

TERMS OF REFERENCE

I. PROJECT TITLE:

SUPPLY OF LABOR, MATERIALS, TOOLS, EQUIPMENT AND ENGINEERING SUPERVISION FOR THE REPLACEMENT OF DEFECTIVE BOOSTER PUMP CONTROLLER SERVICING AYUNTAMIENTO BUILDING

II. DESCRIPTION:

Last March 4, 2024 (Monday), at around 3:30 pm, the FMD received complaints of low water pressure on the third and fourth floors. FMD technical personnel with our outsourced provider immediately checked the VSD controller. Upon checking the CPS Controller, we discovered that the pump rating is below the required pressure demand on the higher floors of the building.

Replacement of the Analog Input of the Constant Pressure System Controller, VFD Keypad, and transmitter to restore normal operation. This replacement is essential to ensure the system's capability to regulate water pressure accurately and safely, mitigating the risk of potential damage to the water pipelines and ensuring uninterrupted supply to the building's higher floors of the Ayuntamiento Building.

III. APPROVED BUDGET FOR THE CONTRACT (ABC):

ONE HUNDRED NINETY-SEVEN THOUSAND, FIVE HUNDRED PESOS (PHP 197,500.00)
Inclusive of all applicable tax.

IV. MATERIAL SPECIFICATIONS

<u>ITEM</u>	<u>QTY</u>	<u>UNIT</u>	<u>DESCRIPTION</u>
1	1	Unit	Switching Power Supply 24V/5.0A (120W), 85~264Vac, 1 Phase (Aluminum Case) Din Rail <i>Preferably: DELTA DRL-24V120W1EN</i>
2	1	Unit	PLC MPU Sa2 Series 8di/4do, Relay Output <i>Preferably: DELTA DVP125A211R</i>
3	1	Unit	PLC Expansion Module 8di/8do, Relay Output for SS2/SA2/SX2/SC/SV2/SE <i>Preferably: DELTA DV165P11R</i>
4	1	Unit	PLC Expansion Analog Output Module 4ch Ao for SS/SA/SX/SC/SV 2 nd Gen <i>Preferably: DELTA DVP04DA-S2</i>
5	1	Unit	PLC Expansion Analog Output Module 4ch Ai for SS/SA/SX/SC/SV 2 nd Gen <i>Preferably: DELTA DVP04DA-S2</i>

6	1	Unit	HMI Dop-100 Series 7" (800x600 color Tft LCD 256mb Rom/Ram, Cortex-a8 (800mhz) Ethernet, 2 Com Port +1, SD Card, USD Host/client) <i>Preferably: DELTA DOP-107EG</i>
7	1	Unit	PLC Accessory Communication 3m Cable PC (Female DB9) to PLC (Male 8pin Mini-din) <i>Preferably: DELTA UCMS030-01A</i>
8	1	Unit	Chipset (LC Accessory USB to RS-232-Converter) <i>Preferably: DELTA UMC-211</i>
9	1	Unit	Switching Power Supply 24V/5.0A (120W), 85~264Vac, 1 Phase (Aluminum Case) Din Rail <i>Preferably: DELTA DRL-24V120W1EN</i>

V. SCOPE OF WORK

1. Mobilization of manpower, tools, and equipment.
2. Engineering supervision of the project.
3. Lock out/ tag out of affected equipment.
4. Coordinate with the Facilities Maintenance Division on the activity to be done.
5. Check and verify VFD and CPS controller Parameters and programming prior the activity
6. Verify the controller if it is on Static or Manual/Bypass
7. Conduct replacement of parts and Installation of Booster pump controller
8. Calibration of installed parts and integration of Existing parameters and programming System
9. System re-process.
10. Verify work completion and assess prior to the startup of the equipment
11. Testing and Commissioning
12. Cleaning of the working area
13. To submit a warranty certificate

VI. CONTRACT DURATION:

The project must be completed within Thirty (30) calendar days from the Purchase Order issuance.

VII. WARRANTY:

One (1) year against material defects and faulty workmanship.

VIII. RESPONSIBILITIES OF SUPPLIER / CONTRACTOR:

- a. Must have at least five (5) years of existence in the business.
Nature of Business: Supply and Installation of Booster Pump Parts
- b. Contractor must have a Certificate from the dealer or manufacturer that it is authorized to repair or perform maintenance work for subject equipment – *DELTA Variable Frequency Drives*

IX. 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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Noted by:

Approved by:

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ATTY. RAYMUNDO U. TAN

Director III

Administrative Service