SPECIAL SPECIFICATION

6634

Integration of ATM Video Coder/Decoder (CODEC) System

1. **Description.** This Item shall govern for the integration of the Contractor installed ATM video encoder with existing ATM Video CODEC System and communications network.

The existing ATM Video CODEC System manufactured by others has been installed and is currently in operation at locations shown on the plans.

The materials and equipment to be furnished and installed and the work to be performed shall be as detailed in the corresponding special specifications in the contract and as directed by the Engineer.

2. **Materials.**

   (1) **General Requirements.** All materials furnished, assembled, fabricated or installed under this Item shall be new, corrosion resistant and in strict accordance with the details shown on the plans.

   The integration of the ATM Video CODEC System shall include, but not be limited to, the following:

   Review of the design and operation of the existing ATM Video CODEC System. Available documentation for the existing ATM Video CODEC System will be supplied by the Department.

   Modification and/or addition of equipment to interface the proposed ATM Video Encoder with existing ATM Video CODEC System to produce one completely compatible ATM Video CODEC System. No hardware changes shall be allowed on the existing equipment without prior approval of the Engineer.

   Integration of the proposed Contractor furnished ATM Video Encoder with the existing ATM Video CODEC System to produce one fully operational ATM Video Codec system.

   Any integration software required shall be supplied either by the Contractor, as approved by the Engineer, or by a third party developer approved by the Engineer.

   Conducting subsystem tests of the integrated ATM Video CODEC subsystem.

   Providing full documentation of the above work performed.

   The Contractor shall be responsible for correcting all problems with existing ATM Video CODEC System and/or software, and repairing any ATM Video CODEC System
damage, arising from the integration of the proposed ATM Video Encoder with the existing ATM Video CODEC System.

(2) **Electrical and Mechanical Requirements.** The Contractor shall furnish and install all cables necessary to interconnect the existing ATM Video CODEC System with the proposed ATM Video Encoder.

All connectors, terminal blocks, panels and surge arrestors shall be provided for the added wiring as shown on the plans and as directed by the Engineer.

Any special interface equipment or software required to interface the proposed ATM Video Encoder with the existing ATM Video CODEC System, at location(s) directed by the Engineer, shall be included in this bid Item.

Any equipment added for this bid Item shall comply with Special Specification Item, "ATM Video Coder/Decoder (CODEC) System".

(3) **Environmental Design Requirements.** Any material used or equipment provided shall meet the environmental requirements described in Special Specification Item, "ATM Video Coder/Decoder (CODEC) System".

3. **Construction Methods.**

(1) **General.** Any addition of equipment shall employ design and construction utilizing the latest available techniques with a minimum of different parts, subassemblies, circuits, cards and modules to maximize standardization and commonality.

The equipment shall be designed for ease of maintenance. All component parts shall be readily accessible for inspection and maintenance. Test points shall be provided for checking essential voltages and waveforms.

(2) **Electronic Components.** All electronic components shall comply with Special Specification Item, "Electronic Components".

(3) **Mechanical Components.** All external screws, nuts, and locking washers shall be stainless steel; no self-tapping screws shall be used unless specifically approved by the Engineer.

All parts shall be made of corrosion resistant material, such as plastic, stainless steel, anodized aluminum or brass.

All materials used in construction shall be resistant to fungus growth and moisture deterioration.

Dissimilar metals shall be separated by an inert dielectric material.

(4) **Documentation Requirements.** Ten (10) complete sets of operation and maintenance manuals shall be provided. The manuals shall, as a minimum, include the following:

Complete modification details to the existing ATM Video CODEC System.

Complete wiring and cabling details of the additions and modifications.
For additional equipment provided under this bid Item, complete schematic diagrams, installation procedures, complete performance specifications, complete parts list, pictorial of components layout on circuit board, and complete stage-by-stage explanation of theory and operation.

All software provided for this project, whether commercial-off-the-shelf (COTS) or vendor developed, shall be provided with all original disks, packing materials, licensing, and software. Vendor shall pre-register all COTS software for the Department in the Department's name.

The documentation described above may be included in the ATM Video CODEC System manuals with the approval of the Engineer.

(5) Testing. The testing shall be in accordance with the Special Specification Item, "Testing, Training, Documentation, Final Acceptance and Warranty", Article 2 and Article 5.

4. Measurement and Payment. No direct measurement or payment will be made for the work performed and materials and equipment furnished in order to provide the Integration of ATM Video Coder/Decoder (CODEC) System, made fully operational and tested in accordance with this specification, but all of the above shall be considered subsidiary to Special Specification Item, "ATM Video Coder/Decoder (CODEC) System."