



NO.MO(I&S)/BWN/ 183

MUNICIPAL COMMITTEE

BAHAWALNAGAR

Dated 15-08-2022

Phone No.063-9240252

Email:MCBWN2017@gmail.com

To,

M/S Colibrative Heavy Industries (Pvt) Ltd.,
Chowk Saeed, Sagian Bypass Road, Shadara,
Kot Abdul Malik, Lahore.
042-37306501

Subject: WORK ORDER.

Name of Work "PROVISION OF SOLID WASTE MACHINERY & EQUIPMENT FOR IMPROVEMENT OF SOLID WASTE MANAGEMENT IN BAHAWALNAGAR CITY (MONITORING & VEHICLE TRACKING SYST WITH 03 YEAR SERVICE)"

Rs. 45,00,000 (Forty Five Lac Rupees only)

Reference: Your tender dated 21-05-2022 for the work cited above being lowest is approved by the competent authority at a cost of Rs. 45,00,000/- (Forty Five Lac Rupees only) with completion period upto 01-02-2023 commencing from the dated issuance of this letter on following rates, terms and conditions subject to strict financial regularities and codal formalities. .

Sr. No	Description of items	Qty	Unit	Rate Approved	Amount
1	Monitoring & vehicle Tracking Syst with 03 year service Specification The scope of works shall include the design, supply, installation, testing and commissioning of Vehicle Tracking Monitoring System (VIMS) complete with associated electrical and communication wiring works, control equipment, LED video display unit, works stations, mounting brackets and accessories. The Contractor shall be responsible for providing complete turnkey system solution including auxiliary equipment, and all such equipment with accessories shall be deemed to be included in the scope of Contractor and no extra payment shall be made to the Contractor for these. The system shall include Hardware and Software of Vehicle Tracking, wiring, termination, electrical boxes, and all other necessary material for a complete operating system in Control rooms. The bidders may raise the queries for any clarification, missing information or ambiguity if any, within one week after issuance of bidding documents. Any work to be carried out by the owner / Main contractor, should be mentioned clearly along with the bid, otherwise no	01 job	18-Nos	45,00,000/-	45,00,000

claim against extra work shall be acceptable. Specification, Drawings and BOQ etc. should be read carefully to comply with specified loads, serving landings and other general and special safety features. Any deviation from specification / BOQ should be mentioned well in time before submission of bid.

The Hardware and Software of Vehicle Tracking and Monitoring System (VTMS) works are to be performed; the requirements given in the Technical Specification shall be fulfilled. The Contractor shall be responsible and provide the following:

- Hardware and Software of Vehicle Tracking, and Monitoring System (VTMS).
- Hardware and Software of Tracking, and Monitoring System (VTMS) to remotely control, and transmit information regarding status of each device from the Site to Control Room
- Operator Workstation with LED Video Display Unit at the Central Control Room
- All software packages shall be provided in original installation media along with their licenses
- Preparing an Engineering Design Report covering, at least, the following subsystems:
 - 1) Detailed Construction Drawings and As-Built drawings for the Hardware and Software of Vehicle Tracking and Monitoring System (VTMS)
 - 2) Schematics and interconnection diagrams showing Hardware and Software of Vehicle Tracking and Monitoring System (VTMS) controllers and other elements to monitor and control the processes outlined above.
 - 3) The exact quantities and types of hardware and software required
 - 4) Technical details of the hardware and software of the complete systems
 - 5) Schematic drawing of the complete systems
 - 6) Layout drawings.
 - 7) Cable schedules and routing plan.
 - 8) Detailed description of the data acquisition software, user configurable functions and software features to be provided.
 - 9) Complete details, brochures and pictures of the proposed area.

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10) Installation, testing and commissioning procedures and methodology.

- Procure, transport and deliver equipment and hardware to site, after approval of the above report(s) by the Engineer.
- Design, install, test and commission of Hardware and Software of Vehicle Tracking and Monitoring System (VTMS) in accordance with the procedures given in the engineering design report.
- Provide training to the minimum four personnel nominated by Employer for 15 days. Bidder shall submit with his bid the following Documents/Data for all system equipment including Hardware and Software of Vehicle Tracking and Monitoring System (VTMS).
 - Brochures and data sheets of each equipment
 - Block diagram of Hardware and Software of Vehicle Tracking and Monitoring System (VTMS)
 - Test standards and design
 - Backup calculations showing that Hard Disks shall be able to record data of all systems for a period of two years.
 - International Standard Reports/Certificates

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Standards

Materials/Equipment shall be designed, manufactured, tested and installed according to relevant IEC/ISO/ITU/IN/CE Recommendations. Where no such Recommendations have been issued to cover a particular subject then a recognized international standard shall be applied. The latest edition and amendments shall apply in all cases.

The Bidder shall state in his bid the standards and codes of practice which he proposes for any items of system or equipment not covered by IEC/ISO/ITU/IN/CE Recommendations. If required by the Employer, the Contractor shall submit two English language copies of any standard or code of practice. Equipment and design shall comply with international USA / European or Any ADB eligible member Country standards.

General Specifications

All the vehicles described above shall be equipped with a Vehicle Tracking and Monitoring System (VTMS), as a

minimum being capable to monitor vehicle routes, speed of travel, distance covered harsh braking, mileage in control room etc

Through VTMS all the operational vehicles and their working shall be easily recorded and monitored. By using this web application, the Client shall be able to monitor the operational vehicle route and speed to keep a strict eye on the vehicles. The Vehicles shall be equipped with approved tracking device operational (fees paid) for the year in which vehicle is supplied to the Employer, routing transmitter for tracking system, and other instruments such as for Fuel Level, Battery Condition & Water Temperature and Tachometer etc.

All the vehicles shall be equipped with air-conditioning system, weight sensors and wi-fi compatibility approved by the Engineer/Employer. All the equipment/machinery shall be equipped with Vehicle Trip Counting System (VTCS) being automatically operated without any human involvement. This web-based system shall be accessible through internet.

Vehicles shall be equipped with a beacon light (yellow, commercial quality) on roof of driver's cab, to be operated from inside the cabin.

Warranty

The Contractor shall provide warranty for all equipment for a period of one (1) year through authorized local distributor commencing the hand-over and acceptance date to the Employer. No equipment shall be accepted without warranty certificate from the manufacturer (OEM). It shall cover all costs for warranty service, including parts replacement, labour, prompt field service, pick-up, transportation, and delivery. No extra cost shall be admissible for Warranty services.

Functional Description

Vehicle Tracking System

The Vehicle tracking system shall be installed at every moving vehicle. The Vehicle Tracking System should have the following features

- Fleet management solution
- Satellite tracking system (GPS) with enhance real time GPRS connectivity
- Solution with nationwide coverage
- 24x7 location on call
- Multiple users' logins
- Geo fence alert
- Battery disconnect alerts

• Vehicle immobilization in case of emergency

- Activity report
- Activity summary report
- Geo fence in/out report (multiple fences)
- Stop report
- Trip wise report
- Mileage report
- Harsh breaking report
- Over speed report
- Live status page (all vehicles live status on one page)
- Bird eye view (graphical reporting)
- Oil change alert (system generated intimation by email) based on tracker kilometers
- Daily, weekly, monthly, yearly reporting
- Vehicle specific reporting
- Raw data availability (for in-house customized reporting/ data-processing)
- Route/geo-fence violations
- Data shall be provided to company in e-format, as per agreed standards & format
- Complete activity report
- Reports will be fetched against company, category, vehicle type, and town against given time period
- Summary option shall be for day, week, month
- Company geo fence defined in our report
- Trip report detail (during trip start from parking site, till pick container then dump at dumping site) travel time, stop time, number of container pick, mileage and other fields
- Container visited summary
- Dumping site visited report
- Workshop visited report
- Continues driving report
- Area wise speed violation report

Fuel Kit

The fuel kit shall be installed at every moving vehicle. The Fuel Kit should have the following features

- Online fuel monitoring through web portal
- Fuel injection/refilling report (liters)
- Fuel consumption vs driven km's report
- Fuel monitoring report
- Online dashboard

Operator Workstation

The minimum configuration of the Operator workstation PCs and the LED Monitors shall be an IBM compatible

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server computer based on the currently prevailing version of the Intel Core i7 microprocessor. One number Operator workstation shall be installed at control rooms. The minimum configuration of the server shall be as per the following minimum specifications:

- Core i7 8th Generation processor latest version
- Intel series chipset Q370
- 16GB RAM- DDR 4
- 1TB Internal Hard disk drive 7200 RPM 3.5inch
- HDMI port for connection to the High-quality monitor
- DVD/RW drive,
- 24" LED monitor FHD with HDMI and VGA
- R/W combination CDR and DVD, Keyboard, Mouse and Peripheral Interface Cards
- Latest MS WINDOWS 10 Professional 64-bit pre-installed Operating System and associated software.
- All components/equipment shall be same brands and shall be OEM Manufacture

4K 55" LED VDU

The 4k 55" LED VDU (video display unit) shall be used to show and monitor all the vehicle routes, speed of travel, distance covered, harsh braking, mileage etc. One number 4k 55" LED VDU shall be installed at control rooms. The minimum configuration of the 4k 55" LED VDU shall be as per the following minimum specifications

- ✓ • 4k Resolution with HDR (High Dynamic Range),
- 8.3 Million Pixel RGB UHD,
- Quad Core Processor,
- Ethernet LAN Port with wireless Network Card built-in,
- All accessories, wall mounting brackets, Remote, user manual,
- Original manufacturer's with warranty card
- Vehicle Tracking and Monitoring System software shall be installed in Control Room.

Total=

45,00,000

TERMS AND CONDITIONS:

1. The contractor has to submit copy of memorandum / partnership deed attested by a competent authority and Power of Attorney in Original in favour of the authorized partner if any, to sign the agreement, receive the payment on your behalf and carry out instructions of the Engineer in-Charge.
2. The work shall be carried out strictly according to the provision made in the technically sanctioned estimate.
3. No claim for increase or decrease in scope of work shall be entertained.

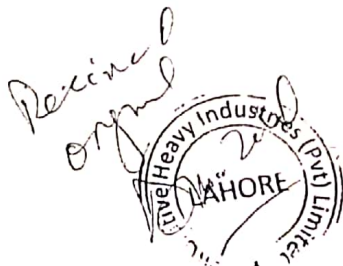
4. No claim / payment of increased in the rate of material or above in the market due to any reason will be claimed/entertained.
5. The Municipal Committee, Bahawalnagar will not accept any responsibility for loss accrued due to interruption of work as result shortage or delay in supply of material and or other input required for completion of work.
6. You will have to complete the work within time limit otherwise the penalty shall be imposed as recommended by Engineer incharge. This will however not affect the other conditions of your tender agreement.
7. No premium on Non schedule items is allowed and decision of the competent authority in this respect will be final and binding upon you.
8. The rates approved are for this specific project only. There are not to be applied on other work anywhere else.
9. No deviation of quantities of items to be executed by the contractor shall be made without prior approval of the competent authority.
10. It will be exclusive responsibility of the contractor to complete the work according to specifications.
11. As you accept the above cost of bid according to quoted rates, terms and conditions, you should contact the concerned Sub-Engineer for getting demarcation for the commencement of work immediately.
12. You shall execute the agreement in the office of undersigned and, shall be signed by you within a week positively, failing which no payment for the work done will be made.
13. Payment will be made after clearance of the consultants as per policy in vogue and no secured advance / Advance payment will be made as per clause approved bid document.
14. You are liable to abide by all terms and condition contained in Bid/ Contract from, work rules and also / instructions issued time by time as per Local Govt. Department Govt. of the Punjab.
15. Manufacturer shall be responsible to receive vehicle chassis from Municipal Committee, Bahawalnagar and after completion of work shall return it to the office of Municipal Committee, Bahawalnagar.
16. Pre inspection of machinery will be conducted prior to delivery.

15-08-22
Dy. Municipal Officer (I&S)/XEN
MUNICIPAL COMMITTEE
Bahawalnagar

No & Date even.

A copy is forwarded for information to

1. The Administrator / ADC(R), Bahawalnagar.
2. The Director Project (PCP), PMDFC, Lahore.
3. The Team Leader, JERs Consultant, Lahore.
4. The Chief Officer, Municipal Committee, Bahawalnagar.
5. The Dy. Municipal Officer (Finance), Municipal Committee, Bahawalnagar.
6. The Resident Deputy Director Audit, Municipal Committee, Bahawalnagar.
7. The Sub Engineer (I&S), Municipal Committee, Bahawalnagar.



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