



Date: November 27, 2020

Title: Mechanical & Electrical Upgrades, New Delhi, India

Solicitation Number: 21-175731

The following Questions & Answers is in link with the Request for Proposal document mentioned above.

Questions & Answers # 3

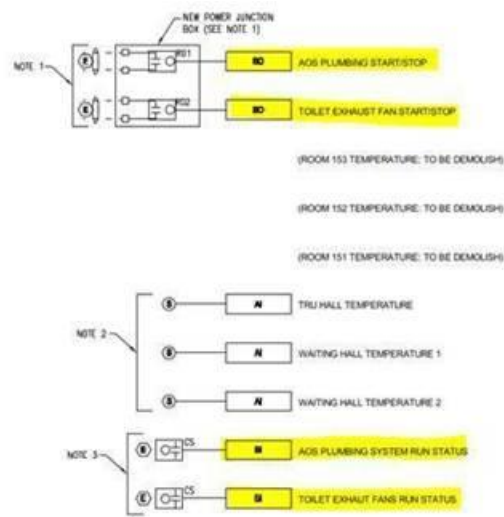
Q26. “We understand that Johnson Controls is the specified vendor and vital part of the tender requirement. The quantity of the Toilet Exhaust Fans and AOS Plumbing system is not clear from HVAC BOQ & from drawings. Please provide quantity for the same. Also please confirm the quantity of the field devices.”

A26. Except for RTU-x’s points, which are typical, the physical point list shown on the control drawing is exhaustive. So there is respectively only one (1) occurrence of “Toilet Exhaust” and one (1) occurrence of “AOS Plumbing”. Each occurrence having 1 BO and 1 BI.

Accordingly, the “MISCELLANEOUS COMMANDS AND MONITORING POINTS” drawing shows the only 2 BO and 2 BI for these occurrences.

AI	RTU-x SUPPLY AIR TEMPERATURE
AI	RTU-x ZONE TEMPERATURE
AI	RTU-x POWER SUPPLY CURRENT LOAD
AI	RTU-x POWER SUPPLY TENSION
BO	AOS PLUMBING START/STOP
BO	TOILET EXHAUST FAN START/STOP
AI	TRU HALL TEMPERATURE
AI	WAITING HALL TEMPERATURE 1
AI	WAITING HALL TEMPERATURE 2
BI	AOS PLUMBING SYSTEM RUN STATUS
BI	TOILET EXHAUST FANS RUN STATUS

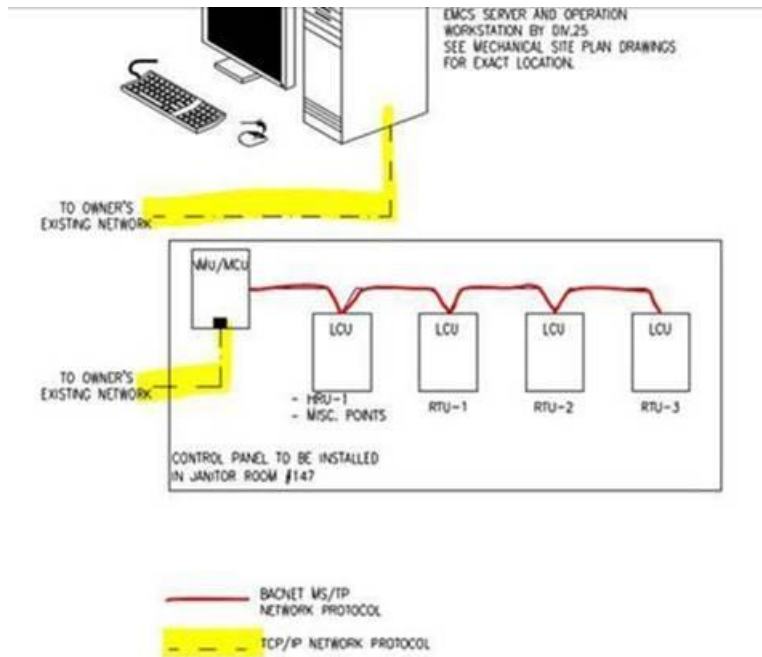
PHYSICAL POINT LIST



Q27. “As mentioned in the drawings BACNET MSTP network protocol needs to be used. Please confirm whether we need to use MSTP network or IP network for DDC controllers.”

A27. As shown in the BMS Network Architecture, the sub-network between LCU DDC controllers has to be BACnet MS/TP (running on RS-485 serial bus). Only the NMU and the computer workstation have to be connected using TCP/IP protocol.

The number of DDC controllers needed are also shown on the BMS Network Architecture:
1 NMU; 4 LCUs.



BMS NETWORK ARCHITECTURE

All other conditions and requirements remain unchanged.