venture

partners shall be submitted with the bid stating the conditions under which it will function, its period of duration, the persons authorized to represent and obligate it and which persons will be directly responsible for due performance of the contract and can give valid receipts on behalf of the joint venture, the proportionate participation of the several firms forming the joint venture, and any other information necessary to permit a full appraisal of its functioning. No amendments / modifications whatsoever in the joint venture agreement shall be agreed to between the joint venture partners without prior written consent of the procuring agency;

- (f) submission of an alternative Letter of Intent to execute a Joint Venture Agreement shall be mandatory.
- (g) Bidders shall also submit proposals of work methods and schedule, in sufficient detail to demonstrate the adequacy of the bidder's proposals to meet the technical specifications and the timely completion as per schedule of each day, each month and every year of the contract till completion of the contract successfully.

## **2.15. Place, Date, Time and Manner of Submission of Tender/Bid Document/RFP**

- i) The bidder/contractors are required to submit their proposal/bid at the office of Sindh Solid Waste Management Board **not later than 1500 Hours PST on 7<sup>th</sup> October 2015** in the office of the SSWMB.
- ii) The Contractors/bidders must submit their proposal/bid under **single stage two envelope procedures** of SPP Rules. Proposal Bid shall comprise a single package containing two separate sealed envelopes. Each Envelope shall contain separately the Technical/operational proposal and the financial proposal.
- iii) Envelopes shall be marked as Technical/Operation proposal and Financial Proposal in bold and eligible letters.
- iv) The package (Outer Envelope) containing the envelopes shall be marked as proposal for Front End Collection and Disposal of Municipal Solid Waste for DMC East Karachi in Bold and legible letters.
- v) The package (outer envelope) shall also be marked the submission address of the Proposal/Bid and Name, Address of Contractor/Bidder.

- vi) The Package (Outer Envelope) shall be sealed, signed and stamped by the contractor or its authorized representative.
- vii) Submitted tender shall not be retrieved or changed for any reason whatsoever.
- viii) Proposal/Bid shall be submitted by hand or may be sent by registered airmail post. Proposals/ bids that are not submitted until due date and time of the submission of proposals/bid will not be considered.
- ix) Where delivery of bid is made by registered mail and the contractor/bidder desired to receive an acknowledgement of receipt of such bid, he shall make a request for such acknowledgement in a separate letter attached to the package (outer envelope) but will not be a part of sealed envelope.
- x) Upon request, representative will provide acknowledgment of receipt of bids to those making delivery in person or.
- xi) Bid submitted through telegraph, telex, fax or e-mail will not be considered.
- xii) Each page of the proposal/bid document must be signed by the contractor/bidder, in case the proposal/bid document is signed by the authorized representative of the contractor then, the authorization shall be in the form of written power of a attorney accompanying the proposal or in any other form demonstrating that the representative has been duly authorized to sign.
- xiii) The procuring agency at his discretion, extend the deadline for submission of bids/proposals by issuing an addendum notified in newspaper. All rights and obligations of procuring agency and the contractor will thereafter be subject to the deadline as extended.
- xiv) The Technical/operational proposal shall not include any financial information. A Technical proposal containing financial information may be declared non responsive.

The technical proposal shall provide the information as indicated in the following Para.

- a) A brief introduction of contractor's organization and an outline of recent experience of contractor (each, partner in case of joint venture) on assignments of similar nature.

- b) A description of the approach and methodology for performing the assignment covering the following subject, technical approach, methodology, organization and staffing.
  - c) The list of the proposed professional, staff team by area of expertise, the position that would be assigned to each staff members and their tasks.
  - d) While preparing the technical proposal, contractor must give particular attention to the following:  
If the contractor considers that it may enhance its expertise for technical operational management and monitoring parts for the assignment to accomplish in a best-suited way and in accordance to the requirement of RFP Document he may associate with other contractors/firms. Any such association must clearly indicate in the technical proposal. In case of joint venture, all partners shall be jointly and severally liable, and shall indicate the lead firm of joint venture.
  - e) Alternative professional staff shall not be proposed and only one Curriculum Vitae (CV) may be submitted for each position.
  - f) Comments and suggestions may be given on the terms of reference including workable suggestions that could improve the quality, effectiveness of assignments and on requirement of the DMC (East) workforce, machinery and facilities including administrative support, office, workshop and rehabilitation of scavengers and any other. However client is not bound to consider the suggestions as whole or partially or otherwise as indicated in RFP Document.
- xv) The financial proposal shall include all cost
- a) Associated with scope and performance of work, management and operational cost, remuneration for staff monitoring system and other incidental charges business taxes, income tax, local & provincial taxes, professional taxes, duties, fees, that may be levied according to the laws and regulation of the land in being prior to the closing date of submission of proposal and taxes and fees on the equipment, and machinery required and on services performed under this contract. Nothing in the contract shall relieve the contractor/bidder from his responsibilities to pay taxes

that may be levied on the profit made to him in respect to contract.

- b) The financial proposal shall contain NO OVERWRITING, CORRECTION and CUTTINGS. The contractor or his authorized representative who signed the proposal must initial such corrections, overwriting and cuttings, if any.
- c) The contractor/bidder is required to quote the cost of every work item and total cost of works correctly in figure and words. The price and cost of works and services under this contract must be expressed in US Dollars (\$).
- d) Bid Security equal to 1% (one percent) of total bid amount in the shape described in clause 2.24 will be attached with financial proposal No Cheque, Demand Draft or Insurance Guarantee shall be accepted as bid security.
- e) All the cost towards salaries, benefit, allowances and honorarium of the work force provided by procuring agency to the contractor on detailment shall be incorporated in the financial proposal.
- f) All cost towards maintenance, repairs, fuel, oil, lubricants, tires, batteries and others which might be incurred on the vehicles of the DMC (East) may be incorporated in the financial proposal.

## **2.16. Currency Unit of Offers and Payments**

The bidder shall quote the bid price for each work, item (Services) and the total bid amount in US Dollar (\$) and the interim/running monthly bill payment will be made to contractor in Pakistani Currency at the conversion/exchange rate declared by the State Bank of Pakistan on the date of submission of interim/running monthly bills.

## **2.17. Conditional and Partial Offers**

Contractor / bidder are hereby cautioned that proposal with conditional offers or deviation from the conditions and instructions contained in RFP Document or other requirement stipulated therein shall result in rejection of proposal /bid as non responsive and shall not be considered. Partial offers are not acceptable under this contract. Acceptance shall only be granted for complete job.

**2.18. Alternative Proposal not Acceptable.  
One Bid per Bidder**

Alternative proposal is not acceptable. Each bidder should submit only one proposal fulfilling all conditions, instructions and requirement contained in RFP. Alternative proposal shall not be entertained.

Each bidder shall submit only one bid either by himself, or as a partner in a joint venture. A bidder who submits or participates in more than one bid will be disqualified.

**2.19. Eligible Bidder.**

This Invitation for Bids is open to all interested bidders who are eligible under provisions of Sindh Public Procurement Rules as mentioned below and the criteria given in the Notice Inviting Tender (NIT) / Bidding Document.

Firms and individuals, national or international, may be allowed to bid for the work. Any conditions for participation shall be limited to those that are essential to ensure the bidder's capability to fulfill the contract in question.

- (a) Bidders may be excluded if;
  - (i) as a matter of law or official regulations, commercial relations are prohibited with the bidder's country by the federal government, or
  - (ii) a firm is blacklisted/ debarred by the procuring agency and the matter has been reported to the Authority, subject to Rule 30 of Sindh Public Procurement Rules 2010.
- (b) Government-owned enterprises or institutions may participate only if they can establish that they are;
  - (i) legally and financially autonomous, and
  - (ii) operate under commercial laws.

Provided that where government-owned universities or research centers in the country are of a unique and exceptional nature, and their participation is critical to project implementation, they may be allowed to participate; and

Bidders shall include national, international companies and Consortiums or Joint Ventures.

- (c) The national Bidders must be:
  - (i) Registered with Pakistan Engineering Council in particular

category and discipline,

- (ii) Registered with relevant tax authorities (income/sales tax, wherever applicable)
- (d) The international bidders can participate and when they are successful, they will be give appropriate time to get themselves registered with PEC and relevant tax authorities in Pakistan before signing of the Agreement.

## **2.20. Disqualification for Participating in Tender**

Contractor or sub contractor cannot participate in tender in any manner directly or indirectly, in their name or in the name of any other person or firm.

- a. Those who are prohibited to participate in tender by any Govt. institution, authority and those who are prohibited by law due to having any criminal record or conviction.
- b. Those who have been declared bankrupt by the authorities or have filed bankruptcy.
- c. Those who have been declared or announced as insolvent by court of law or tribunal or any other authority or institution.
- d. Those who are under liquidation.
- e. Those whose affairs are run by any tribunals.
- f. Those who have suspended their affairs or those who are in similar position as per the law of their country.
- g. Those who have been declared defaulter of social security contribution or premium payments under the law of Pakistan or as per law of their country.
- h. Those who have been declared defaulter of taxation or revenue department for nonpayment of income tax, sales tax, customs duties, or any other tax levied from time to time in Pakistan or as per law of their country.
- i. Those who have been condemned by decision of any court or law or tribunal because of their non-professional or unethical activities or professional malpractices.
- j. Those who have been determined by any institution or organization or authority or agency for adopting or performing non professional attitude or unethical or immoral



activities or professional malpractices and such determination resulted from administering them during their jobs.

- k. Those who do not provide the required information or provided misleading or false representation or deliberately suppressed the information to be provided as required in RFP Document.
- l. Those who have been prohibited from professional activity by the Chamber of Commerce in Pakistan or any other equivalent body established for same purpose in the country where they are registered before the date of submission of the bid.
- m. The contractors/bidders who are blacklisted by Federal Govt., Provincial Govt., Autonomous Bodies and State Bank of Pakistan.

## **2.21. Exclusion Prohibition and Acts forbidden**

The contractor/bidder shall be excluded from participating in tender under following circumstances.

- a. Those who are authorized by procuring agency in any way for preparation of RFP and the committees set out by the procuring agency in this regard.
- b. Those who are authorized by the procuring agency to finalize and to approve the tender process.
- c. The institutions established, with whatsoever reason, in relation with the procuring agency or existing structure of the procuring agency and institution such as foundation, association, union and the companies associated with the procuring agency.
- d. Those firms and companies who are rendering the advisory or consultancy services in preparation of RFP Document.
- e. The following acts and attitude are forbidden in the tender:
  - i. To render the activities of other participants doubtful, to obscure them from participation in the tender or to offer an agreement to the participant or to influence them to act in a manner, which will effect the other participant or tender process
  - ii. The act and attitude towards fraud, threat, influence, bribery or by any other way to win the tender.

- iii. To issue and use false documents regarding Bid Security or Performance Security etc.
- iv. More than one offer in the tender directly or indirectly in the name of themselves or in the name of others, as in person or in mandate.

The Contractor who participate inspite of these disqualification, prohibitions and exclusions shall stand excluded and their bid security shall be forfeited.

## **2.22. Subcontracting and Responsibilities.**

Bidders/contractors may execute subcontracts for services up to 30% (Thirty Percent) of the total services for each / any job of solid waste management collection/transportation, door to door collection, manual and mechanical sweeping and mechanical washing and other services which are covered under this RFP Document, subject to approval of SSWMB. The contractor/bidder is responsible for performance of subcontractors to the procuring agency.

## **2.23. Bid Validity.**

Validity period of proposal / bid is 120 (One Hundred and twenty) calendar days following the last date of submission of RFP/Bid Document. Bidder/Contractor may be requested to extend the validity period in writing, and consent of the bidder shall be obtained. If applicant does not agree in such extension bid security of the applicant will be returned.

## **2.24. Bid Security.**

The proposal must accompanied with a bid security (earnest money) equal to 1% (one percent) of the contract price in the currency in which the bids is priced/quoted in the form of bank draft / pay order or in the shape of bank guarantee from any scheduled bank of Pakistan in favour of SSWMB. The bid security shall remain valid for a period of 28 (twenty eight) days beyond the validity period of the bid.

## **2.25. Responsiveness of Bid to Bidding Document/RFP.**

In preparing their proposals contractors are expected to examine in detail the document comprising the RFP. Material deficiencies in providing the information requested in the RFP document may result in rejection of a proposal as non-responsive.

Prior to detailed evaluation of Bid, the procuring agency will determine the substantial responsiveness of the bid to bidding document. A substantially responsive bid is one, which conforms to all the conditions of bidding document without material deviation.

A material deviation is one

- i) Which effects in any substantial way the scope, quality or performance of works and services.
- ii) Which is inconsistent with bidding document/RFP and limits in any substantial way, procuring agency rights or the obligation of the contractor/bidder under the scope of work or restriction/adoption of such conditions that would effect unfairly the competitive position of the bidder presenting substantially responsive bid.

## **2.26. Examination of Bids and Determination of Responsiveness.**

- a. Prior to the detailed evaluation of bids, the procuring agency will determine whether the bidder fulfills all codal requirements of eligibility criteria given in the tender notice such as registration with tax authorities, registration with PEC, turnover statement, experience statement, and any other condition mentioned in the NIT and bidding document. If the bidder does not fulfill any of these conditions, it shall not be evaluated further.
- b. Once found to be fulfilling the eligibility criteria, as mentioned in sub- clause a. and in clause 2.19, the bids of eligible bidders will be evaluated for technical responsiveness as per specification and criteria given in the bidding documents. Technical and financial evaluations may be carried out in accordance with, single stage-two envelope, bidding procedure.
- c. A bid will be considered technically responsive if it (i) has been properly signed; (ii) is accompanied by the required bid security in the manner described in the bid document; and (iii) conforms to all the terms, conditions and specifications of the bidding documents, without material deviation or reservation. A material deviation or reservation is one (i) which affect in any substantial way the scope, quality or performance of the works; (ii) which limits in any substantial way, inconsistent with the bidding documents, the procuring agency's rights or the bidder's obligations under the contract; or (iii) adoption/rectification whereof would affect unfairly the competitive position of other bidders presenting substantially responsive bids.

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- d. If a bid has major deviations to the commercial requirements and technical specifications will be considered technically non responsive. As a general rule, major deviations are those that if accepted, would not fulfill the purposes for which the bid is requested, or would prevent a fair comparison or affect the ranking of the bids that are compliant with the bidding documents.

**(A). Major (material) Deviations include:-**

- (i) has been not properly signed;
- (ii) is not accompanied by the bid security of required amount and manner;
- (iii) failing to respond to specifications;
- (iv) failing to comply with Mile-stones/Critical dates provided in Bidding Documents;
- (v) sub-contracting contrary to the Conditions of Contract specified in Bidding Documents;
- (vi) refusing to bear important responsibilities and liabilities allocated in the Bidding Documents, such as performance guarantees and insurance coverage;
- (vii) taking exception to critical provisions such as applicable law, taxes and duties and dispute resolution procedures;
- (viii) a material deviation or reservation is one :
  - (a) which affect in any substantial way the scope, quality or performance of the works;
  - (b) adoption/rectification whereof would affect unfairly the competitive position of other bidders presenting substantially responsive bids.

**(B) Minor Deviations**

- (a) Bids that offer deviations acceptable to the Procuring Agency and which can be assigned a monetary value may be considered substantially responsive at least as to the issue of fairness. This value would however be added as an adjustment for evaluation purposes only during the detailed evaluation process.
- (b) If a bid is not substantially responsive, it will be rejected by the procuring agency, and may not subsequently be made responsive by correction or withdrawal of the non-conforming deviation or reservation.

**2.27. Return of Bid Security.**

- a. The bid security of the contractor / bidder who is awarded the work shall be retained and the bid security of other bidders shall be returned (in the shape it is deposited) after award to successful bidder.
- b. Bid security of the successful bidder (to whom the contract is awarded) will be returned upon submission of performance security. (in the shape it is deposited)

**2.28. Forfeiture of Bid Security.**

The bid security may be forfeited

- a. If the contractor/bidders withdraw his bid during the period of bid validity.
- b. If the contractor/bidders does not accept the correction of his bid price.
- c. If the successful bidders fails
  - a. To furnish required performance security
  - b. To sign the agreement

**2.29. Proposal/Offer to be non responsive without bid security.**

Proposal/offers which are not accompanied with required amount of bid security in the shape noted above will be rejected as non responsive.

**2.30. Evaluation Criteria**

Criteria, sub-criteria and point system for evaluation of technical proposal are as under:

<b>1.</b>	<b>Company Profile</b>	<b>Marks</b>
1.1	Number of Similar assignment /work completed by contractor during last five years	5
1.2	Value of Similar Assignment/works	10
1.3	Value and Numbers of appropriate Solid Waste Machinery owned by the company	10
1.4	Organization Structure/Relevant Experience of the firm	5
1.5	Net worth (Financial) of the contractor including bank financing not less than one billion rupees.	10
	<b>Sub Total</b>	<b>40</b>
<b>2</b>	<b>Technical/Operational approach &amp; Methodology.</b>	<b>Marks</b>
2.1	Approach & Methodology for the works & services	10
2.2	Responsiveness to RFP	10

2.3	Goal Oriented Work Plan	15
	<b>Sub Total</b>	<b>35</b>
<b>3</b>	<b>Technical/Operational &amp; Operational Team</b>	<b>Marks</b>
3.1	Education & Qualification	10
3.2	Relevant background	10
3.3	Time expend with the contractor	5
	<b>Sub Total</b>	<b>25</b>
	<b>Grand Total</b>	<b>100</b>
<b>The Minimum Technical Score to qualify is 75 Marks</b>		

### 2.31. Manner Place, Date and Time of Opening of Bid

- a. The proposal/bid will be opened **on 7<sup>th</sup> October 2015 at 1600 hours** PST by the Tender Opening Committee at the office of Sindh Solid Waste Management Board.
- b. Initially, only the envelope marked “Technical/Operational Proposal” shall be opened.
- c. The envelope marked “Financial Proposal” shall be retained in the custody of client without being opened.
- d. The evaluation committee of the procuring agency shall evaluate the technical/operational proposals on the basis of their responsiveness to RFP, applying the evaluation criteria, sub-criteria and point system specified in RFP Document without reference to the price. Any proposal which is found non responsive shall be rejected at this stage and particularly if the proposal fails to achieve the minimum technical score indicated in RFP document. No amendment in technical proposal shall be permitted during technical evaluation.
- e. After the technical evaluation is completed, the procuring agency shall inform the contractor/bidders, the technical scores obtained by their technical proposals and shall notify those contractor/bidder whose proposal did not meet the minimum qualifying marks or work considered non responsive to the RFP and their proposal will be returned unopened after completing the selection process.
- f. The procuring agency shall simultaneously notify in writing to the contractor that have secured the minimum qualifying marks and that the date and time and location for opening of financial proposals.
- g. The financial proposals shall be opened publically in the presence of contractor or their representative who chose to attend.
- h. Rectification of arithmetical errors will be made on the basis that if there is discrepancy found between the unit price and total price, that is obtained by multiplying the unit price and the

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quantity, the unit price shall prevail and the total price shall be corrected accordingly.

- i. If any discrepancy is found between words and figure, the amount in words shall prevail.

## **2.32. Preliminary Examinations and Determination of Responsiveness of Bid prior to detailed evaluation of Bid.**

1. The procuring agency will examine the bid whether:
  - a. The bid is complete and does not deviate from the scope of work for any computational error.
  - b. That required securities are furnished.
  - c. The documents have been properly signed.
  - d. That the bid is valid till the required period.
  - e. That bid does not deviate from basic technical requirement.
  - f. That the bids are generally in order.
2. The Tender Proposal shall be rejected and not considered:
  - a. If each page of the proposal/bid is not signed by the bidder.
  - b. If its validity is less than specified period.
  - c. If it is submitted for incomplete scope of work.
  - d. If it is conditional and contained alternative proposals.
  - e. If it indicates that bid price is not inclusive the amount of all taxes, incidental charges.
  - f. If not accompanied with bid security
  - g. If bidder participated in more than one bid.
  - h. If received after the deadline for submission of bid.
  - i. If submitted through Fax, Telex, Telegram or e-mail.

### **2.33. Clarification of Bid.**

In examination, evaluation and comparison of bids the procuring agency may at his discretion ask the contractor/bidder for clarification of his bid. The request for clarification and response shall be in writing and no change in price or substance of bid shall be sought, offered or permitted. No bidder shall be allowed to alter or modify his bid after the expiry of deadline for the receipt of the bid.

### **2.34. Correction of Errors before Financial Evaluation.**

- I) Bids determined to be substantially responsive will be checked by the procuring agency for any arithmetic errors. Errors will be corrected by the procuring agency as follows:
  - a. where there is a discrepancy between the amounts in figures and in words, the amount in words will govern; and
  - b. where there is a discrepancy between the unit rate and the line item total resulting from multiplying the unit rate by the quantity, the unit rate as quoted will govern, unless in the opinion of the procuring agency there is an obviously gross misplacement of the decimal point in the unit rate, in which case the line item total as quoted will govern and the unit rate will be corrected.
- II) The amount stated in the Form of Bid will be adjusted by the procuring agency in accordance with the above procedure for the correction of errors and with the concurrence of the bidders. The amount thus corrected shall be considered as binding upon the bidder. If the bidder does not accept the corrected bid price, his bid will be rejected, and the bid security shall be forfeited in accordance with clause 2.28 hereof.

### **2.35. Financial Evaluation and comparison of Bids**

- i. The procuring agency will evaluate and compare only the Bids determined to be substantially responsive in accordance with clause 2.26.
- ii. In evaluating the Bids, the procuring agency will determine for each bid the evaluated bid price by adjusting the bid price as follows:
  - (a) making any correction for errors pursuant to clause 2.34;
  - (b) making an appropriate adjustment for any other acceptable variation or deviation.
- iii. The estimated effect of the price adjustment provisions of the

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conditions of contract, applied over the period of execution of the contract, shall not be taken into account in bid evaluation.

- iv. If the bid of the successful bidder is seriously unbalanced in relation to the procuring agency's estimate of the cost of work to be performed under the contract, the procuring agency may require the bidder to produce detailed price analysis for any or all items of the Bill of Quantities to demonstrate the internal consistency of those prices with the methods of performing the work and schedule proposed. After evaluation of the price analysis, the procuring agency may require that the amount of the Performance Security set forth in clause 2.36 be increased at the expense of the successful bidder to a level sufficient to protect the procuring agency against financial loss in the event of default of the successful bidder under the contract

## **2.36. Performance Security**

- a. The successful bidder shall furnish to the procuring agency a Performance Security in the form of pay order or bank guarantee from any scheduled bank of Pakistan, and the amount stipulated in the bidding data and the Conditions of Contract within a period of 28 days after the receipt of Letter of Acceptance, but 07 days prior to expiry date of bid security.
- b. Failure of the successful bidder to comply with the requirements of Sub-clause a. or clauses 2.37 or 2.40 shall constitute sufficient grounds for the annulment of the award and forfeiture of the bid security.
- c. Validity of performance security shall extend at least seven months beyond the date of completion of contract, or as mentioned in the bidding data to cover defects liability period or maintenance period subject to final acceptance by the procuring agency.

## **2.37. Signing of Contract Agreement.**

- 1) Within 14 days from the date of furnishing of acceptable Performance Security under the Conditions of Contract, the procuring agency will send the successful bidder the Contract Agreement.
- 2) The formal Agreement between the procuring agency and the successful bidder shall be executed within 14 days of the receipt of the Contract Agreement by the successful bidder from the procuring agency.
- 3) A procurement contract shall come into force on the date on which the signatures of both the procuring agency and the successful bidder are affixed to the written contract.

**2.38. Stamp Duty**

The formal Agreement between the client (Procuring Agency) and the successful bidder shall be duly stamped at rate of 0.3% of sanctioned price and as stated in Letter of Acceptance. Stamp duty will be paid by the successful bidder.

**2.39. General Performance of the bidders**

Procuring agency may in case of consistent poor performance of the contractor and his failure to remedy the underperforming contract may take such action as may be deemed appropriate under the circumstances of the case including the rescinding the contract and/or black listing of such contractor and debarring him from participation in future bidding process.

**2.40. Integrity Pact**

The bidder shall sign and stamp the Integrity Pact provided at Annexure-10 to the bidding documents. Failure to provide such Integrity Pact shall make the bid non-responsive.

**2.41. Defect Liability Period**

Defect liability period shall be 06 (six) months after the date of completion and expiry of the contract agreement.

**2.42. Return of Performance Security**

The performance security of the contractor shall be returned after 06 (six) months (defect liability period) of completion and expiry of the contract period, upon determination that the obligation under the contract have been duly fulfilled in accordance with the provisions of contract document and agreement and the contractor has no liability to the procuring agency due to this contract. In case the liabilities of the contractor to the procuring agency and other tax amount due to the contract, then such amount shall be recovered from the amount of performance security and balance amount of the performance security shall be returned to the contractor.

**2.43. Retention Money.**

Retention money shall be deducted from contractor's running performance bill at the rate of 2% (Two Percent) of monthly bill amount. The retention money shall be released in the currency in which it is deducted (Pak Rupees) after every fifteenth running bill payments of the contractor for the works successfully executed for

last twelve month. The amount due to the contractor in respect of retention money shall be released after deduction of such amount as are required to be recovered on account of default of contractor in performing his functions under this contract.

**2.44. Format Contract Agreement**

Format of Contract Agreement at annexure 11.

**2.45. Form of Bank Guarantee for Performance Security**

Format of bank guarantee for performance security is attached at annexure 9.

**2.46. Inspection of Work & Services performed by the contractor**

Representative of procuring agency shall inspect the work and services performed by the contractor under the contract and any deficiencies of work and services shall be notified in writing giving warning letter to the contractor. If the contractor does not recover/remove the deficiencies indicated a penalty as per penalty clauses shall be imposed.

**2.47. Letter of Acceptance.**

After announcement of tender decision, letter of acceptance will be sent to successful bidder/contractor, inviting for signing of agreement the contract agreement shall be signed within 14 (fourteen) days following the date of letter of acceptance.

**2.48. Arbitration**

Any dispute that is not amicably resolved shall be finally settled, unless otherwise specified in the Contract, under the Arbitration Act 1940 updated from time to time and would be held anywhere in the Province of Sindh at the discretion of procuring agency.

**2.49. Information Related to Contractor / Bidder**

- a. Contractor/Bidder Full Name \_\_\_\_\_
- b. Address \_\_\_\_\_
- c. Telephone No. \_\_\_\_\_
- d. Fax No. \_\_\_\_\_
- e. E-mail Address. \_\_\_\_\_

**2.50. Bidding Data****Bidding Data**

<b>Srl#</b>	<b>Data</b>	
1	Name of Work	<b>Front End Collection and Disposal of Municipal Solid Waste for Zone East (DMC East Area) Karachi, Sindh, Pakistan.</b>
2	The Name of Procuring Agency's Official	Executive Director (Operations-I), Sindh Solid Waste Management Board
	Address	Bungalow No. D-47 Block-2, Clifton, Karachi, Pakistan.
	Telephone#	+92 21 35372982-4
	E-mail	<a href="mailto:info@sswmb.gos.pk">info@sswmb.gos.pk</a>
	Facsimile	+92 21 35863029
	Website	<a href="http://www.sswmb.gos.pk">www.sswmb.gos.pk</a>
3	Procedure of open competitive bidding (International Competitive Bidding – ICB)	<p>Single Stage – Two Envelope Procedure</p> <p>a. Proposal shall comprise a single package containing two separate sealed envelopes. Each envelop shall contain, separately the Technical/Operational Proposal &amp; Financial Proposal.</p> <p>b. The package (outer Envelope) shall be clearly marked the name of the Proposal, date and time of submission and the address and place of the submission and name and address of the contractor/bidder</p> <p>c. The package (outer envelope) containing the two envelopes must be sealed, signed and stamped by the contractor or its authorized representative.</p>
4	Proposal shall be submitted by hand or may be sent by registered airmail. Proposal submitted through telegraph, telex, fax or e-mail will not be considered.	
5	Financial Proposal to be submitted with Technical Proposals.	
6	Pre-proposal / Pre bid meeting will be held at the office of SSWMB-Bungalow No, D-47, Block-2 Clifton, Karachi, Pakistan <b>on 1<sup>st</sup> September 2015 at 1500 hours PST.</b>	
7	The proposal/bid submission address is at the office of SSWMB Bungalow No.D-47 Block-2 Clifton, Karachi, Pakistan.	
	Proposal must be submitted no later than the following date & time. <b>7<sup>th</sup> October 2015 at 1500 hours PST</b>	
8	Proposal must remain valid for 120 (One Hundred and Twenty) days after the proposal/bid submission deadline	
9	<p><b>Bid Security</b></p> <p>Bid security equal to 1% of total Bid amount will be attached with financial proposal in the form of Pay order, Demand Draft or Bank Guarantee in favour of Sindh Solid Waste Management Board. The bid security shall remain valid for a period of 28 days beyond validity period of the bid. Bid security shall be submitted in the same currency as that in which the bid is priced/quoted.</p>	

Sindh Solid Waste Management Board (NIT-15)

10	Clarification may be requested not later than 7 (Seven) days before the submission date. The address for requesting clarification is Executive Director (Operations-I) Sindh Solid Waste Management Board Karachi, Bungalow No. D-47 Block-2 Clifton, Karachi - Pakistan e-mail <a href="mailto:info@sswmb.gos.pk">info@sswmb.gos.pk</a> , Facsimile +92 21 35863029
11	The proposal as well as all related correspondence exchange by the Contractor/Bidder and procuring agency shall be written in English however it is desirable that the firm's personnel have a working knowledge of the national and regional languages of Islamic Republic of Pakistan.
12	Alternative proposals are not acceptable; each bidder should submit only one proposal fulfilling all conditions, instructions and requirement contained in RFP. Alternative proposal shall not be entertained.
13	The Contractor/Bidder should quote the cost for each item of works under this contract and total bid price in US Dollars and interim payment/running bill payments shall be made in Pak Rupees (conversion/exchange rate declared by the State Bank of Pakistan shall be applicable of the date of submission of interim bill/monthly running bill for payment.
14	The Contractor/Bidder should quote the cost for each item of works inclusive of all National, Provincial, Local taxes, duties, expenses, contingencies and incidental charges.
15	Contractor/ Bidder must submit the original Technical/Operational Proposal, and the original of the Financial Proposal.
16	Successful Contractor/Bidder is required to submit performance security at 1% (one percent) of the contract amount in form of pay order or bank guarantee in favour of Sindh Solid Waste Management Board, in the currency in which the bid is priced/quoted.
17	Contractor/bidder shall undertake to sign Integrity Pact as per Format provided by SSWMB under this contract.

## **Section III**

### **Description of Zone East (DMC East Area)**

**Description of Zone East (DMC East Area)****3.1. Gulshan Zone- Brief Description**

Gulshan Zone is of relatively large area of about 92.4 KM<sup>2</sup>. The population estimate as per population statistics of 1998 is 646662 persons and in view of growth rate of 5% per annum the population of this zone in the year 2015 is about 1481938.

The population density of the East West part (UC-01 to UC-09) is relatively high, which is about 29502 person per KM<sup>2</sup> while population density of North East part (UC-10 to UC-13) is relatively low, which is about 8144 persons per KM<sup>2</sup>. Gulshan-e-Iqbal Zone is far away from the existing two landfill sites (Gond Pass and Jam Chakro landfill sites) while linear distance between geometrical centre of the zone and each landfill site is about 15 KM. So MSW of Gulshan-e-Iqbal Zone should be transported to landfill site through GTS.

UC 01, 06, 07, 10, 11, 12 and 13 are of relatively large area and low MSW density which are 2.87 t/KM<sup>2</sup>, the other UCs are of relatively higher MSW density of about 9.47 t/KM<sup>2</sup> while the service radius of MSW collection point is 70 meter.

This zone comprises of 13 Union Council. Details of Municipal Solid Waste Generation in each UC and its population and other detail are given in Annexure-“1-11”

**3.2. Demographics.**

Gulshan Zone is well demarcated area, mostly developed with established infrastructure. The icons of the area are Aga Khan Hospital, National Stadium, Liaquat National Hospital, PTV Station, Federal Urdu University, Karachi University, NED and Sir Syed Engineering Universities, Metrological Department, DOW University, SUPARCO, EXPO Centre, Civic Centre, Safari Park and etc. The zone comprises of following UCs:

<b>UC No.</b>	<b>UC Name</b>	<b>UC No.</b>	<b>UC Name</b>
1	Dehli Mercantile	8	Jamali Colony
2	Civic Centre	9	Gulshan-e-Iqbal II
3	PIB Colony	10	Pehalwan Goth
4	Essa Nagri	11	Metroville
5	Gulshan-e-Iqbal I	12	Gulzar-e-Hijri
6	Gilani Railway Station	13	Saphoran
7	Shanti Nagar		

Union Council 01, 02 , 05, 08 and 09 belongs to middle to high income groups. UC-01 & UC-02 comprises of commercial

areas and housing units ranging from 200 Sq Yard to 1000 Sq Yard and high-rise apartment blocks. Union Council No. 05, 08 and 09 comprises of category of bungalows ranging from 240, 400, 600 and 1000 Sq Yard. There are katchi abadies i.e. Sherpao Basti and Abdullah Darwesh Colony in UC-01, Ghosia Colony UC-02, Pak Muslim Colony, Pankha colony UC-05, Rehmatia Colony, Madina Colony, Zia ul Haq Colony and Maroriya Goth in UC-08.

Union Council No. 03, 10 and 11 belongs to middle to low income group comprising of commercial areas and housing units ranging from 80 to 120 Sq Yard. There are katchi abadies i.e. Iqbal Colony in UC-3, Pehlwan Goth, Hasan Hazara Goth, Juma Goth, Gilgiti Colony and Chaman Iqbal Colony in UC-10, Rajput Colony, Leemo Goth, Quaid-e-Azam Colony, Azeem Goth in UC-11. The area is almost developed as for infrastructure is concerned.

Union Council No. 04, 07, 12 and 13 belongs to low income group comprises of residential areas and Goth Abad Scheme, there are katchi abadies i.e. Essa Nagri, Mannu Goth, Furqan Abad, Gohar Abad, Peer Bukhar Colony, Liaquat Basti, Kernal Colony in UC-4. Shanti Nagar Sindhi Para, Dalmia, Majeed Para, Mujahid Colony, Mochi Para in UC-07. Sikandar Goth, Bakhar Goth, Muhammad Khan Goth, Ayub Goth, Gabol Goth, Ali Town, Sir Shah Nawaz Goth in UC-12. Saphoran Goth, Bhattai Abad, Bakhtawar Goth, Dhani Bux Goth, Rashdi Goth, Bilawal Shah Noorani Goth, Seeta Nagar in UC-13. The area comprising of housing units ranging from 60, 80 to 120 Sq Yard. The area is partially developed as for infrastructure is concerned.

The detail of housing units and MSW generation in each UC of the zone is given in annexure 1 & 2.

The Areas / localities in UC's in Gulshan Zone

UC#	Name of UC	Area falling under UCs.
1	Dehli Mercantile	Shabirabad, Muhammad Ali Society, Al-Hamra Society, Block-7/8 KDA Scheme-01, Kokan Society, Banglore Town, Adam Jee Nagar, Faran Society, Katchi Memon Society, Ameer Khusro Road, DMCHS Society, Tipu Sultan Road, Haide Ali Road Dhoraji Society, Dhoraji Colony.
2	Civic Centre	Sharfa Abad, Bahadur Abad, Maqbllo Abad, TV Station, Seelani Chowk, Dawood Colony, Chandni Chowk, Ghosia Colony, Jail Qaurter, Gulshan-e-Iqbal Scheme-14, Dhoraji Colony, Al-Hilal Society, Katchi Memon Society.
3	PIB Colony	PIB Colony, Ameen Abad, Nafees Abad, Iqbal Abad.

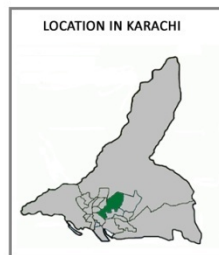
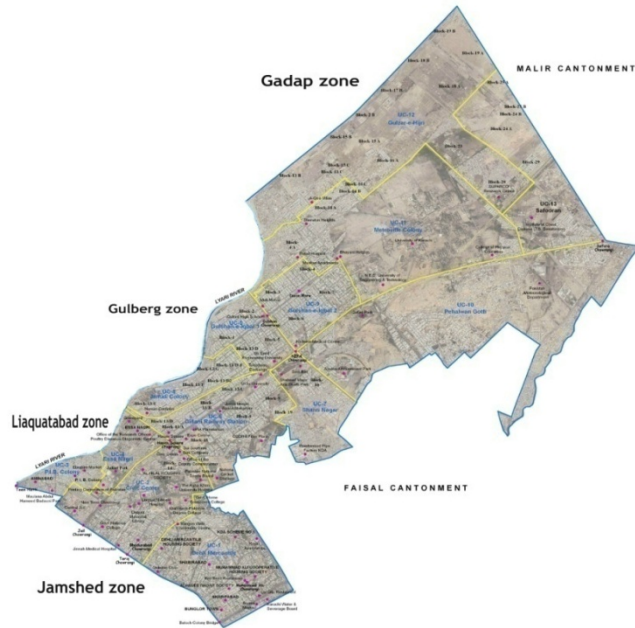


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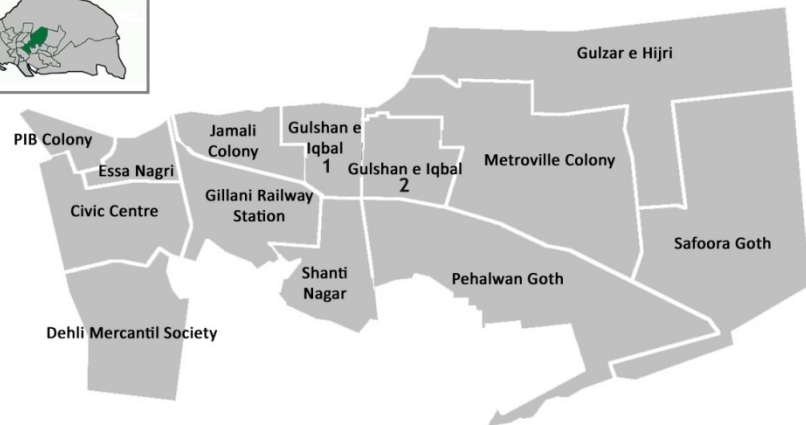
4	Essa Nagri	Essa Nagri, Gulshan-e-Iqbal Block-12, Furqan Abad, Gohar Abad, Pir Bukhari Colony, Manoo Goth, Liaquat Basti, Carnal Colony, Faizan-e-Madina, Nashter Basti, Old Sabzi Mandi, Askari Park Road, Press Quarter, Karachi Flats.
5	Gulshan-e-Iqbal I	Gulshan-e-Iqbal Block-1, 2, 5, 13, 13-D
6	Gilani Railway Station	Gulshan-e-Iqbal Block-8, 9, 13-A, 13-C, 13-D
7	Shanti Nagar	Shanti Nagar, Sindhi Para, Dalmia, Majeed Para. Gulshan-e-Iqbal Block-10, 10A, Mujahid Colony, Mochi Para.
8	Jamali Colony	Gulshan-e-Iqbal Block-13D/1, 13D/2, 13D/3, 13G, 13/E, Zia ul Haq Colony, Madina Colony, railway Society, Rehmatia Colony.
9	Gulshan-e-Iqbal II	Gulshan-e-Iqbal Block-3, 4, 6, 7 New Dhoraji Colony.
10	Pehalwan Goth	Pehlwan Goth, Jumma Goth, Gilgiti Colony, Hassan Hazara Goth Gulistan-e-Johar Block-1, 1A, 2, 3, 3A, 4, 5, 6, 7, 8, 9, 10, 14, 15, 16, Gulshan-e-Iqbal Block-11
11	Metroville	Gulshan-e-Iqbal Block-4 (A.D.E), 4A, Metrovil-III & II, Railway Society, Rajput Colony, Quaid-e-Azam Colony, Azeem Goth, Sahafi Colony, Lemo Goth, Moti Mehal, Bakhsh Ali Goth, Sui Gas Compund, Commissioner Society.
12	Gulzar-e-Hijri	Gulzar-e-Hijri Scheme-33, Sachal Goth, Sikandar Goth, Bhakar Goth, Muhammad Khan Goth, OKHAI Complex, Abbas Town, Gabol Goth, Ayub Goth, Sir Shah Nawaz Goth, Ali Town, Sachal Goth.
13	Saphoran	Saphoran Goth, Bhattai Abad, Bukhtawar Goth, Dhanni Bux Goth, Rashidi Goth, Seeta Nagar, Johar Complex, Bilawal Shah Noorani Goth, Rizvia Society, Gulistan-e-Johar Block-8, 9, Zuhra Nagar, Haroon Bungalows Phase-I, II, Millenium Phase-I, II, Arif Arcade, Sunlay Banglore, Haris Banglore, Sumaira Banglore, Rizwan Society, Billi's Arcade, Homes, T.B. Sanatorium, Pioneer Park City.

### 3.3. Map of Gulshan Zone.

## Gulshan zone



## Gulshan-e-iqbal zone 13 Union councils



### **3.4. Jamshed Zone Brief Description**

The Jamshed zone is situated in the East of Karachi city and has a typical high population density. The population estimated as of 1998 statics is 7301509 persons and in view of growth rate of 5% per annum the population of this zone in the year 2015 is about 1672244.

The average population density of the zone is about 62654 persons per KM<sup>2</sup>. The population density of UC-01 to 07 is relatively low 43107 Person KM<sup>2</sup> but MSW Generation density is also low 12.07 t/KM<sup>2</sup> comparing the population density and MSW Density of UC-08 to UC-13 which is relatively high i.e. 132441 Person per KM<sup>2</sup> and 37.08 t/KM<sup>2</sup> respectively.

Jamshed Zone is far away from the existing two landfill sites (Gond Pass and Jam Chakro Landfill). While the linear distance between the geometrical centers of the zone and each landfill site is about 17 KM, so that MSW of Jamshed Zone should be inter transported through GTS. While the service radius of MSW collection points is 150 Meter.

This zone comprises of 13 Union Council. Details of Municipal Solid Waste Generation in each UC and its population and other detail are given in Annexure-“1-11”

### **3.5. Demographics of Jamshed Zone**

Jamshed Zone is well planned, well developed area mostly developed with established infrastructure except some locality in Union Councils as katchi abadies. The icons of the area are Mazar-e-Quaid Azam, Nishter Park, Iqra University, St. Pitter Church, Adamji College, Agha Khan Jamat Khana, Imam Bargah Shah-e-Khurasan, Jamia Masjid, Banoria Town, Dawood Engineer University, Islamia College, PECHS Girls College, KMC Sports Complex, St. Lawrence Church etc.. The Zone comprises of the following UCs.

<b>UC No.</b>	<b>UC Name</b>	<b>UC No.</b>	<b>UC Name</b>
1	Akhtar Colony	8	Jat Land Line
2	Manzoor Colony	9	Central Jacob Line
3	Azam Basti	10	Jamshed Quarters
4	Chanessar Goth	11	Garden East
5	Mehmoodabad	12	Soldier Bazar
6	PECHS-I	13	Pakistan Quarter
7	PECHS-II		

The Union Council 01, 02, 03, and 04 belongs to middle to low income group comprises of housing units of 100 to 125 Sq

Yard, there are katchi abadies i.e. Kashmir colony, Jonejo Town, in UC-1, Rehman Colony, and Hill area in UC-2, Azam Basti UC-3, Chanessar Goth in UC-4. The housing units in katchi abadies ranging from 60 to 80 Sq yards.

The Union Council 5, 6, 7, 10, 11, 12 and 13 belongs to middle to high income group, comprising of housing units ranging from 200 to 400 and 1000 Sq Yards. There are katchi abadies i.e. Liaquat Ashraf colony, Baloch Para, Mehmoodabad No.4, 5, 6 in UC-5, Allah Wali Colony in UC-6, New Sindhi Muslim Colony, Ummar Colony in UC-7, Maqdoom Colony, Ganj Shakar Colony, Usman Mohajir Colony in UC-10, Baloch Para, Zia Colony in UC-11, Gul-e-Rana Colony, Katchi Para, Punjab Colony, Iqbal Market in UC-12, Tahro Lane and Ghosia Colony UC-13. The housing units ranging from 60 to 80 Sq Yards, these katchi abadies are congested unplanned areas of the UCs, these area are partially developed as for infrastructure concerned.

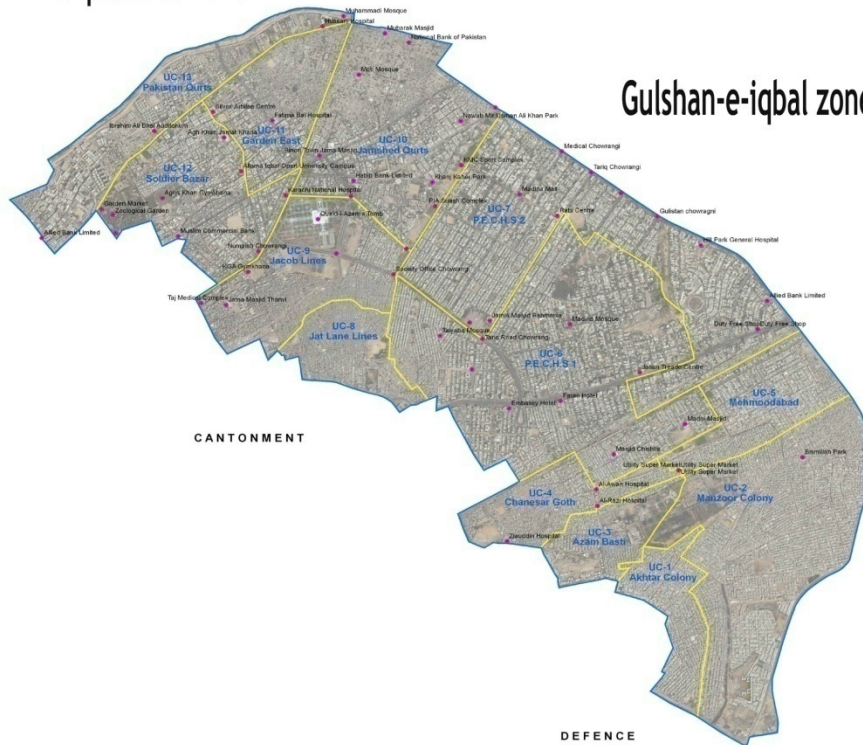
The details of housing units and MSW generation in each UCs of the Zone is given in Annexure-1-11.

### 3.6. Map of Jamshed Zone

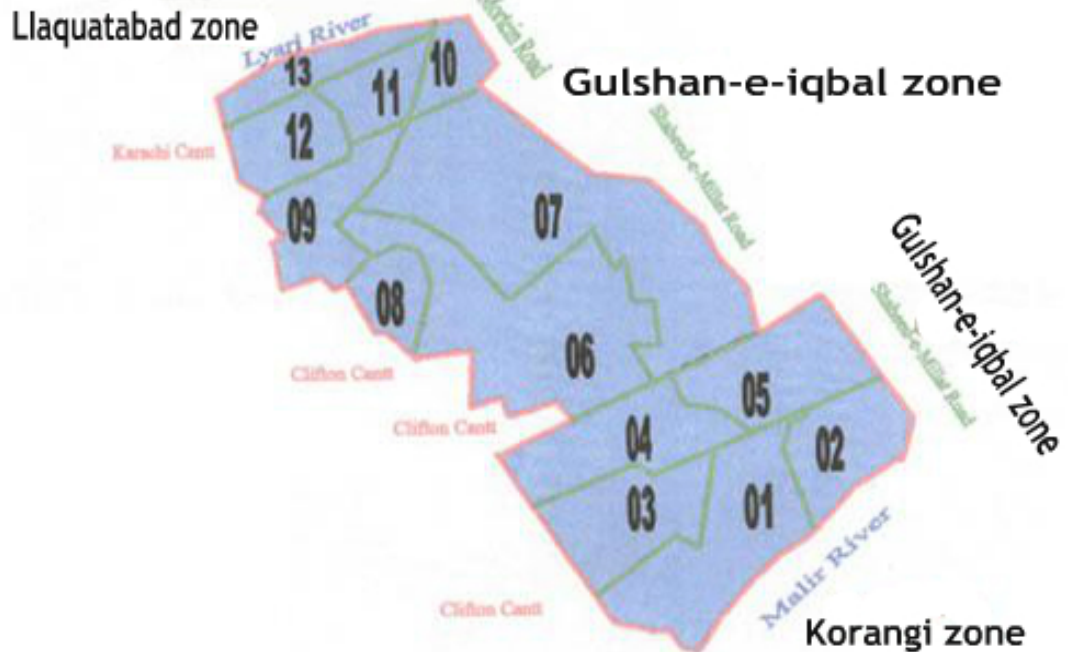
# Jamshed zone

Laiquatabad zone

Gulshan-e-iqbal zone



# Jamshed zone



### 3.7. Existing Solid Waste Management System in DMC East

#### i. Door to Door Collection.

At present collection of municipal solid waste at doorstep does not exist in DMC East.

Residents of DMC East throw their household waste to nearby katchra kundi (dustbin) during any time of the day. The shopkeepers of commercial areas and attendants of shopping malls, and residents of DMC East usually throw garbage at the corner of each street, and in front of shops etc. No any strategy or collection plan for doorstep collection does exists in DMC East in general.

#### ii. Street Sweeping.

Main roads, and lanes in DMC East are cleaned manually using brooms and brushes and the sweeping stuff is kept in the form of numbers of small heaps, besides kerbs and on road sides, which are then lifted with help of Belcha and transported to nearest dustbin site/collection point using wheelbarrow/handcarts. Sweeping stuff is normally thrown into the dustbin. Sweeping is done normally in two shifts i.e. 6:00 AM to 10 AM and then 2:00PM to 5:00PM. Mechanical sweeping is not done in DMC East except on some occasion on the main road when such machines are provided by KMC.

iii. Washing of Main and Important Roads.

Currently no such practice is being carried out.

iv. Transportation of MSW from Dustbin/Collection points to GTS or nearest Landfill Sites.

Garbage vehicles i.e. Arm Roll, Compactor, Dump Trucks, Tractor Trolley designated to each UC of the Zone collects and transport waste from collection points/dustbins to GTS of the Zone. In some cases MSW is transported to nearest land fill sites. Each vehicle is supposed to make 3 to 4 trips a day to clear garbage from dustbins/collection points. Though complete lifting of garbage from the zones could not be made due to availability of required numbers of vehicles. Usually containers of 4 to 7 Ton capacity are placed at collection points/dustbins. However in some areas of DMC East garbage is dumped, at open places, such garbage is lifted using loaders and bobcat type of machinery and labours using baskets to pick and to load into refuse vans or compactor which is then transported to GTS of Zones. The machinery for lifting and transportation of MSW available with DMC East is very old and not compatible with the machines normally required for MSW lifting and transportation.

v. Location of GTS of the Zones of DMC East.

GTS for the Gulshan Zone is located near the boundary of Lyari Expressway on the bank of Lyari River near Hasan Square. Whereas in other zone GTS exist within and at the periphery of Malir River near Expressway. The service area of the GTS is the whole area of the each zone with MSW handling capacity of each zone is mentioned in respective annexures.

**3.8. Existing System of Offal Collection & Disposal in DMC (East)**

On the eve of Holy festival of Eid Ul Azah every year, thousands of animals, i.e. goat, lamb, sheep, cow, bulls and camels are offered as a sacrifice. These sacrifices is done (as custom) on the door step or within the premises jointly or individually on the roads sides open ground and the offal and other residuals like bone skin parts offals and other intestinal organs etc. are thrown at the door step, road side in the bushes, open ground and collection points, dustbins sites etc. creating an unclean environment with a pungent odor of blood which is seen almost in each area on this event.

This situation is dealt with MSW Management of each zone efficiently and affectively. Initiating a specific campaign under an offal collection plan. A day before the

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event clearing the garbage from dustbins sites is done. The special offal collection campaign usually started just after Eid Ul Azha prayer. The offals and other residual animal waste are then collected through machinery within the zones including hired rental vehicles and disposed of in the pits already excavated at designated places where the offal are buried in a manner that create no hazard to the surrounding. Sprinkling the lime powder and other insecticidal / perfume spray is also done to create pleasant atmosphere.

The campaign is managed in such a manner that area is made clean and clear by the evening of each day event which continuous for three continuous day. An estimated numbers of offals that is collected and buried in DMC East are about 150,000 numbers.

### **3.9. Problem & Short Coming in Existing System**

- Waste has never been assigned priority by the Government.
- Non existence of Door to Door Collection System.
- Poor attendance of Sanitary Workers / Officials affecting street sweeping and waste disposal.
- Ineffective system of monitoring / reporting causing indiscriminate dumping of waste on open spaces and road sides, also causing delay in complaint redressal system.
- Deficient number of concrete dustbins (katchra kundi) / containers in the most of the areas, resulting in open and scattered dumping of garbage.
- Irregular collection of garbage from community bins/collection points due to:
  - Poor Supervision.
  - Too many dustbins sites.
  - Defective, un-appropriate and old garbage vehicles.
  - POL problems.
  - Political/labour Union intervention.
  - No fix timing of garbage vehicles to collect garbage from dustbin sites and transportation to landfill site.
  - Open transportation of garbage causing environmental pollution.
  - Encroachments especially in market / commercial area causing difficulties in sweeping, collection and transportation to GTS /Land Fill Site. Hence the required number of trips is not achieved.

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- No proper GTS facility
- Scavenging specially on open spaces and road side dustbins causing scattering of garbage.
- Existing rules with regards to SWM need to be reviewed, strengthened and enforced.
- Lack of public awareness / civic sense regarding SWM collection and disposal.
- Lack of scientific approach for integrated SWM.



## **Section IV**

### **Proposed Plan for DMC (East)**

**Proposed Plan for Zone East (DMC East Area)**

**4.1 Front End Collection Plan (Proposed Plan)**

Front End Action Plan. It Includes followings scope of Work and services

1. Door to door collection and revamping of bin system.
2. Sweeping of roads, streets, lane, footpath, medians and open spaces and sweeping waste collection and disposal.
3. Washing of important roads as and when required including on special occasions.
4. Lifting and transportation MSW from dustbins sites & collection points to designated GTS.
5. Scientific monitoring and tracking system for entire management and operation plan.
6. Community awareness program and its implementation.

**4.2 Door to door collection mechanism**

Door to door collection for Front End Collection Plan/mechanism is categorized as:

**(a) Block Collection.**

Wherein waste collecting vehicles with one or two waste collecting workers move around the residential blocks on a specified time each day and sounds horns or ring bell and wait at intermediate location for residents to bring waste in polythene bags to the collection vehicles or where the workers with the collecting vehicles collect garbage in a basket at the door step of the residents and throw in the collecting vehicles, which is then disposed of to nearest dustbin site.

**(b) Door Step Collection.**

Wherein waste is left outside the property by the residents in plastic/polythene bags and picked up by waste collecting vehicles moving in and around the residential area at specific time each day or collected at door step by the sweepers every day, equipped with wheel barrow, handcart and disposed of to nearest dustbins sites.

**(c) Shared containers type collection.**

Wherein a container of suitable capacity is placed at an appropriate place within a residential block, apartment

building market and shopping area and residents and other generators, put their waste stuff inside the container. These containers may be of hook and lifting type or may be bucket type with proper tipping arrangements, which are then emptied at by compaction container type compactor vehicles and then again placed at the location. However this operation is done as many times as required to keep the container free of garbage. The location where such containers are placed are kept cleaned and spilled out garbage is swept from the surrounding.

Anyone or all defined categories will be adopted under the front end collection plan for door to door collection keeping in view the demographics of the area, however for the purpose of guidance, sweeping methodology in various UCs of the Zones of DMC East is mentioned hereunder.

Plastic bag will be provided free of cost by contractor/operator to all residential units for the first two months only. The size and grade of polythene bag is given in the technical specification.

**Note.**

Where block collection and door step collection is adopted, and where possible in case of shared container type collection, organic and inorganic Municipal Solid Waste are to be collected separately and transported to GTS in a manner that these two types of MSW be disposed of at GTS separately as directed by SSWMB officials and this practice is to be adopted in each zone. Organic and inorganic MSW is to be collected in different colored bags and litterbin and containers as the case may be.

## Strategy for door-to-door collection in various zones of DMC East

### Gulshan Zone

Name of UC	Door to door collection Strategy	Suggested Tools and Machinery for door to door collection type.
UC#3 PIB Colony  UC#4 Eassa Nagri  UC#6 Gillani Railway Station  UC# 7 Shanti Nagar  UC#8 Jamali Colony  UC# 9 Pehlwan Goth  UC#11 Metrovil  UC#12 Gulzar-e-Hijri  UC#13 Saphoran  <ul style="list-style-type: none"> <li>• Low to Middle Income Group</li> <li>• Congested areas</li> </ul>	<p><b>Shared Containers Type Collection</b></p> <ul style="list-style-type: none"> <li>• Steel Containers of appropriate size &amp; capacity must be placed at appropriate distance. When filled up must be lifted and disposed of into a compactor vehicle and the empty container must be placed back on the location. The operation of clearing the container be done at least twice a day or as many time as required to keep the container free of garbage</li> <li>• Block Collection Strategy: Block collection may also be adopted in some area which are congested and thickly populated using small vehicles moving around the area on fixed timings along with one or two waste collecting workers.</li> </ul>	<p>Details of buckets and bins, bin sizes, frequency of placement, tools to be utilized and polythene bags are given in technical specification.</p> <p>Details of Type of garbage collecting and transporting vehicles, bin mechanism are given in technical specification.</p> <p>Small Compactor vehicles type or small Suzuki / pick up type vehicles may be used.</p>
UC#1 Dehli Mercantile  UC#2 Civic Centre  UC#5 Gulshan-e-Iqbal-I	<ul style="list-style-type: none"> <li>• <b>Block Collection Strategy:</b> Block collection may also be adopted in some area which are congested and thickly populated using small vehicles moving around the area on fixed timings along with one or two waste collecting workers.</li> </ul>	<p>Details of buckets and bins, bin sizes, frequency of placement, tools to be utilized and polythene bags are given in technical specification.</p>

<p>UC#9 Gulshan-e-Iqbal II</p> <ul style="list-style-type: none"> <li>Middle to high Income Group</li> <li>Sparsely areas</li> </ul>	<ul style="list-style-type: none"> <li><b>Door Step Collection.</b> Wherein waste is left outside the property by the residents in plastic/polythene bags and picked up by waste collecting vehicles moving in and around the residential area at specific time each day or collected by the sweepers every day equipped with wheel barrow, handcart and disposed off to nearest containers and bucket with tipping arrangements.</li> </ul>	<p>Details of Type of garbage collecting and transporting vehicles, bin mechanism are given in technical specification.</p> <p>Small Compactor vehicles type or small Suzuki / pick up type vehicles may be used.</p>
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### Jamshed Zone

Name of UC	Door to door collection Strategy	Suggested Tools and Machinery for door to door collection type.
<p>UC#1 Akhtar Colony</p> <p>UC#2 Manzoor Colony</p> <p>UC#3 Azam Basti</p> <p>UC#4 Chanessar Goth</p> <p>UC# 5 Mehmood Abad</p> <p>UC#8 Jat Land Line</p> <p>UC#9 Jacob Line</p> <p>UC#10 Jamshed Quarter</p> <p>UC#13 Pakistan Quarter</p> <ul style="list-style-type: none"> <li>Low Income Group</li> <li>Thickly Populated</li> </ul>	<p><b>Shared Containers Type Collection</b></p> <ul style="list-style-type: none"> <li>Steel Containers of appropriate size &amp; capacity must be placed at appropriate distance. When filled up must be lifted and disposed off into a compactor vehicle and empty container must be placed again on the location. The operation of clearing the container be done at least twice a day or as many time as required to keep the container free of garbage</li> <li><b>Block Collection Strategy:</b> Block collection may also be adopted in some area which are congested and thickly populated using small vehicles moving around the area on fixed timings along with one or two waste collecting workers.</li> </ul>	<p>Details of buckets and bins, bin sizes, frequency of placement, tools to be utilized and polythene bags are given in technical specification.</p> <p>Details of Type of garbage collecting and transporting vehicles, bin mechanism are given in technical specification.</p> <p>Small Compactor vehicles type or small Suzuki / pick up type vehicles may be used.</p>

<p>UC#5 PECHS-I</p> <p>UC#7 PECHS-II</p> <p>UC#11 Garden East</p> <p>UC#12 Soldier Bazar</p> <ul style="list-style-type: none"> <li>• Middle to high Income Group</li> <li>• Sparsely areas</li> </ul>	<ul style="list-style-type: none"> <li>• <b><u>Block Collection Strategy:</u></b> Block collection may also be adopted in some area which are congested and thickly populated using small vehicles moving around the area on fixed timings along with one or two waste collecting workers.</li> <li>• <b><u>Door Step Collection.</u></b> Wherein waste is left outside the property by the residents in plastic/polythene bags and picked up by waste collecting vehicles moving in and around the residential area at specific time each day or collected by the sweepers every day equipped with wheel barrow, handcart and disposed off to nearest containers and bucket with tipping arrangements.</li> </ul>	<p>Details of buckets and bins, bin sizes, frequency of placement, tools to be utilized and polythene bags are given in technical specification.</p> <p>Details of Type of garbage collecting and transporting vehicles, bin mechanism are given in technical specification.</p> <p>Small Compactor vehicles type or small Suzuki / pick up type vehicles may be used.</p>
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### 4.3 Street Sweeping and Sweeping of Main Roads

i) Classification / Type of Roads.

a. **Primary Main Roads.**

These are the main roads connecting different zones in a district (dual carriageway), planned and constructed on established engineering practices with proper road geometry, 3 or 4 lane carriageways.

b. **Secondary Main Roads.**

May be classified as main roads but secondary type, connecting various UCs in a Zone, mostly single carriageways, however in some parts double carriageway facility. Planned and constructed on normal engineering practices with without outside walks, green belts, and median or edge stones and without proper road geometry, three lane single carriageways.

c. **Streets.**

These are internal roads, connecting various residential blocks, around market and commercial areas mostly 2 lane dual carriageways type with or without sidewalks. Constructed on conventional practice.

**d. Narrow lanes and streets.**

Paved or unpaved narrow internal streets in old resident areas, markets and around old commercial areas, single lane to double lane i.e. 10 to 20ft wide with or without sidewalks or edge stone.

**ii) Sweeping Methodology.**

**1. Conventional Type (i.e. manual).**

With the help of sweepers, using broom/brushes the sweeping waste is collected through wheelbarrows transported and disposed of to nearby buckets containers with tipping arrangements.

**2. Mechanical Type (i.e. using machine sweepers).**

Appropriate, vacuum type mechanical sweeping vehicles including built-in sweeping waste containing facility, shall be used. The sweeping waste shall be disposed of to nearest bucket or container having tipping arrangements.

**iii) Proposed Sweeping System under Front End Collection Plan**

**a) Secondary Main Roads, Streets and Narrow Lanes. (Manual Sweeping)**

It is suggested that on secondary main roads, streets and on narrow lanes and streets manual sweeping be adopted along wheelbarrow and Suzuki / Pickup type of vehicles to transport the sweeping waste from the beat (area) to bucket or containers. Sweeping on internal streets of residential area may be done as per schedule, guideline given at technical specification. Whereas in market / commercial areas and in bazaar type of market area, sweeping is required two times in a day as mentioned in the schedule of sweeping at technical specification. Contractor must make its own schedule, for the purpose, however the area must be cleaned and cleared from garbage.

**b) Primary Main Roads and Secondary Road. (Mechanical Sweeping)**

Using mechanical sweepers of appropriate size and capacity for sweeping of these roads as enlisted is to be done. Sweeping stuff may be disposed of to nearest dustbin site or to GTS. Mechanical sweepers

of self contained and vacuum type is best suited for the purpose.

**List of Primary and Secondary main Roads Mechanical Sweeping**

**Primary Main Roads (Dual Carriageway)**

<b>S No.</b>	<b>Name of Road</b>	<b>Length (KM)</b>
1	University Road from Jail Chowrangi to Saphoran Chowrangi	13.0
2	Rashid Minhas Road from Shahrah-e-Faisal to Moti Mehal Bridge.	9.4
3	Allama Shabbir Ahmed Usmani Road from Sehbah Akhtar Road to Abul Hasan Isphahani Road	3.5
4	Abul Hasan Isphahani Road from University Road to Super Highway Road	2.7
5	Karsaz Road from Shahrah-e-Faisal to National Stadium	2.3
6	Sir Shah Suleman Road from National Stadium to Gharibabad Bridge	2.3
7	Stadium Road from University Road to Rashid Minhas Road	5.8
8	Alamgir Road	1.8
9	Shaheed-e-Millat Road from Jail Chowrangi to Shahrah-e-Faisal	6.8
10	Siraj Ud Daulah Road	1.7
11	Bahadur Shah Zafar Road	1.7
12	Haider Ali Road	1.6
13	Nishtar Road, Ghazi Salah ud Din Road & Fatima Jinnah Road	3.8
14	Baitul Mukharram Road (Dividing Road of Block-15 & Block-8 Gulshan-e-Iqbal)	1.1
15	Mumtaz Manzil Road (Dividing road of Block-15 & 17 Gulshan-e-Iqba)	0.8
16	Sehbah Akhtar Road from Sir Shah Suleman Road to Allama Shabbir Ahmed Usmani Road	2.1
17	Tipu Sultan Road from Karsaz Road to Shahrah-e-Faisal	2.5
18	Ameer Khusro Road	1.9
19	Jamal Ud Din Afghani Road	1.0
20	Road from Aziz Bhati Park to Rashid Minhas Road Block-10 Gulshan-e-Iqbal	1.1
21	Meeran Muhammad Shah Road from Amir Khusro Road to Tipu Sultan Road	1.5



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22	M.A. Jinnah Road from Capri Cinema to Gurumandir Chowk	2.1
23	Johar Road from Tipu Sultan Road to Shahrah-e-Faisal	1.6
24	Tariq Road from Shaheed-e-Millat to Shahr-e-Quaideen	1.9
25	Shahrah Quaideen from Shahr-e-Faisal to Numaish Chowrangi	2.9
26	Nishter Road from Teen Hatti Chowk to Zoological Garden KMC	2.5
27	Jahangir Road from Teen Hatti Chowk to Gurumandir	2.2
28	Jamshed Road from Jail Chowrangi to Gurumandir Chowk	1.5
29	Dada Bhai Noroji Road from Kashmir Road to Peoples Chowranig	0.7
30	Kashmir Road from Jail Chowrangi to Shahrah-e-Quaideen	2.8
31	Khalid Bin Walid Road from Shaheed-e-Millat to Shahrah-e-Quaideen	3.1
32	Bahadur Yar Jang Road from Gurumandir Chowrangi to Soldier Bazar Maternity Home.	0.6
33	Martin Road from Teen Hatti to Jail Chowrangi	1.8
34	Shaheed-e-Millat Expressway from Shahrah-e-Faisal (Baloch Colony) to Hino Chowrangi Flyover (Qayum Abad)	4.5
35	Sir Syed Road from Kashmir Road to Tariq Road	1.0
36	Allama Iqbal Road from Kashmir Road to Jheel Park	1.2
37	Business Recorder Road from Gurumandir Chowrangi to Lasbella Traffic Signal	1.1
38	Captain Fareed Bukhari Road from Shahrah-e-Faisal to Allah Wali Chowrangi Shahrah-e-Quaideen	0.6
39	New M.A. Jinnah Road from Jail Chowrangi to Peoples Chowrangi	3.0
40	Soldier Bazar Road from Maternity Home to M.A. Jinnah Road	0.5
41	New M.A. Jinnah Expressway from Peoples Chowrangi to CDGK Parking Plaza	2.5
<b>Total</b>		<b>106.5</b>

**Secondary main roads (Single Carriageway)**

<b>S No.</b>	<b>Name of Road</b>	<b>Length (KM)</b>
1	Main PIB Colony Road	1.20
2	Haji Pakwan Road Block-4 Gulshan-e-Iqbal	0.50
3	Road in front of Five Star Apartment Block-5 Gulshan-e-Iqbal	1.60
4	Sardar Ali Sabri Road from University Road to Abid Town	1.50
5	Dividing Road of Block-8 & 9 Gulshan-e-Iqbal	1.00
6	Zakir Mahmood Hussain Road from Sharah-e-Faisal to Feerozabad Police Station	1.30
7	Masjid Tayyaba Road Block-2 from Captain Fareed Bukhar Road to Shahrah-e-Quaideen	1.15
8	Ch. Rehmat Ali Road	0.65
9	Hamid Hussain Farroqui Road from Tariq Road to Hill Park	1.50
11	Nizami Road from Numaish Chowrangi to New M.A. Jinnah Road	0.65
12	Madina Road from M.A. Jinnah Road to New M.A. Jinnah Road	0.65
15	Love Lane Road from Love Lane Bridge to M.A. Jinnah road via Zoological Garden	2.30
16	Brito Road from Numaish Chowragi to Nishter Road	1.50
<b>Total</b>		<b>15.50</b>

**Proposed Machinery for Mechanical Sweeping and contained sweeping waste capacities under Front-end collection plan.**

**Mechanical Sweeper -B1**

- Type- Vacuum type dry brushing mechanism
- Maximum sweeping width 3.5 Meter
- Operating speed 5 to 10 KM Per Hour
- Contained sweeping waste capacity 8 to 10 cubic meter
- Total number of machine Required= to be determined by the bidder as per his strategy



**Mechanical Sweeper – B2**

- Type- Vacuum type dry brushing mechanism
- Maximum sweeping width 2 Meter
- Operating speed 5 to 8 KM Per Hour
- Contained sweeping waste capacity 2 to 3.5 cubic meter
- Total number of machine Required= to be determined by the bidder as per his strategy



**Proposed Machinery for Washing of Main Roads under Front-end collection plan.**

**Mechanical Washers -C1**

- Type- Automatic sprinkling washing mechanism
- Maximum Washing width 3.5 Meter
- Operating speed 5 to 10 KM Per Hour
- Contained water tank capacity 1000 to 1500 Gallons
- Total number of machine **Required= 03 Number**



**c) Footpath, Medians, Roundabouts and Open Spaces. (Manual Sweeping)**

It is suggested that on footpath Medians, Roundabouts and open spaces, manual sweeping be adopted along wheelbarrow and Suzuki Pickup type of vehicles to transport the sweeping waste from the beat (area) to bucket or containers placed nearby the area. Sweeping be carried out as per schedule of sweeping provided in technical specification. The purpose is that the area must be cleaned and cleared from garbage.

iv) **Proposed Lifting & Disposal of MSW from Collection Point/Dustbin Sites to GTS.**

Under the proposed plan efficient and effective collection & transportation system for MSW is to be adopted using appropriate MSW collection, transportation, machineries and collection system. The suggested numbers of such machines of different MSW contained capacity to handle 883 Tons Per day MSW generation of DMC East satisfactorily is 35 numbers. A system schedule must be developed that helps keeping the area free of garbage. To coop up the target numbers of collection point / dustbin sites are to be significantly reduced that can be done using:

1. Containers, bucket, bins having tipping arrangements is to be provided at appropriate location that can be emptied into a compaction type container mounted on vehicles.

Using compaction type containers mounted vehicles save labour cost and frequent cleaning of bin, buckets and containers help discourage scavengers, reduce insects/rodents problems, prevent windblown trash, control odor, save inside storage space and outside parking spaces, reduce the hazards of open dumping. For various such reasons emphasizes is made to use appropriate machinery for solid waste management and transportation.

The bins, buckets and containers mechanism along with the vehicle types that are recommended for collection, transportation is mentioned hereunder along with pictorial view of desired vehicles and their tipping mechanism. Operation schedule of machines, number required and proposed plan for operation is given in technical specifications.

**Proposed Machinery for lifting and Transportation including bin Tipping Mechanism under Front end collection plan**

**Bin tipping Mechanism - A1**

- Appliance- standard metal or plastic rubbish bin.
- Bin cubage 0.24 to 0.3 cubic meter



**Bin tipping Mechanism A2**  
**Appliances- metal bucket**  
**Bucket cubage= 0.8 meter cube**



**Bucket raising Mechanism A3**

Appliance- big metal rubbish bucket

Bucket cubage =3.35 meter cube





Bucket tipping mechanism-A4  
Appliances- special metal covering  
bucket.  
Bucket cubage =1.4 to 2meter cube



## Type of Vehicle –Tipping Mechanism –Bin category and type of vehicles

Vehicle Type - compactor semi Automatic or Automatic compaction type.  
Container in-built vehicle with

- BIN tipping Mechanism –A1
- BIN tipping Mechanism-A2
- Bucket raising Mechanism-A3
- Bucket tipping Mechanism-A4
- Container volume
  - 6.6 M<sup>3</sup>
  - 10 M<sup>3</sup>
  - 12 M<sup>3</sup>
  - 16 M<sup>3</sup>
- Number required
  - A suggested number of machines having different container capacity that are required to handle MSW generation of DMC East on Daily Basis are mentioned as under:
    - **Vehicle with Container Capacity of 6.6 M<sup>3</sup> = 06 No.**
    - **Vehicle with Container Capacity of 10 M<sup>3</sup> = 05 No.**
    - **Vehicle with Container Capacity of 12 M<sup>3</sup> = 05 No.**
    - **Vehicle with Container Capacity of 16 M<sup>3</sup> = 05 No.**
    - Total = 21 No.**



**Small vehicle tipping mechanism**

Appliances- auto tipping bucket

Small vehicle bucket cubage = 1.4 meter cube

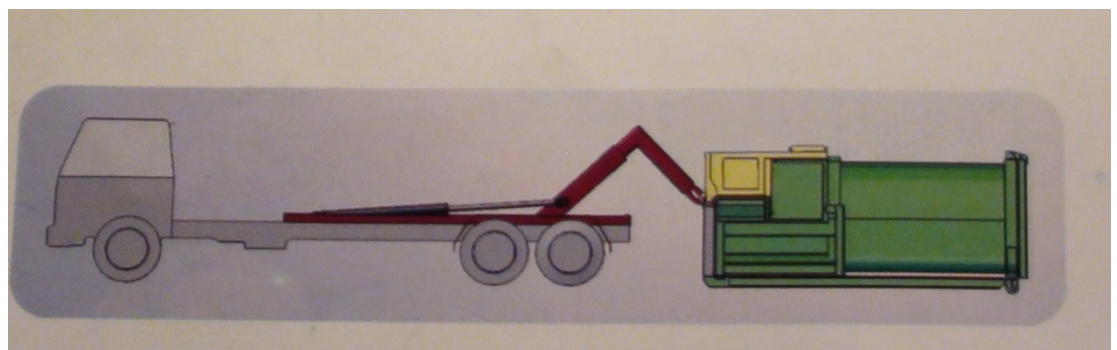
Capacity of in-built container = 1.5 to 2.5 meter cube

No. Required

As many numbers as required in view of the physical conditions.



Container Hook Lifting type Mechanism



Hook Lifting type Mechanism-B

Appliances- metal container

Container Cubage

1. 10 m<sup>3</sup>
2. 07 m<sup>3</sup>
3. 05 m<sup>3</sup>

Number required

- Suggested number of machines required of different container  
Volume capacity is 

<b>05 M<sup>3</sup> Volume=</b>	<b>05 No.</b>
<b>10M<sup>3</sup> Volume=</b>	<b>04 No.</b>
<b>07M<sup>3</sup> Volume=</b>	<b>05 No.</b>
<b>Total =</b>	<b>14 No.</b>

NOTE: THE CONTRACTOR IS SUPPOSED TO GIVE HIS OWN STRATEGY FOR THE FRONT END COLLECTION COMPRISING OF DIFFERENT TYPES OF VEHICLES (LARGE, MEDIUM AND SMALL AND EVEN UPTO HAND CARTS & WHEEL BARROWS). INNOVATIVE APPROACH LEADING TO IMPROVED EFFICIENCY AND SAVINGS IN COST WILL BE HIGHLY APPRECIATED.

#### **4.4 Schedule of Works**

Proposed schedule of work and services is given at term of reference and technical specification.

#### **4.5 GTS of Zones and Locations.**

- a. Gulshan Zone, near Hasan Square beside Lyari Expressway Or as designated by procuring agency.
- b. Jamshed Zone, beside Shaheed-e-Millat Expressway on the bank of Malir River Or as designated by procuring agency.

## Section V

# **Terms of Reference & Technical Specification**

**Terms of Reference & Technical Specification****5.1 MSW by Definition**

Municipal Solid Waste, commonly known as trash or garbage is a waste type consisting of everyday items that are discarded by public includes food waste, market waste, yard waste, landscape waste (tree cutting, bushes, grass cuttings etc). Domestic waste, Slaughter and Sacrificial animal waste (like offals, bones, skin etc.) and other miscellaneous solid waste from residential commercial, institutional areas but do not include demolition waste (inert waste) Industrial waste, agriculture waste, Medical Waste or sewage sludge.

The total estimate MSW generation in DMC East is 883 Ton Per Day, the composition of MSW and its quantum varies depending upon, type of dwelling population density, commercial activity and density of different type of bazaar and markets in the area, the quantum of MSW also reflects its variation on various occasion, like Eid Festival in the month of Ramdan and Eidul Azha. The quantum also depends on seasonal variation.

Municipal Solid Waste can be classified in several ways, but the following list represent at typical classification:

- Biodegradable Waste i.e.  
Food and kitchen waste, green waste, waste from houses, gardens, papers.
- Recyclable Material i.e.  
Like paper, glass, bottles, canes, metals, plastic, fabrics, clothes, batteries, old types etc.
- Electrical and Electronics Waste  
Like discarded, electrical appliances etc.
- Composite Waste.  
Waste clothing, Tetra Pack, Plastic like toys etc.
- Hazardous Household Waste  
Like paints, chemical in daily residential usage, light bulbs, tube, spray cane, garden fertilizer, different type of plastic bottles and cans garden pesticide, herbicides etc.

[70]

Municipal Solid Waste as defined here above includes all type of waste that is collected at dustbins/collection points except, demolition waste (inert waste) industrial and medical waste, agriculture waste, sewage sludge but includes sweeping waste with a minor component of dirt.

## 5.2 Transition Period

Transition period for the purpose of implementation of this contract is 03 (three) months starting from date of signing of agreement and work order. The contractor shall be liable to perform its activities at the work and services even in the transaction period.

## 5.3 Terms of Reference

### a. Scope of work

1. Door to door collection of garbage & revamping of bin system.
2. Sweeping of roads, streets, lanes, footpaths, green belts, medians and open spaces and sweeping waste collection and disposal.
3. Washing of important roads as and when required on special occasions.
4. Lifting and transportation MSW from dustbins sites & collection points to designated GTS.
5. Establishment of Scientific Monitoring and Tracking system for all components i.e. vehicle sanitary staff, assets etc.
6. Establishment of complaint management system.
7. Community awareness program and its implementation.

### b. Objective of work and services

The objective of work and services is to provide an efficient, cost effective, environment friendly solid waste collection transportation system. It should have an efficient and effective management and operation system for the public who should be able to live in a waste free and healthy environment. Effective management

supported by an efficient monitoring and evaluation system is the key to attain these targets and desired results in time.

**c. Task to be performed.**

1. Door to door collection.

Door to door collection for Front End Collection Plan/mechanism is categorized as:

(a) Block Collection.

Wherein waste collecting vehicles with one or two waste collecting workers move around the residential blocks on a specified time each day and sound horns or ring bell and wait at intermediate location for residents to bring waste in polythene bags to the collection vehicles or where the workers with the collecting vehicles collect garbage in a basket at the door step of the residents and throw in the collecting vehicles, which is then disposed of to nearest dustbin site.

(b) Door Step Collection.

Wherein waste is left outside the property by the residents in plastic/polythene bags and picked up by waste collecting vehicles moving in and around the residential area at specific time each day or collected at door step by the sweepers every day, equipped with wheel barrow, handcart and disposed of to nearest dustbins sites.

(c) Shared containers type collection.

Wherein a container of suitable capacity is placed at an appropriate place within a residential block, apartment building, market or shopping area and residents and other generators, put their waste stuff inside the container. These containers may be of hook and lifting type or may be bucket type with proper tipping arrangements. These are then emptied at by compaction container type compactor vehicles and then again placed back at the location. However this operation is done as many time as required to keep the container free of garbage. The locations where such containers are placed are kept clean and spilled out garbage is swept from the surrounding.

Anyone or all defined categories will be adopted under the front end collection plan for door to door collection keeping in view the demographics of the area. However for the purpose



of guidance, sweeping methodology in various UCs of the Zones of DMC East is mentioned hereunder.

Plastic bag will be provided free of cost by contractor/operator to all residential units for the first two month of the contract only.

**d. Street Sweeping and sweeping of main roads**

**1. Conventional Type (i.e. manual).**

With the help of sweepers, using broom/brushes and sweeping, waste is collected through wheelbarrows, transported and disposed of to nearby buckets containers with tipping arrangements.

**2. Mechanical Type (i.e. using machine sweepers).**

Appropriate, vacuum type mechanical sweeping vehicles including built-in sweeping waste containing facility, shall be used. The sweeping waste shall be disposed of to nearest bucket or container having tipping arrangements.

**e. Collection and transportation of MSW**

Under the proposed plan, an efficient and effective collection & transportation system for MSW is to be adopted. A system that helps keeping the area free of garbage. To attain above target, number of collection points / dustbin sites are to be significantly reduced that can be done using:

1. Containers, bucket bins having tipping arrangements are to be provided at appropriate location that can be emptied into a compaction type container mounted on vehicles.

Using compaction type container mounted vehicles save labour cost and frequent cleaning of bins, buckets and containers help discourage scavengers, reduce insects/rodents problems, prevent windblown trash, control odor, save inside storage space and outside parking spaces and reduce the health hazards of open dumping. For variety of such reasons, emphasis is to use appropriate machinery for solid waste management and transportation.

**f. Responsibilities of procuring agency**

1. In case the procuring agency does not fulfill its obligation regarding signing of agreement, the procuring agency may relinquish its commitments 45 (forty five) days after receiving the acceptance letter by procuring agency.
2. The procuring agency shall assist and facilitate the contractor in performing the work and services as per the contract in respectful and honorable manner throughout the period of contract.
3. The procuring agency shall make all due payments to the contractor in respect to verified monthly bills timely and will be careful and justified in imposing penalties.

**g. Responsibilities of contractor**

1. The contractor will carry out and perform the work and services under this contract in respectful, honorable manner with desire and objective to serve people of the area.
2. The contractor will submit his monthly performance bill in time and in accordance work performed correctly and in justifiable manner.
3. Contractor shall follow the instructions, guidelines issued by client or by representative of client and shall comply with all such instruction timely.
4. Contractor is responsible for ensuring good behavior to public and follow the code of conduct detailed in contract document

**5.4 Technical specification.**

**A. Revamping of Bin System**

The contractor shall provide bin, bucket and containers having tipping mechanism compatible with compactor vehicles in the color scheme noted below:

Gulshan Zone – Orange  
Jamshed Zone –Red

Marking of Logo and Letters

Sindh Solid Waste Management Board and the Zone Name shall be written in Capital Bold Letter and its logo shall be placed on bin, buckets and containers with the approval of the Procuring Agency.

**Bin Type and Sizes**

1. Plastic Litterbins of bin cubage 0.24 to 0.3 Meter cube.
  2. Standard metals bucket with the following cubage:
    - a. Bucket cubage of 0.8 to 1.4 m<sup>3</sup>.
    - b. Bucket cubage of 1.4 to 2 m<sup>3</sup>.
    - c. Big bucket cubage 3.35 to 4 m<sup>3</sup>.
  3. Standard Metal Container of container cubage 5 to 10 m<sup>3</sup>.
- All the bins, buckets and containers shall be of tipping type.

**Bin Requirements**

Zones	Plastic Litterbins of different sizes and colors	Standard metal bucket of different sizes and colors	Standard Metal container of different sizes and colors
Gulshan	1500 Nos.	1000 Nos.	200 Nos.
Jamshed	1000 Nos.	500 Nos.	100 Nos.
<b>Total</b>	<b>2500 Nos.</b>	<b>1500 Nos.</b>	<b>300 Nos.</b>
Area of placement	in market & shops	in market shopping malls & commercial centre & residential Unit	At appropriate places in residential areas, apartment blocks, residential blocks and public places

**REMARKS:**

Contractor shall provide bins, buckets, and container on prior approval for numbers to be provided at first stage second stage and third stage as desired by procuring agency.

**B. Plan for Placement of bins, buckets and containers**

The contractor will prepare a comprehensive plan for placement of bins, buckets and containers in various union councils of each zone as per guideline for revamping of bins system.

The plan submitted by successful bidder shall be reviewed by client after award of the contract and a revised plan shall be prepared with mutual consent of client and contractor and with the approval of client, the approved plan shall be implemented for provision work and services under this contract.

### **C. Polythene bags**

Polythene bags of size 0.5X1 meter in black color of +30 micron thickness with letters and logo of SSWMB printed on it shall be provided by the contractor for door to door collection in the areas where door step strategy is adopted. Contractor will provide such bags free of cost for the first two weeks of the contract and thereafter bag will be provided to residents on payment. Prior approval of the client shall be required for the cost of the bag provided to residents. Samples of polythene bag shall be sent for approval of client with required printing. Only approved polythene bags shall be provided to the residents for everyday collection of domestic solid waste.

### **D. Cost of Polythene bags provided free of cost**

All cost towards providing/supplying of polythene bags free of cost (for the first two weeks of the contract) shall be included in unit cost of work and services mentioned in price list.

### **E. Door to door collection plan**

Domestic waste shall be collected by adapting the strategy for door-to-door collection defined under front-end collection plan. The contractor shall submit plans for implementation of this system for door-to-door collection along with the tender. Such plan shall be reviewed and reworked with the consent of client and successful bidder and shall be subject to approval of competent authority. The approved plan shall be implemented. The strategy for door-to-door collection defined herein in the documents using UC wise parameter are basic once and for guidance only. The bidder is supposed to give his own appropriate plan and strategy. Innovation and out of box ideas shall be encouraged.

## F. Handcarts and other tools for door to door collection

1. Contractor will collect waste from narrow streets, which cannot be accessed by garbage vehicle, through workers using wheeled handcart and empty them into nearby containers or to the compactor vehicles parked in nearby locality.

Wheeled handcart bin cubage = 120 Litters

2. Contractor may also collect waste from congested residential colonies through workers using wheelbarrows and baskets.

## G. Manual sweeping

Manual sweeping of roads shall be done by male/female sanitary workers using broom/brushes. The sweeping waste is collected through wheelbarrows and disposed of into nearby containers or buckets or compactor vehicles parked in the nearby the locality.

Tools for manual sweeping

1. Broom and brushes
2. Shovel and spades
3. Racks
4. Basket
5. Hoe.

## H. Length and area for manual sweeping

a) Gulshan Zone	760.00 KM
b) Jamshed Zone	<u>490.00 KM</u>
Total	1250.00 KM

- c) Length and area for manual sweeping under following subhead is noted below.

a) Medians	14000 Sq Meter
b) Footpath	<u>34000 Sq Meter</u>
c) Roundabouts	<u>3300 Sq Meter</u>
d) Open spaces	<u>2000 Sq Meter</u>
Total	53300 Sq Meter

## I. Workforce required for manual sweeping

Minimum suggested workforce required for sweeping of roads, medians, footpaths, roundabouts and open spaces under manual sweeping 1700 persons.

**J. Schedule for manual sweeping**

Type of roads	Manual sweeping length meter	Mon	Tue	Wed	Thu	Fri	Sat	Sun
Secondary Main Road	94400	Yes	No	Yes	No	Yes	No	Yes
Streets	556000	No	Yes	No	Yes	No	Yes	No
Narrow lanes	486500	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Type of Area	Manual sweeping Square meter	Mon	Tue	Wed	Thu	Fri	Sat	Sun
Medians	14000	Yes	No	No	Yes	No	No	Yes
Footpath	34000	No	No	Yes	No	No	Yes	No
Open spaces	2000	No	No	No	No	No	Yes	No
Roundabouts	3300	Yes	No	No	No	No	Yes	No

Manual sweeping shall be done in 02 (two) shift according to the schedule of sweeping.

06:00AM –to- 10:00 AM Shift-1

02:00PM –to- 06:00 PM Shift-2

All cost towards workers, bins, bucket, container, tools must be included in the unit cast of works and services items mentioned in the price list.

**K. Schedule for mechanical sweeping on primary and secondary main roads**

DMC	Mechanical sweeping length meter	Number of Sweeping Machine	Mon	Tue	Wed	Thu	Fri	Sat	Sun
East	132050	05	Yes	No	Yes	No	Yes	No	No

Standard mechanical sweeping machine of vacuum type with self contained in-built waste collection container shall be applied at the work.

**L. Plan for mechanical sweeping.**

Contractor will prepare a comprehensive plan for mechanical sweeping work of each zone as per guideline given herein above and will attached the same with the contract document. The plan submitted by the successful bidder shall be reviewed by the client after award of the contract. The approved plan shall be implemented for operation of work and services under this contract.

### M. Plan for collection and transportation of MSW and schedule of operation.

Name of DMC	MSW Generation Per day	Number of collection and transportation vehicles of different Capacity	Mon	Tue	Wed	Thu	Fri	Sat	Sun
DMC East	883	35	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Door to door collection	Inclusive as above	Tool as per requirement	Yes	Yes	Yes	Yes	Yes	Yes	Yes

### N. Plan for mechanical washing of the road

Name of DMC	Length of washing of main roads Per Year	Number of Washing vehicle	Mon	Tue	Wed	Thu	Fri	Sat	Sun
DMC East	600 KM	2	Occasionally when asked for on written orders						

**Note:-**

The schedule and work plan given herein above are based on basic parameters and of tentative basis and the bidder are suppose to give their own appropriate plan strategies and schedules. Innovation and out of box ideas shall be encourage.

### O. Proposed Managerial and operational staff requirement

Srl No.	Designation	Numbers	Qualification	Remarks
01.	Manager Operation	01	Well experienced high qualified professional engineer	Please attached the C.V. of the personal
02	Manager Monitoring & Tracking System	01	Personal may be an I.T. Specialist at least B.S in computer science with specialization in networking and system management sciences	Please attached the C.V. of the personal
03	Zone Field Incharge	03	Graduate having sufficient experience in SWM.	Please attached the C.V. of the personal
04	Supervisor	26	Graduate having sufficient experience in SWM.	Please attached the C.V. of the personal
05	Asst. Supervisor	52	Intermediate sufficient	Please attached

			experience in SWM.	the C.V. of the personal
06	Muquddam	78	Metric having sufficient experience in SWM.	Please attached the C.V. of the personal

## 5.5 Basis of current date prices

### i. Source of price (Diesel/Petrol/Lubricants)

The source of prices of diesel/petrol/lubricants shall be either obtained from Government of Pakistan (GOP) Federal Bureau of Statistics (FBS) monthly statistical bulletin or Pakistan State Oil (PSO) however for a particular adjustable element the same source shall be used throughout the currency of the contract.

### ii. Source price – Labour (Unskilled)

The source price for labour shall be either Govt. of Pakistan (GOP) Federal Bureau of Statistics (FBS) statistical bulletin or statutory notifications. However for a particular adjustable element the same source shall be used throughout the currency of the contract.

### iii. Element for price adjustment

Following specified elements is subjected to price adjustment

- a) Fuel (Diesel/Petrol) for vehicles collecting/Transporting MSW only
- b) Labour (unskilled)

### iv. Standard Procedure and Formula for Price Adjustment Calculations.

#### A) Applicability.

a. The provision for price adjustment shall be applicable to this contract and price adjustment shall be applicable as payable in full for original scheduled completion period.

b. In the event the completion of contract exceeds the original scheduled period then:

- i. In case of default on the part of contractor causing delay in original schedule completion, the rate of price adjustment will be frozen at the original scheduled date of completion, however price adjustment will be applicable till actual completion. While computing price adjustment beyond the scheduled completion period, in the event



the rate is reduced then that reduced rate will be applicable.

- ii. The price adjustment will be payable in full for the extended period in case the contractor has been granted an extension of time for no fault on the part of contractor duly approved by Sindh Solid Waste Management Board (the procuring agency).
- c. The Basis for compensation (Price Adjustment) will be only those element as specifically listed in clause No.5.5(iii) of this document.
- d. There shall be no price adjustment for the elements which the employer has either supplied free of cost or at fixed prices as well as for those elements for which an umbrella ex gratia or escalation cover is provided by the Government through an executive order or Statutory Regulatory Order (SRO).
- e. The price adjustment provided herein is only for price adjustment in Local Currency (Pak Rupees).
- f. No method other than given in this document is applicable to compute the price adjustment.

**B) Base Date Price and Current Date Price**

**a. Base Date Price.**

The base date price (or Base date index) of the element specified in clause 5.5 (iii) shall be the price of the element which was prevalent twenty eight (28) days prior to the date of submission of tender and such price is to be indicated in writing in the document, as required to be provided by the bidder under appendix-A along with the documentary evidence of specified source. The base date price of the specified element shall be obtained from the sources specified under clause No.5.5

**b. Current Date Price.**

The current date price (or current date index) of the element specified under clause 5.5(iii) shall be price of the element, which was prevalent twenty eight (28) days prior to the start of the execution month (calendar month) to which a particular monthly statement (monthly running bill) is related. The current date price of the specified element shall be obtained from the source

specified in the contract and its documentary evidence is to be provided by the contractor along with monthly bill statement.

**c. Procedure.**

The monthly bill statement (monthly running bill) as submitted by the contractor, will be

- i. Subjected to verification by procuring agency or its authorized representatives. In case the billed amount is for more than one month, the amount of bill shall be segregated for actual work done for each month.
- ii. Considering the base date price and current date price, the price adjustment in the billed amount shall then be calculated for the month under consideration in accordance with the formula for price adjustment.

C) Formula for Price Adjustment (generalized form)

$$P_n = A + b \frac{L_n}{L_o} + c \frac{M_n}{M_o} + d \frac{E_n}{E_o} + \dots$$

$P_n$  = is Price Adjustment factor for the work carried out in the period n.

A = is a constant or non-adjustable portion of the price adjustment factor as specified here under representing the non-adjustable portion of contract price.

b, c, d ....=are the coefficient or weightage order 0.xx (i.e. fraction having two significant digits) for each specified element of adjustment in the contract. The sum of A, b, c, d, etc shall be one.

$L_o, M_o, E_o, \dots$ = are the base date indices for the specified (adjustable) element.

$L_n, M_n, E_n, \dots$ = are the current date indices of the specified (adjustable) element.

If P is the amount payable (prior to adjustment) at the rate entered in the price schedule of work carried out in period n then adjusted payable bill amount to the contractor for the work carried out in period n shall be equal to  $P_n \times P$ .

## **5.6 Rate analysis**

The contractor shall provide rate analysis for each item of BOQ mentioned in the price sheet. The rate analysis should indicate breakup of Unit Cost by activities involved in an item. The consumption of fuel at current rates, factored cost of machines, cost of Litterbins, buckets, containers, polythene bags (that are provided free of cost for two months only), tools, labour cost, managing and monitoring and other cost breakup while evaluating unit price for the items of works and services and shall also provide breakup of cost of other items that are inbuilt in items of works, and the way of evaluation the unit prices. The details are required to assist the reasonability of rates quoted by the contractor.

## **5.7 Chargeable works**

The contractor shall provide polythene bags to the resident free of cost for the first two month of the contract period, afterwards the contractor shall charge the cost of polythene bags from the area residents to whom the bags are provided, however the cost of the bags shall be approved by the client. In any case no cost towards supplying polythene bags to the residents shall be included or inbuilt in the unit price of the item mentioned in the price list except that provided free of cost for first two month of the contract. After two months, the residents shall be at liberty to buy these polythene bags either from the contractor or open market.

## **5.8 Procuring agency representative, duties and authorities**

The procuring agency will appoint a supervising consulting firm or a team of supervising personnel to examine whether work is being performed in accordance with the standards, quality and specification. The supervising consulting firm or supervising personnel shall verify the monthly performance bill, check monthly performance and shall report to the client. The contractor shall follow to the instructions of the supervising authority.

## **5.9 Uniform**

All field staff of the contractor shall wear a proper uniform as approved by the client. A logo of SSWMB shall be placed on the front pocket and on the back of the uniform, the cost of uniform shall be included in the unit price of work item mentioned in the price list.

### 5.10 Weightment of MSW.

Payment of MSW collection and Transportation shall be based on weight (Metric Ton=1000Kg), subject to weight quantified/measured through a designated weighbridge (weighbridge designated and approved by SSWMB). The weighing charges shall be borne by the contractor and deemed to be included in the Unit Cost of the item.

### 5.11 Tentative Weight Assessment.

The weight of Municipal Solid Waste shall be assessed on the basis of its density as (Weight / Volume) Tons Per Cft. (This density shall be subjected to verification by SSWMB and the contractor prior to execution of work. The jointly verified density shall be used for assessment of weight of MSW throughout the contract). The Assessment of weight by density shall not be the basis of Payment. This tentative assessment of weight is a check to ensure that any construction debris or inert waste is not mixed with MSW. Contractor for the purpose of assessment shall provide cubage of each and every vehicle container transporting MSW to GTS or Landfill.

Debris and inert waste shall not be mixed with MSW. Any weight of debris or inert waste shall not be subject to payments. If mixed with MSW strict action shall be taken including imposition of penalties and actions that such weight shall not be allowed for payment.

### 5.12 Rating System and Payment Criteria for sweeping work (Manual and Mechanical)

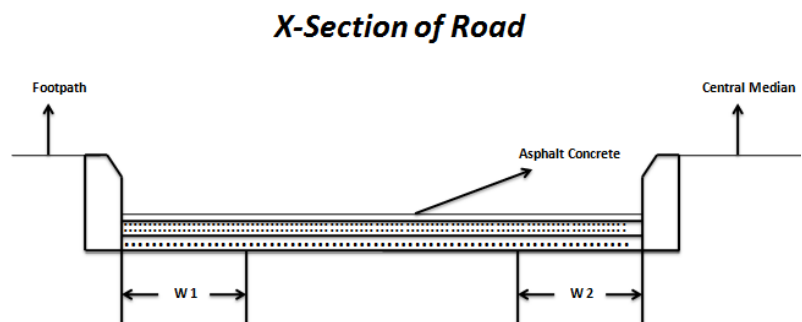
#### A) Street Cleaning Rating System in Term of Litter and Dust.

<b>Numeric Value</b>	<b>Service Standard sweeping works</b>	<b>Payment in terms of percentage of cost of work done</b>
1	a) A clean street no litter b) A clean street no dust and particles	100%
2	a) A clean street, except for a few one piece of litter b) A clean street, except for a few dust particles micron>40	90%
3	a) No concentration of litter. There are no piles of litter, and there are large gaps between pieces of litter. b) No concentration of dust. There are no piles of dust, and there are large gaps between minor heap of dust particle or	80%

	small gaps between dust particles.	
4	<p>a) Litter is concentrated in spots. There may either be large gaps between pile of litter, or small gaps between pieces of litter.</p> <p>b) Dust and particle micron &lt;600 is concentrated in spots, there may either gaps between minor heap of dust particle or small gaps between dust particle</p>	70%
5	<p>a) Litter is concentrated and there are only small gaps between pieces of litter.</p> <p>b) Dust and particle micron &lt;1000 is concentrated in spots, there may either gaps between minor heap of dust particle or small gaps between dust particle</p>	50%
6	<p>a) Litter is highly concentrated with no gaps in the pile of litter. The litter is straight line along the curb.</p> <p>b) Dust is highly concentrated with no gaps in the heaps of dust and particle. The dust is straight line along the curb.</p>	30%
7	<p>a) Litter is very highly concentrated and there are no gaps between the piles of litter. The litter is a straight line along and over the curb.</p> <p>b) Dust is very highly concentrated and there are no gaps between the dusts. The dust is a straight line along and over the curb.</p>	0%

B) Basis for Payment for Sweeping Work.

- i. Manual sweeping of Road/Streets with Kerb at both edge with or without footpath but not including sweeping of footpath.



W1= 2 Meters Minimum from the edge stone of road

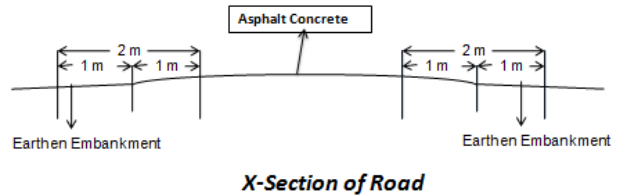
W2= 2 Meters Minimum from the edge stone of road

L = Length of sweeping

Sweeping work measured in KM in one direction of road= W1 and W2 both for length of sweeping L

Note: Single length L of sweeping in one direction (inclusive of both W1 and W2) shall be considered for payment.

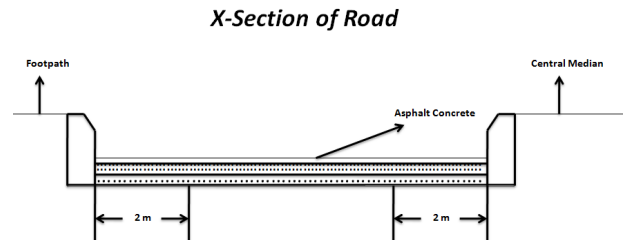
- ii. Manual sweeping of Road/Streets with earthen embankments or sides without kerbs.



Note: Single length L of sweeping in one direction inclusive of both W1 and W2 shall be considered for payment.

- iii. Mechanical sweeping of roads single or double carriageways.

- a) Mechanical sweeping of roads (single or double carriageways) with kerb at both edge with or without footpath, but not including sweeping of footpath

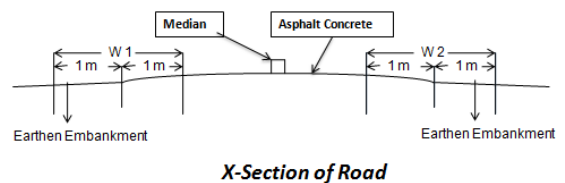


W1= 2 Meters Minimum from the edge stone of road  
W2= 2 Meters Minimum from the edge stone of road

Sweeping work measured in KM in one direction of road= W1 and W2 both for length of sweeping L

Note: Single length L of sweeping in one direction (inclusive of both W1 and W2) shall be considered for payment.

- b) Mechanical sweeping of roads single or double carriageways with earthen embankment sides without kerbs having central median or without central median.



Sweeping work measured in KM in one direction of road= W1 and W2 both for length of sweeping L

Note: Single length L of sweeping in one direction (inclusive of both W1 and W2) shall be considered for payment.

### 5.13 Submission of Monthly Bill

- A. The contractor shall submit the bill for the work and service performed by 7<sup>th</sup> day of every month. Monthly bill shall be supported by zone wise MSW weight slips along with detail of lifting of MSW along with date, time and location. An inventory of roads on which sweeping work is done with length and reference date, time and location shall be provided by the contractor in support of their bill. Contractor may use GIS System and other latest technology to provide information in support of his monthly bill submission.
- B. Minimum amount of monthly bill (interim / running payment certificate)  
The amount of interim running payment shall be equal to the amount of certified monthly works executed. The monthly bill shall be paid within 15 days of its submission.

### 5.14 Demolition, Construction/Building Material and Debris Management Service.

The contractor shall be required to provide demolition construction/building material and debris management service on phone call or on complaint for removal/lifting and disposal of debris of demolition, construction/ building material from the area of service (the area of service of DMC East) at his own risk and cost. For the purpose of this management the contractor shall be required to:

- a) Provide as number of vehicle as required to lift and transport of demolition material and debris.
- b) Provide as much staff as required to manage this service.
- c) Construct, manage and operate a construction demolition/building material and debris yard at appropriate place within the same area where demolition material and debris shall be dumped.

The contractor will however be allowed to charge free from the public requesting for lifting/removal of such demolition material and debris. The fee/charges for this service shall be fixed at the rates approved by the SSWMB.

The contractor will also be allowed to sell out demolition construction/building material dumped at the yard at the rates approved by the SSWMB.

The contractor is hereby warned that:

- Dumping of demolition, construction/building material in the community dustbins, on road , streets, lanes, footpath, central median, roundabout & open places is

strictly prohibited any violation in this regard will be dealt strictly and penalized as per law / rules.

### **5.15 Notices.**

Prior to impose penalty, the contractor shall be informed by procuring agency officials of his deficiencies through two consecutive notices at week interval after that penalty will be imposed.



## Appendix-A

### Price Adjustment Under Clause 5.5 of Section-V of Contract Document

The source of indices and the weightages or coefficient for us in the adjustment formula under Clause 5.5 shall be as follows:

Cost Element	Description	Weightages	Applicable index
1	2	3	4
Non Adjustable Portion			
(i)	Fixed Portion	0.49	Official price from public sector organization or statistical bulletin published by Federal Bureau of Statistic (FBS), Statistical Division Govt. of Pakistan Statutory Notification.
Adjustable portion			
(i)	Fuel Diesel and Petroleum	0.08	Govt. of Pakistan by Federal Bureau of Statistic (FBS), Monthly statistical bulletin or Pakistan State Oil
(ii)	Labour (unskilled)	0.43	Govt. of Pakistan (GoP) Federal Bureau of Statistic (FBS), Statistical Bulletin and Statutory Notification.
	Total	1.00	

1. For Base Date and Current date indices refer clause no.5.5. The base cost indices or prices shall be those applying 28 days prior to the latest day for submission of bids. Current indices or prices shall be those applying 28 days prior to the last day of the billing period.
2. Any fluctuation in the indices or prices of elements other than those given above shall not be subject to adjustment of the Contract Price.

**Appendix-B****Price Adjustment Under Clause 5.5 of Section-V of Contract Document*****(To be filled in by bidder/contractor)***

Srl No.	Description	Base Date Price	Source
1	2	3	4
(i)	Fuel (Diesel and Petrol)		As given under Clause No.5.5-i
(ii)	Labour (unskilled		As given under Clause No.5.5-ii

Srl No.	Description	Current Date Price	Source
1	2	3	4
(i)	Fuel (Diesel and Petrol)		As given under Clause No.5.5-i
(ii)	Labour (unskilled		As given under Clause No.5.5-ii

**Note:** *The bidder/contractor is hereby cautioned to read clause 5.5 and price adjustment procedure given therein carefully while filling the above appendix.*

**List of Subcontractors**

I/we intend to subcontract the following parts of the work to subcontractors. In my/our opinion, the subcontractors named hereunder are reliable and competent to perform that part of the work for which each is listed.

Enclosed are documentation outlining experience of sub contractors, the curriculum vitae and experience of their key personnel and type of contracts carried out in the past.

<b>Part of Works (Give Details)</b>	<b>Subcontractor (With Complete Address)</b>
<b>1</b>	<b>2</b>

**Note:** *While filling the above reference may kindly be drawn to Clause No.2.22 of this document.*

**List of Solid Waste Machinery / Vehicles & Equipment**

Owned Purchased or Leased	Description of Unit (Make, Model, Year)	Capacity HP Rating	Condition	Present Location or Source	Dated of Delivery at Site	Fuel consumption Per Kilometer
1	2	3	4	5	6	7
a. Compactor along with tipping arrangements						
b. Suzuki Pickup Type Vehicles with tipping arrangements						
c. Arm Rolls Type Vehicles with tipping arrangements						
d. Mechanical Sweepers vacuum type with wet sweeping mechanism and contained dirt provisions						
e. Mechanical Sweepers vacuum type with dry sweeping mechanism and contained dirt provisions						
f. Mechanical Washer						

**Note:** While filling the above reference may kindly be drawn to Clause No.4.3 carefully of this document.

**Appendix-E****List of Solid Waste Machinery / Vehicles that the contractor intend to purchase from the DMC (East)**

<b>Make Model of the Machinery</b>	<b>Type of Machinery</b>	<b>Registration No.</b>
1	2	3

**Note:** *While filling the above contractor /bidder is requested to survey the existing machinery of the DMC East with due care and diligence*

**Appendix-F****Breakdown of Unit Cost of the item in BOQ by the Activities and Works in that item**

Group of Activities in an item of BOQ: _____						
No.	Description of the Activities in the Item	Unit	Unit Cost	Quantity	Cost in Pak Rupees	Cost in US\$
1						
2						
3						
4						
5						

Cost = Unit Cost x Quantity

**Note:** *While filling the above contractor /bidder is requested to study the document and description of Items in BOQ carefully*

**Estimated Progress Payments**

Bidder's estimate of the value of work which would be executed by him during each of the periods stated below, based on his Programmed of the Works and the Rates in the Bill of Quantities, expressed in thousands of Pakistani Rupees.

<b>Quarter/Year/Period</b>	<b>Amounts (Million of Rupees.)</b>
<b>1</b>	<b>2</b>
1 <sup>st</sup> Quarter	
2 <sup>nd</sup> Quarter	
3 <sup>rd</sup> Quarter	
4 <sup>th</sup> Quarter	
5 <sup>th</sup> Quarter	
6 <sup>th</sup> Quarter	
7 <sup>th</sup> Quarter	
8 <sup>th</sup> Quarter	
9 <sup>th</sup> Quarter	
Bid Price	

## Section VI

# Performance Evaluation & Monitoring System



**Performance Evaluation & Monitoring System****6.1 Scientific Monitoring and tracking system for entire management and operation Plan**

The monitoring of processes included in front-end services should be aimed to ensure that the objectives of solid waste management plan are realized and achieved. The proposed mechanism for different processes include:

**COMMAND AND CONTROL CENTRE**

- Command and Control Centre to be established by the service provider.
- Members from District Municipal Corporation and Sindh Solid Waste Management Board to also be part of central control room.
- Radio monitoring system be established at control room.
- Android-based monitoring system be established at control room.
- GPS tracking system for garbage transportation vehicles.
- The Command and Control Centre should be of a platform that it can be linked with the Central Command & Control Centre to provide real time data.

**COMPLAINT CELL**

- Complaint cell to be established by the service provider.
- Call waiting time to be less than 5 minutes.
- All complaints to be reported to command and control centre for resolution.
- Command and Control Centre to notify the complaint cell, as the complaint is resolved.
- Complaint cell to duly confirm it with the complainant.
- Linkage between Complaint Cell, Union Council, District Municipal Corporation and Sindh Solid Waste Management Board to be established.
- Concerned Union Council to verify 75% of complaints.
- District Municipal Corporation and Sindh Solid Waste Management Board to verify at least 33% of the complaints.
- Response time to attend complaints should be less than 8 hours.

**FOR STREET SWEEPING**

- Monitoring and evaluation committees to be established at level of Union Council, District Municipal Corporation, Sindh Solid Waste Management Board and Service Provider.
- All committees to act independently
- Monthly third party evaluation & monitoring / validation
- Bio-metric and android based attendance system for sweeping staff.

#### **FOR GARBAGE COLLECTION**

- Monitoring and evaluation committees to be established at level of Union Council, District Municipal Corporation, Sindh Solid Waste Management Board and Service Provider.
- All committees to act independently.
- Monthly third party evaluation & monitoring / validation.
- Electronic chips should be installed in garbage bins.
- Daily collection report of GTS to be analyzed.

#### **PUBLIC PERCEPTION STUDIES**

- A third party firm will conduct quarterly public perception studies.
- The quantum of complaints will be analyzed to assess the performance of service provider.

# **Section VII**

## **Conditions of Contract and Price Sheet**

### **Section VII**

#### **Conditions of Contract and Price Sheet**

##### **7.1 Compliance of Laws & Rules Regulation**

The contractor shall be bound under this contract to comply with all substantive and procedure laws of Islamic Republic of Pakistan, which may include but are not limited to the followings:

- i) Labour Laws
- ii) Land Laws

[99]

- iii) Environmental Laws
- iv) Local Govt. Act. / laws
- v) All National and Provincial Rules and Regulation applicable to the nature of services and works under this contract.

Inability of successful bidder to comply with all laws, rules, regulation and procedures will result in penalization, as per penalty clauses provided in this contract.

All substantive and procedural laws of Islamic Republic of Pakistan including Sindh Public Procurement Rules 2010 amended 2013 shall govern this document.

## 7.2 RFP Document

All section of RFP documents i.e.

- i) Section-I Preambles
- ii) Section-II Instruction to Contractor
- iii) Section-III Description of the Zones of DMC East
- iv) Section IV Proposed plan for DMC East
- v) Section-V Terms and reference and Technical Specifications.
- vi) Section-VI Performance Evaluation and Monitoring System
- vii) Section-VII Conditions of Contract & Price Sheet
- viii) Section-VIII Annexure

All Sections noted above and the clauses contained therein are part and parcel of RFP Document and are integral part of the agreement and shall be binding upon client and contractor.

## 7.3 Correspondences-Communications-Notices

All correspondence, communication and notices required or permitted under this contract shall be in writing and in

[100]

English language and shall be given (to and from contractors & client) at official address provided in this contract document. The relevant parties shall duly notify change of address.

#### **7.4 Language of Agreement**

Agreement will be prepared in English language.

#### **7.5 Type of Agreement and Contract Price**

The agreement is a unit price contract, the sum of amounts is calculated by multiplying quantity of each work item as indicated in the price list and unit price quoted by the contractor for that work / services items. The payments of each work/services performed by the contractor shall be based on the unit price quoted by the contractor.

#### **7.6 Duties and Taxes**

All taxes, duties, fees, and other contractual costs regarding the signing of the contract shall be borne by the contractor.

#### **7.7 Expenses included in the Contract Price**

All costs associated with the operational management, monitoring and performance of works and services according to the contract, expenses related with fuel, spare parts, maintenance and repair, depreciation of vehicles (solid waste collection and transportation vehicles) etc. and cost of other incidental items, cost of transportation, cost of trollies, polythene bags, containers, dustbins, litterbins and others mentioned in various sections of the contract. Cost of any or all insurances related to and for the purpose of works and cost of all taxes required to be paid by the contractor pursuant to laws of Pakistan. All the above-mentioned costs and those mentioned in the sections of the contract document must be taken into account and included in bid price.

#### **7.8 Intermediate payment / Running Bill**

The contractor shall submit running bill in the first week of every month for the work and services performed by him. The monthly performance shall be checked and determined by the client subject to verification through client representatives and on the basis of such verified determinations by the client payment shall be made within 15

[101]

days after submission of monthly performance bill/running bill by the contractor.

## **7.9 Insurance of work & work places**

The contractor shall be responsible for safeguarding of work and work places. The contractor shall take all insurances required by pertinent legislations and submit the policies thereof to the client. The contractor shall be responsible for any damages cost by its personnel and his subcontractor in respect of work performed under this contract.

## **7.10 Indemnification by Bidder/Contractor**

Contractor shall indemnify, defend and hold harmless the client (SSWMB), its members, officers, directors, employees and representatives from and against any and all claims arising out of or in anyway connected with gross negligence, fraud, or willful misconduct of the contractor or any one acting in contractor's behalf or under its instructions in connection, with this contract and contractor's obligations there under. Any cost or expenses incurred by the contractor pursuant to its indemnity obligation under this clause shall be the sole responsibility of the contractor.

AND

The contractor/bidder shall indemnify the SSWMB and its employees against all losses and claims in respect of:

- a) Death or injury to any person, due to accident.
- b) Loss or damage to any vehicle, plant, property which may arrived out of accident or public riots or in consequences of execution of work and against all claims, proceedings, damages, cost, charges and expenses, whatsoever in respect of or in relation thereto the contractor shall indemnify the client, its officers, employees for any loss claims, demands or lawsuits resulting from defects in contractor's performance during execution of work and services.

## **7.11 Contractor Liability for Indemnification**

The contractor shall be directly responsible for the choice or use of defective or non-compliant tools or machineries deficiencies of performance in works and services, mistakes in sufficient supervision or any failure to fulfill his obligation in accordance with the provisions of this contract and specification and any other losses and damages that my occur due to similar reasons. The contractor shall indemnify

such losses and damages in accordance with pertinent legislation.

## 7.12 Penalties & Cancellation of Contract.

Penalties as noted below shall be imposed if negligence, discrepancies and deficiencies on the part of the contractor to fulfill their obligations on the performance of works and services and the requirements to perform such works and services are found during the period of this contract.

a.	If door to door services is not rendered up to the mark or door to door services is rendered partially and non compliance of the requirement for door to door services mentioned in the technical specifications	Rs.15000/- Per Day Per Zone
b.	If number of manpower provided is found insufficient to perform works and services satisfactorily and not in accordance with the minimum requirement of manpower mentioned in the contract	Rs.400/- Per Day Per Person
c.	If the vehicle used for collection, transportation of solid waste is found inappropriate to the standards of solid waste management system. (Except where SWM vehicles of the procuring agency are utilized.)	Rs.50000/- Per Day Per Vehicle
d.	If numbers of Solid Waste collection and transportation vehicle is deficient to the minimum requirement for successful collection and disposal of MSW as proposed by the bidder in their proposal.	Rs.100000/- Per Day
e.	If the SWM vehicles are not cleaned and washed and found on road in dirty, out of order and unsafe conditions.	Rs.2000/- Per Vehicle Per Day
f.	If leachate is dropped from the vehicle on roads and working routs.	Rs.5000/- Per Vehicle Per Day
g.	Failure to operate machinery and manpower and vehicles during emergency conditions	Rs.500000/- Per Day
h.	Improper collection of Solid Waste from dustbins and collection point including road sides collection.	Rs.1000/- Per Day Per collection point
i.	If debris are found mixed with MSW while taking weights of MSW at designated weighbridge.	Rs.5000 Per Trip
j.	Number of Garbage Containers, litterbins, tipper bins are found less than the requirement as proposed by bidder in their proposal.	Rs.50000/- Per Day

k.	Failure to clean public areas and removal of waste there from.	Rs.10000/- Per Day
l.	Sweepers personals not wearing uniform (Identifiable to procuring agency)	Rs.500/- Per Person Per Day
m.	Failure to collect domestic waste on road sides footpath and streets in 24hours.	Rs.1000/- Per Day
n.	If garbage containers are not cleared properly and timely as required under the contract	Rs.10000/- Per Day
o.	Repeat violation of cleaning and street sweeping services	Rs.20000/- Per Day
p.	On open transportation of garbage	Rs.5000/- Per Vehicle Per Day
q.	If polythene bags for door to door collection to the residents of the area are not provided as mentioned in the contract.	Rs.5000/- Per Day Per Zone
r.	If the works and services to be delivered are not started within the stipulate time i.e. 15 days after signing of agreement.	Rs.50000/- Per Day
s.	If dumping of garbage and other solid waste to any other place other than the approved disposal site.	Rs.10000/- Per Day
t.	Segregation of MSW is prohibited under front end collection plan. If segregation takes place by scavenger or other persons at collection point, dustbins sites, at containers and stage of door to door collection.	Rs.25000/- Per Dustbin Per Month

If the procuring agency finds any non conformity/contrary to the job description defined in this document. The contractor shall be bound given a chance to bring his work standards to the satisfaction level of the procuring agency and if the non conformity is not corrected within the time limit granted by the procuring agency, the penalties will be imposed on the contractor.

If non conformity continuous, despite the penalties the procuring agency may terminate the agreement and damages to the procuring agency due to these non conformities of the contractor shall be recovered from his performance securities.

### 7.13 Resolution of Dispute

a) **Amicable Settlement:** If any dispute and differences arises between procuring agency and contractor in connection or arises out of this contract, the procuring agency and contractor shall attempt to settle such



disputes (within the provisions of the contract) through discussion in the first instance. The designated representatives of procuring agency and contractor shall promptly use their best efforts in good faith to reach a reasonable and equitable resolution of such dispute.

- b) Settlement through Arbitration:** After coming into force of the procurement contract dispute between the parties to the contract shall be settled by complaint redressal committee defined in SPPR 2010 amended 2013 or through arbitration in accordance with arbitration Act. 1940 and Laws for the time being in force in Islamic Republic of Pakistan.

## **7.14 Code of Conduct**

The contractor that attempts to get secret information to conclude illegal agreements with the competitors or to effect the procuring agency during the phase of tender inspection, evaluation and comparison shall result in their offer cancellation and this situation shall be penalized administratively.

The contractor shall act objectively and trust worthy in accordance with rule of business ethic. It should avoid making public announcement regarding the works and services without prior permission and authorization of the procuring agency.

The contractor and its staff shall not perform their obligation against the procuring agency and they shall not accept any type of the contributions that may affect their decisions at execution, performance, reporting at the works and services.

Assets of the procuring agency shall not be utilized without appropriate documentations and valid permissions in accordance with the contract. Procuring agency's assets shall not be used for personal interest.

Contractor is responsible to ensure that its employees keep good behavior with public during execution of services in the area. Contractor shall be constructive with the public and shall not behave in a disgusting manner to the public. The services that are to be performed are to serve the public. Bribes, tip or commission offered as incentive or reward to any person shall be considered as fraud which is strictly forbidden under this contract. If the contractor is found guilty under forbidden clauses of the contract, action shall be taken accordingly.

### **7.15 Time extension in conditions, situations of force majeure**

Time extension shall be granted to the contractor in condition and situation of force majeure, but such condition and situation shall be certified by procuring agency and competent authorities.

The contractor shall not be liable for any failure or delay in performance of his obligation under the contract which is caused by circumstances beyond his control under force majeure.

Time extension shall be granted to the contractor in case where the procuring agency fails to fulfill its obligation regarding performance of the contract due to any reason not related with the contractor.

### **7.16 Access to the service area**

Procuring agency and their authorized representative shall have access at all time to service area, offices of the contractor and any document, materials and record and accounts relating to the works and services performed under the contract for the purpose of inspections and reviews.

### **7.17 Termination upon notice by procuring agency**

Procuring agency may terminate the contract upon 30 (thirty) days prior written notice to contractor in the event

- i) That contractor violets and consent to a violation of any law applicable to the services, where the violation may have a material adverse effect on the management and operation of services under the contract.
- ii) procuring agency may terminate the contract immediately upon the bankruptcy of the contractor or in other conditions as specified in the various clauses of the contract.

### **7.18 Termination by contractor**

The contractor may also terminate this contract upon 30 (thirty) days prior written notice to procuring agency in the event

- i) That procuring agency's failure to perform its material obligations under this contract in timely manner. If the

failure is not addressed properly by the contractor for redressal in 30 (thirty) days, but in no case such redressal is made beyond 90 (ninety) days except if procuring agency continuous to pursue for redressal of such failure.

### **7.19 Work in emergency**

The contractor in case of emergency may be called upon to provide works and services as per scope of work under this contract and the contractor shall comply with such emergency orders of procuring agency without excuses. Non compliance of the contractor shall lead to disqualification and will be dealt accordingly

### **7.20 Payment of Income Tax**

The contractor, sub contractor and their employees shall be responsible for payment of all taxes and all type of income taxes, other taxes and taxes on income arising out of the contract under law of the land. The rate and prices quoted by the contractor shall be deemed to cover all such taxes.

### **7.21 Local Taxation**

The price coated by the contractor shall include all customs duties, import duties, business taxes income and other taxes that may levied in accordance with law and regulation in force in Pakistan as of the date, 28 days prior to the closing date for the submission of bid and taxes on vehicle machinery tools acquired for the purpose of the contract and on services performed under the contract, nothing in the contract shall relived the contractor from his responsibilities to pay taxes that may levied in respect of the contract.

### **7.22 Liability of the contractor**

The contractor and their sub contractor or assigns shall follow strictly all relevant labour laws including workman's compensation act, and the procuring agency fully indemnified for all claims arising out of any damage by the contractor, his sub contractors or assigns and labour employed by them.

**7.23 Price List and B.O.Q.**

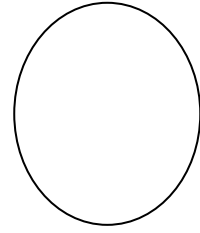
<b>Item No</b>	<b>Description of Item</b>	<b>Unit</b>	<b>Quantity</b>	<b>Offer Unit Price (US \$) In Figure &amp; in Words</b>	<b>Total Price (in US \$) In Figure &amp; in Words</b>
1.	Providing for and <b>collection of MSW waste, sweeping waste including cost of door to door collection</b> , management, operational, monitoring cost and cost of machineries, labours, sweepers, coolies, drivers, transportation, etc, cost of all taxes and other incidental cost as per the contract document.	Tons	322357 Per Year		
2.	Providing for and <b>manual sweepings of roads, streets, footpaths, green belts, medians, roundabouts and open spaces</b> including management operational, monitoring cost, labour, drivers, coolies cost and cost of tools and other incidental cost and cost of all taxes as per contract document.	Kilo Meter	315464 Kilo Meter Per Year		
3.	Providing for and <b>mechanical sweeping of roads</b> including management operational, monitoring cost, labour, drivers, coolies cost and cost of tools and other incidental cost and cost of all taxes as per contract document.	Per Kilo Meter	38030 KM Per Year		
4.	Providing for and <b>mechanical washing of main roads</b> including management operational, monitoring cost, labour, drivers, coolies cost and cost of tools and other incidental cost and cost of all taxes as per contract document.	Per Kilo Meter	600 KM Per Year		
5.	Providing and supplying at site of works litterbins, metal buckets, metal container (tipping type) compatible with Solid Waste Machinery including painting of bucket, bin and container in desired color including cost				

Sindh Solid Waste Management Board (NIT-15)

	lettering as directed, cost of transportation, manufacturing etc. complete				
	a) Plastic Litterbin as per required standard having bin cubage of 0.24 to 0.3 Meter Cube	Each	2500 Nos		
	b) Standard Metal Bucket of bin cubage 1. 0.8 to 1.4 Meter Cube 2. 1.4 to 2 Meter Cube 3. 3.4 to 4 Meter Cube	Each Each Each	500 Nos 500 Nos 500 Nos		
	c) Metal Container of container cubage 1. 6.6 Meter Cube 2. 10 Meter Cube 3. 12 Meter Cube 4. 16 Meter Cube	Each Each Each Each	20 Nos 30 Nos 30 Nos 60 Nos		
6.	Providing for and collection and transportation of offals and other sacrificial animal waste (on eve of Eid ul Azha) from door steps, roads, streets, lanes, open ground i.e. from the whole area under contract including cost of collection, transportation and disposal to landfill site (Jam Chakro Landfill site) including cost of management, monitoring, labours, machinery, incidental cost and cost of all taxes etc. complete. This is one time activity in a year.	Ton	5000 Ton Per Year		

Per Year of cost of work and services for item listed in price list / B.O.Q. in Figures \_\_\_\_\_

Per Year of cost of work and services for item listed in price list / B.O.Q. in wards \_\_\_\_\_



Seal & Signature

Name of Contractor/Bidder \_\_\_\_\_

Address: \_\_\_\_\_

Landline & Cell # : \_\_\_\_\_

Fax # : \_\_\_\_\_

e-mail address : \_\_\_\_\_

## 7.24 Form of BID

### FORM OF BID

Bid Reference No. \_\_\_\_\_  
(Name of Contract/Work)

To:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

1. Having examined the bidding documents including Instructions to Bidders, Bidding Data, and Conditions of Contract, Specifications and Bill of Quantities and Addenda Nos. \_\_\_\_\_ for the execution of the above-named work, we/I, the undersigned, offer to execute and complete the work  
and remedy any defects therein in conformity with the Conditions of Contract, Specifications, Bill of Quantities and Addenda for the sum of US Dollar  
\_\_\_\_\_  
(\$ \_\_\_\_\_) or such other sum as may be ascertained in accordance with the said conditions.
2. We/I understand that all the Annexure attached hereto form part of this bid.
3. As security for due performance of the undertakings and obligations of this bid, we/I submit herewith a bid security in the amount of US Dollar \_\_\_\_\_ (\$ \_\_\_\_\_) drawn in your favour or made payable to procuring agency and valid for a period of \_\_\_\_\_ days beginning from the date, bid is opened.
4. We/I undertake, if our bid is accepted, to commence the works and to complete the whole of the works comprised in the contract within the time stated in the contract document.
5. We/I agree to abide by this bid for the period of \_\_\_\_\_ days from the date fixed for opening the same and it shall remain binding upon us and may be accepted at any time before the expiration of that period.
6. Unless and until a formal Agreement is prepared and executed, this bid, together with your written acceptance thereof, shall constitute a binding contract between us.
7. We do hereby declare that the bid is made without any collusion, comparison of figures or arrangement with any other bidder for the works.

We understand that you are not bound to accept the lowest or any bid you may receive.

9. We undertake, if our/my bid is accepted, to execute the Performance Security referred to in Conditions of Contract for the due performance of the Contract.

10. We confirm, if our bid is accepted, that all partners of the joint venture/consortium shall be liable jointly and severally for the execution of the Contract and the composition or the constitution of the joint venture/consortium shall not be altered without the prior consent of the procuring agency.

*(Please delete this in case of Bid form a single bidder)*

in the capacity of \_\_\_\_\_ duly authorized to sign Bids for and on behalf of

Dated this \_\_\_\_\_ day of \_\_\_\_\_ 20 \_\_\_\_\_

Signature: \_\_\_\_\_

\_\_\_\_\_  
(Name of Bidder in Block Capitals)  
(Seal)

Address: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Witness:

Signature: \_\_\_\_\_

Name: \_\_\_\_\_

Address: \_\_\_\_\_  
\_\_\_\_\_

Occupation: \_\_\_\_\_



# Section VIII

## Annexure

## **Section VIII**

### **Annexure**

<b><u>Gulshan Zone</u></b>
Annexure-1 MSW Details in Each Union Council
Annexure-2 Statics of House Hold Unit
Annexure-3 Road, Footpath, Median & Open Spaces
<b><u>Jamshed Zone</u></b>
Annexure-4 MSW Details in Each Union Council
Annexure-5 Statics of House Hold Unit
Annexure-6 Road, Footpath, Median & Open Spaces
Annexure-7 Existing SW Machinery in Gulshan Zone
Annexure-8 Existing SW Machinery in Jamshed Zone
<b><u>Forms</u></b>
Annexure-9 Performance Guarantee format
Annexure-10 Integrity Pact.
Annexure-11 Format for Contract Agreement