

## TERMS OF REFERENCE

### PREVENTIVE MAINTENANCE OF TWO (2) UNITS OF BAGGAGE X-RAY MACHINE (XRC 5030) LOCATED AT THE AYUNTAMIENTO BUILDING FOR C.Y. 2025

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| BRIEF DESCRIPTION                         | : | Quarterly Preventive Maintenance of the Two (2) units of XRC 5030 Baggage X-ray Machine located at the ground floor lobby entrance and basement lobby entrance/exit of the Ayuntamiento Building.  |
| DURATION OF CONTRACT                      | : | One (1) Calendar Year<br>Four (4) Quarterly Preventive Maintenance per Year  |
| APPROVED BUDGET FOR THE<br>CONTRACT (ABC) | : | Ninety Thousand Pesos ( <i>Php90,000.00</i> ) per year<br>Twenty-Two Thousand Five Hundred Pesos<br>( <i>Php22,500.00</i> ) per quarter<br>( <i>Inclusive of all applicable government taxes</i> ) |

#### I. SCOPE OF WORK AND SERVICES

1. To conduct Quarterly Preventive Maintenance Service of the X-Ray Machines to maintain proper working condition. The schedule of Preventive Maintenance Service shall be coordinated with end-user.
2. The contractor shall maintain and repair the software/program, systematically examine, clean, lubricate, adjust and repair/replace parts of the machines, however any replacement parts found defective shall be quoted separately.
3. The contractor shall supply and have standby technician with tools and equipment if necessary to perform the needed repair.
4. The contractor shall respond immediately or within twenty-four (24) hours to the end-user's report of any X-Ray Machine malfunction without additional charge either by call or by actual inspection.
5. The contractor shall provide maintenance records of repair work performed, preventive maintenance activities, spare parts utilized and any modifications to the equipment.
6. General Inspection of the X-ray Machine Components and Accessories
  - 6.1. Perform visual inspection of X-ray Machine components such as:
    - 6.1.1. External Uninterruptible Power Supply (UPS),
    - 6.1.2. Conveyor Belt,
    - 6.1.3. Operation Key Switch,
    - 6.1.4. Monitors, Mouse, Keyboard,
    - 6.1.5. Advanced Operator Control Panel (if applicable),
    - 6.1.6. Indicator Lights, and Emergency Stop Buttons,
    - 6.1.7. Entry and Exit Curtains, Entry and exit rollers.
  - 6.2. Conduct Physical Inspection on machine peripherals the
    - 6.2.1. Personal Computer,
    - 6.2.2. Power Supplies,
    - 6.2.3. Internal UPS,
    - 6.2.4. Programmable Logic Controller (PLC),

- 6.2.5. Generator Control Switch,
- 6.2.6. X-ray Generator,
- 6.2.7. AOCP Board (if applicable),
- 6.2.8. Internal Sensors,
- 6.2.9. Interlock Switches,
- 6.2.10. Connectors and Cords.

## **7. Checking of Power Supplies**

- 7.1. Measurement of internal and external UPS Voltage Output
- 7.2. Measurement of Power Supply Voltage Input and Voltage Outputs

## **8. Cleaning and Functional Testing of the following:**

- 8.1. Operator Key Switch
- 8.2. Monitor, Mouse, Keyboard and AOCP
- 8.3. Indicator Lights and Emergency Stop Buttons

## **9. Functional Testing of Programmable Logic Controller (PLC)**

- 9.1. Verification of PLC Output

## **10. Cleaning and Functional Testing of Personal Computer (PC)**

- 10.1. Functional testing of all hardware components, temperature capabilities, XIS Program Version and the image interpretation.

## **11. Function Testing and Tuning of X-ray Generator and Linear X-ray Detector Array**

- 11.1. Adjustment of the KV and mA rating and LXDA alignment if the excitation of the diodes or are weak.

## **12. Belt Adjustment**

- 12.1. Belt adjustments for proper belt tracking.

## **13. Overall Cleaning**

# **II. OTHER RESPONSIBILITIES OF THE SUPPLIER/CONTRACTOR**

The Contractor shall submit the following requirements:

- a. DTI/SEC registration certificate
- b. Mayor's Permit
- c. PhilGEPS Registration Certificate
- d. The Contractor shall submit a written undertaking that they will exercise sufficient supervision and that they have qualified service technician personnel, equipment, and materials to address all of BTr's issues/concerns effectively. Documents indicating the name and designation of their technician shall be submitted to BTr.

# **III. RESERVATION CLAUSE**

The BTr reserves the right to reject documents which do not comply with the requirements, waive any formalities of documents or consider any submission of documents as substantial compliance reject any and all bids; declare a failure of bidding, annul the bidding process, or not to award the contract, without thereby incurring any liability to the affected bidder or bidders or if the funds/allotment for the program/project/activity has been withheld or reduced through no fault of the BTr.

The BTr assumes no responsibility whatsoever to compensate or indemnify bidders for any expenses incurred in the preparation of the bid.

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