



Oregon

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Department of Corrections

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08/25/05

Addendum # 1 to Bid # 200001-05
For
Oregon Department of Corrections
Coffee Creek Correctional Facility Expansion Project



Below you will find revisions, clarifications, deletions and/or additions to the bid specifications. This addendum modifies the related Invitation to Bid only to the extent specifically indicated herein. All other areas not specifically mentioned or affected by this addendum shall remain in full force and effect.

This addendum shall be added to and become part of the original Invitation to Bid.

The Bid Closing and Bid Opening date and time have been changed as follows:

Sealed Bids will be received until the Bid Closing on 09/13/2005 at 2:00 PM by the Department of Corrections, Purchasing Section, 3601 State Street, Suite 280, Salem, OR

Sealed Bids will be publicly opened at the Bid Opening on 09/13/2005 at 2:00 PM in ROOM #366, Department of Corrections, 3601 State Street, Suite 280, Salem, OR.

No further Substitution Requests or requests for clarification will be accepted at this time. The deadline for such requests has passed (see Section C.2.2 in the original ITB).

Revisions to the technical specifications and drawing are specified below. A second addendum will be issued in approximately one week to clarify additional items.

This addendum represents a material change to the ITB and is required to be signed and returned by the Bid closing date and time. Failure to do so may result in bid rejection.
If you have any questions pertaining to this Addendum, please contact Scott Petterson at (503) 378-3798 x 22496.

Company Name: _____

Authorized signature: _____

Date: _____

August 26, 2005

Page 2

CCCCF Expansion's Technical Specifications and Drawings are revised as follows

Technical Specifications

Item 1 SECTION 01100 SUMMARY

A.Paragraph 1.7.A.1.b, add the following to the end of this paragraph: "The proximity badges shall have not only the contractor's name on it, but also a photo of the individual. The Contractor is responsible for providing two such badges for each worker entering the site."

Item 2 SECTION 01500 TEMPORARY FACILITIES AND CONTROLS

A.Paragraph 2.2.B, Add sub-paragraph 9 as follows: "9. The Owner has made available for use by the General Contractor (with one room for the Architect) the Existing Office Building located at the northwest corner of the site."

Item 3 SECTION 02201 EARTHWORK AND SUBGRADE PREPARATION

A.Paragraph 3.1.A, add the following sub-paragraph:

"1. Following stripping activities and prior to any fill activities, the Contractor shall contact Mike Schrieber, geo-technical engineer, at 503-655-2347 to observe the strippings and the proof-roll with a loaded dump truck.

2. Following excavation for footings, the Contractor shall contact Mike Schrieber, as identified above, to evaluate the sub-grade and confirm the soil conditions or recommend over-excavation to suitable soils."

Item 4 SECTION 10550 POSTAL SPECIALTIES

A.To clarify, these are the units called out as Note 19 "Collection Boxes" in both of the new Medium Dayrooms.

Item 5 SECTION 11190 GENERAL DETENTION WORK REQUIREMENTS

Paragraph 1.2, delete sub-paragraph H and its associated sub-paragraphs.

Item 6 SECTION 17000 ELECTRONICS AND COMMUNICATIONS GENERAL

A.Replace paragraph 1.7.B with the following:

"1.7 QUALITY ASSURANCE

B.Contractors Pre-Qualification

1. The following, list of subcontractors are pre-qualified for bid on Division 17 security control systems, sections 17010, 17100, 17150, 17550, 17600, 17750, and 17800.
 - a. Engineered Control Systems, Spokane, Washington
 - b. EO Integrated Systems, San Antonio, Texas
 - c. Mask Systems Inc, Moorpark, California

August 26, 2005

Page 3

Item 7SECTION 17150PERIMETER SECURITY DETECTION SYSTEM

A.Change model number in paragraph 2.2 C 3 from "Southwest Microwave 365" to "Southwest Microwave 380".

Item 8SECTION 17250TELEPHONE / DATA COMMUNICATIONS SYSTEMS WIRING

A.Replace this section entirely with the attached section of the same name.

Item 9SECTION 17260FIBER OPTIC BACKBONE CABLING SYSTEM

A.Replace this section entirely with the attached section of the same name.

Item 10SECTION 17265TELEPHONE BACKBONE CABLING SYSTEM

A.Replace this section entirely with the attached section of the same name.

Item 11SECTION 17270HORIZONTAL CABLING SYSTEM

A.Replace this section entirely with the attached section of the same name.

SUBSTITUTION REQUESTS

The approval of the substitution requests noted below is contingent upon the requested manufacturer meeting all aspects of the performance of the originally specified products. Post-bid discovery that the requested manufacturer can not provide a product of equal performance or can not provide a product with all of the identified features and hence the rejection of the product, shall not result in a change in contract to the Owner. In no case are models being approved at this time, regardless of whether that information was included in the substitution request or not – only manufacturers are being reviewed and approved at this time.

Spec.Description	Para.	Manufacturer Approval
07720Security Roof Scuttle	1.7	Nystrom
07720 Domed Fire Vent	1.8	Nystrom
08710 Exit Devices	2.2	Yale
08710 Parallel Arm Closers	2.2	Norton
09671 Resinous Flooring	2.1	Degussa
10200 Louvers	2.1	Greenheck
11190 DEC	1.4	Maximum Security Products Corp., Waterford, NY: 518-233-1800
11190 DEC	1.4	Chief Industries, Grand Island, NE: 308-382-8820
11190 DEC	1.4	Architectural Building Supply, Idaho Falls, ID
15194 Gas Stops	2.6	Apollo / Conbraco
15410 Flushometer	2.1.A	Zurn
15410 Sink Faucet	S-1	Sloan, Zurn
15410 Sink Faucet	S-2	Sloan, Zurn
15410 Service Sink Faucet	MS-1	Sloan, Zurn
15410 Lav Faucet	L-1	Sloan, Zurn
15410 Lav Faucet	L-2	Sloan, Zurn

August 26, 2005

Page 4

MEDIUM DRAWINGS

Item 12 Sheet OP1.0.2

A. Replace the existing sheet with the one attached here.

Item 13 Sheet OP2.0.3

A. Replace the existing sheet with the one attached here.

Item 14 Sheet A1.1AA

A. Note 25 refers to an ironing board in this day room – eliminate this ironing board from this room.

B. Increase the total number of secured dayroom tables with stools by three for a total of 11 in this day room. Confirm total configuration with Architect prior to placement.

Item 15 Sheet A1.1BB

A. Note 25 refers to an ironing board in this day room – eliminate this ironing board from this room.

B. Increase the total number of secured dayroom tables with stools by three for a total of 11 in this day room. Confirm total configuration with Architect prior to placement.

Item 16 Sheet A1.1.C

A. Add a single ironing board, per detail 41/A10.1, to the day room – exact location to be coordinated with architect.

Item 17 Sheet A1.1.D

A. Add a single ironing board, per detail 41/A10.1, to the day room – exact location to be coordinated with architect.

Item 18 Sheet A8.01

A. Detail 25: To clarify, the embed toe board is to be provided with the pre-cast. See detail 7/S3.0.1 for more information.

Item 19 Sheet A9.04

A. Detail 34: To clarify, refer to detail 6/S3.0.4 for further information regarding the connections.

Item 20 Sheet A9.04

A. Detail 24: To clarify, attachment for the channel to the columns is further outlined in detail 6/S3.0.4.

Item 21 Sheet A11.0.5

A. Replace the existing sheet with the one attached here.

Item 22 Sheet S1.1AA

A. Note 5: To clarify, the size of the TS columns are identified on 20/S3.0.7.

Item 23 Sheet S3.02

A. Detail 10: To clarify, the embeds are provided with the pre-cast. Bolts and beams are provided under 05500 miscellaneous metals.

Item 24 Sheet E2.1.C

A. Replace the existing sheet with the one attached here. This reflects a revision of Legend Note 1 to clarify that there are existing stub-outs and conduits, and new wiring and receptacles shall be provided.

August 26, 2005

Page 5

Item 25 Sheet E2.1.D

A. Replace the existing sheet with the one attached here. This reflects a revision of Legend Note 1 to clarify that there are existing stub-outs and conduits, and new wiring and receptacles shall be provided. Revision of plans to indicate location of existing panels RHMC and RHMD.

Item 26 Sheet E2.2.C

A. Replace the existing sheet with the one attached here. This reflects a revision of Legend Note 1 to clarify that there are existing stub-outs and conduits, and new wiring and receptacles shall be provided.

Item 27 Sheet E2.2.D

A. Replace the existing sheet with the one attached here. This reflects a revision of Legend Note 1 to clarify that there are existing stub-outs and conduits, and new wiring and receptacles shall be provided.

Item 28 Sheet SS0.01

A. Add new drawing titles to index as shown on attachment SS01

Item 29 New Sheets

A. Insert the attached two new sheets SS2.1 C and SS2.1D that show the needed expansion of the MATV system in the existing housing area remodel under Alternate #4.

Item 30 Sheet SS3.1

A. Detail 2, The references to "By Others" should be deleted from this detail. All components and devices shall be provided in accordance with the specifications. To clarify, FACP is the Fire Alarm Control Panel.

Item 31 Sheet SS7.2

A. To clarify, Manhole SMH 2 is south of the added housing units AA/BB, outside the secure perimeter.

B. The referenced spare conduits for the added housing unit are stubbed out of manhole SMH 2 to the north of the manhole in the direction of the new security equipment room. Duct bank extends 5 feet inside the security perimeter fence.

MINIMUM DRAWINGS

Item 32 Sheet A1.1

A. Add an ironing board to the Day room in an area to be coordinated with the Architect. Ironing board to be per detail 41/A10.1 of the Medium Drawings.

Item 33 Sheet P3.1

A. Reference: Detail 5/P3.1: Delete note= "Expansion Tank, Watts DET-12, 4.8 gallons" and replace with the following note= "Expansion Tank, Bell and Gossett, ASME rated, potable water tank model HFT-30, 4.4 gallons."

B. Reference: Detail 5/P3.1: Change the T&P Relief Valve on the water heater GWH-F1 to a Pressure Relief Valve at that location and add a T&P Relief Valve Hot Water Storage Tank.

August 26, 2005

Page 6

Item 34 Sheet EC.1

A. Replace the existing sheet with the one attached here. This reflects the addition of symbol for fourplex IGH receptacle which is half isolated ground receptacle and half normal power.

Item 35 Sheet E2.1

A. Replace the existing sheet with the one attached here. This reflects the addition of fourplex IGH receptacles in offices where requested.

Item 36 Sheet E5.3

A. Replace the existing sheet with the one attached here. This reflects a revision of panel schedule for panel URH1 to reflect added computer loads.

Item 37 Sheet SS0.03

A. Add new drawing title to index as shown on attachment SS02

Item 38 New Sheet

A. Add new sheet SS2.2 showing the addition of camera CMG-03 to the existing G building exterior.

Item 39 Sheet SS4.2

A. Add control switch for added Camera on building G as shown on attachment SS03

Medium and Minimum Revised drawings (reduced size) will be sent two day delivery to the General Contractors that attended the Pre-Bid Meeting. Full sized drawings may be purchased from Willamette Print & Blueprint Co., Inc. 3461 NW Yeon Ave., Portland, OR 97210, Phone # (503) 223-5011.

END OF ADDENDUM

SECTION 17250 - TELEPHONE/DATA COMMUNICATIONS SYSTEMS WIRING

PART 1 – GENERAL

1.1 DESCRIPTION OF WORK:

A. Work Covered By This Section:

The sections listed below are governed by this section:

1. Section 17260 - Fiber Optic Backbone Cabling System
2. Section 17265 - Telephone Backbone Cabling System
2. Section 17270 - Horizontal Cabling System

B. Related Work Specified Elsewhere:

1. Section 17000, Electronics and Communications General
2. Section 17010, Signal Raceways and Branch Power Circuitry

C. Scope of Work:

1. The work of this section shall be the responsibility of a single specialty contractor experienced in the design and installation of all the required systems, and in accordance with the quality assurance requirements of this section.
2. The contractor shall design, furnish, install, functionally test, performance test, and document the systems of this section. The governing overall requirement is completely functioning and documented systems.
3. The contractor shall provide necessary coordination with the work of other divisions to meet the requirement for fully functioning systems.
4. The completed systems shall be characterized by the following:
 - a. Permanently installed components with proper alignment and adequate access for maintenance.
 - b. Properly supported, protected, labeled, and dressed systems cabling.
 - c. Full, communicative documentation thoroughly describing system installation and interconnection.

D. System Description:

1. Refer to the drawings and individual specification sections for detailed system requirements. The major elements of the system will include:
 - a. Fiber Optic Distribution System: This system shall consist of fiber optic cable to be used as data backbone between Telecom Rooms. Related equipment shall be fiber optic connectors, fiber optic distribution unit (FODU) and fiber optic patch cords. This system shall comply with the NEC and EIA/TIA standards.
 - b. Horizontal Data System: This system shall provide individual cables from each work station to the assigned data patch panel location. Each cable shall consist of four unshielded twisted pairs that have been certified for use at Category 5E.
 - c. Horizontal Telephone System: This system shall provide individual cables from each work station to the assigned telephone backboard location. Each cable shall consist of four unshielded twisted pairs that have been certified for use at Category 5E.
 - d. Telephone Riser: This system shall provide multiple pair cables from each telephone backboard location to the main distribution backboard location in the Administration Building. Each cable shall consist of up a 25 and 100 unshielded twisted pairs that have been certified for use at Category 3 under the UL LAN Cable Certification Program.
 - e. Conduit: Conduit shall be provided as shown on the drawings for installation of the

data and telephone cables.

1.2 QUALITY ASSURANCE:

A. Contractor Qualifications:

1. The work specified under this section shall be accomplished by an electronic communications system specialty contractor experienced in the design, fabrication, installation, checkout, and servicing of systems such as those described herein. This contractor shall be the single contact point with respect to all the work specified herein.
2. The contractor shall, as a minimum, have the following qualifications:
 - a. Have successfully completed, within the last two years, at least two projects of similar size and complexity involving the installation of systems similar to those specified herein.
 - b. Have successfully completed, within the last two years, at least two projects involving the installation of fiber optic communications systems.
 - c. Be regularly engaged in the design and implementation of data, telephone, and/or video communications systems, with sufficient qualified staff to complete the specified systems.
 - d. Contractor shall be certified in AMP products and able to offer Twenty (20) year warranty from AMP/Tyco Corporation.

B. Codes and Standards:

1. The design, manufacture, testing, and methods of installation of all equipment, apparatus and materials furnished under these contract documents shall comply with all applicable municipal, county and state codes and also to the latest publication of applicable standards publications of the following organizations:

Telecommunications Industry Association, TIA - Specifically, EIA/TIA Standards 568A.
Current NEC and EIA/TIA standards

- C. Guarantees and Certificates: Submit with the As-Built (Record) drawings submittal. Guarantee periods shall commence upon successful completion of acceptance testing.
- D. Database Files: All cabling and terminations shall be documented in the form of an MS WORD file on 3.5" disk and hard copy printout.

PART 2 - PRODUCTS

2.1 MATERIALS:

- A. Supply items of equipment of a type already fully developed and with adequate operating experience to indicate suitability for the intended use. Select for accessibility of replacement parts and maintenance and alignment services.
- B. Select products at the time of bid to be of the manufacturer's latest model or type offered which meet the applicable specifications. Do not select discontinued items replaced by newer models or versions.
- C. Use only products which are new and of the best quality of their respective kind. No used materials shall be installed.
- D. Provide Network Patch Cables.
 1. Network patch cables shall be blue, category 5E, unshielded round UTP, 24 AWG, stranded cable, wired to 568B/AT&T/258A. Configuration using RJ-45 connectors - gold plated.

2. The following lengths and quantities shall be provided:

<u>Quantity</u>	<u>Length</u>
10	3 ft (1m)
10	6 ft (2m)
10	10 ft (3m)
10	15 ft (4m)

2.2 CONDUIT:

- A. Conduit shall be provided and installed in accordance with the requirements of Division 16 of these Specifications.

PART 3 - EXECUTION

3.1 INSTALLATION:

- A. Verify the completion of the required rough-in work.
- B. Install the system(s) to the manufacturer's recommendations.
- C. Comply with all installation requirements of Section 17000.

3.2 TESTING

- A. For the various systems, testing shall comply with the following sections:
1. Section 17260 - Fiber Optic Backbone Cabling System
 2. Section 17265 - Telephone Backbone Cabling System
 3. Section 17270 - Horizontal Cabling System

END OF SECTION 17250

SECTION 17260 - FIBER OPTIC BACKBONE CABLING SYSTEM

PART 1 - GENERAL

1.1 DESCRIPTION OF WORK:

A. Work Covered By This Section:

1. Furnish, install, test, and document complete and working Data Transmission Systems using fiber optic cabling and related equipment. Terminate all fibers for future connection to PLCs, computer systems, data switching system, and other equipment to be provided by others.
2. The work specified by this section is also covered by Section 17000 (Data Communications Systems, General).

B. Related Work:

1. Section 17250, Telephone/Data Communications Systems
2. Section 17270, Horizontal Cabling System
3. Section 17600, Surveillance Closed Circuit Television System
4. Section 17800, Control Electronics

1.2 DESCRIPTION OF SYSTEM:

- A. Multipurpose distribution system for data, consisting of a dedicated run of graded-index (multimode) multi-fiber optic cable as shown in the drawings.

PART 2 - PRODUCTS

2.1 PATCH PANELS AND RELATED HARDWARE:

- A. Description: Rack-mounted metal enclosures for interconnecting optical fibers.

B. Specifications:

1. 24 port rack mount enclosure. Stack enclosures to achieve total quantities required.
2. SC connectors, coupling bushings and adapter plates.
3. Rubber grommets where cable enters.
4. Provide locking mechanism at door for fiber termination side.

2.2 MULTI-MODE FIBER OPTIC CABLES:

- A. Description: Multifiber, jacketed, tight buffer, 62.5/125 micron, dual window fibers.

B. Specifications:

1. 24 fibers, of graded-index silica, with 62.5 micron core and 125 micron cladding.
2. Numerical aperture: 0.275
3. Attenuation: 3.5 dB per kilometer, maximum, at 850 nanometer wavelength; 1.0 dB per kilometer, maximum at 1300 nanometer wavelength.
4. Bandwidth: 160 megahertz-kilometers, minimum, at 850-nanometer wavelength; 500 megahertz-kilometers, minimum, at 1300-nanometer wavelength.
5. NEC classification: type OFNP.

6. One fiber per buffer tube, tubes stranded around dielectric strength member, PVC jacket.
- C. Manufacturer: AMP/Tyco cable with breakout kit or approved equal.

PART 3 - EXECUTION

3.1 STORAGE:

- A. Store fiber optic cables according to manufacturer's recommendations. Seal cut ends with wax and tape if stored where subject to rain or moisture.

3.2 INSTALLATION:

- A. Comply with applicable sections of the National Electrical Code (NEC), including Article 770 covering optical fiber cabling.
- B. Install, test, and adjust equipment and components in accordance with the manufacturer's recommendations.
- C. Seal cut ends of fiber optic cables with wax and tape to form a watertight seal prior to pulling into conduits or installing in areas subject to presence of moisture. Do not pull or place stress on jacket, fibers or tubes; apply pulling force only to center strength member. Do not pull using a "Kellums" grip on jacket. Lubricate conduits longer than 50 feet prior to, and during, pulling.
- D. During installation, maintain a minimum bending radius of 12 inches. Install for maximum possible permanent bending radius; maintain minimum bending radius of 12 inches.
- E. Install fiber optic cables in continuous run from patch panel to patch panel, without splices.
- F. Support vertical runs of fiber optic cables at intervals of 5 feet, minimum. Support horizontal runs of cable at intervals of 2.5 feet, minimum. Install supports to be tight enough to prevent slippage, but not tight enough to deform the jacket.
- G. The multimode fiber (12 strand) will be terminated using "SC" style connectors. The fiber optic cables will be terminated in a Fiber Optic Distribution Unit located at the top of the data rack.
- H. Install breakout kits in accordance with manufacturer's recommendations. Install sufficient length of jacketing on each fiber/tube to allow easy connection to patch panels with large, sweeping bends. Maintain minimum installed bending radius of 6 inches for portions of fiber contained in breakout jacketing. Securely tether strength member of each cable to chassis of patch panel so that no stress is induced on individual fibers, tubes, or jackets.
- I. Install connectors per manufacturer's specifications, and inspect using microscope to verify flat, perpendicular, smooth, well-polished finish of each fiber end. Install dust caps on all connectors during times they are not connected to other connectors or equipment.

3.3 FIELD QUALITY CONTROL:

- A. After installation, test each fiber of cable for optical continuity. After installation of connectors and connection to patch panels, measure total length of each fiber of each run of cable using an Optical Time Domain Reflectometer (OTDR). Prepare hardcopy of traces for each fiber, and include in test data. Measure attenuation, using insertion loss method, of each fiber at 850 nanometers, and at 1300 nanometers. Measure attenuation in both directions using optical source and power meter, not OTDR. Record all measurements using identification numbers specified in Section 17000, and buffer tube color coding, and include in test data.
- B. If testing shows inconsistent loss rate or other defects in any fiber, or if recorded attenuation (insertion loss) exceeds the calculated loss by more than 2 dB, replace or repair connector and/or fiber to bring loss to within 2 dB of calculated loss. Calculated loss shall be determined by totaling: manufacturer-specified maximum loss of cable per unit of length times the measured length, plus specified maximum loss of each connector at the patch panel.

3.4 TESTING AND ADJUSTMENT:

- A. Conduct acceptance testing in accordance to direction given by The Owner. Testing will be supervised and witnessed by the designated The Owner representative(s). Acceptance of the system shall be based on several factors including system availability, functional and electrical performance to the requirements of these specifications and the manufacturer's specifications, and the overall system workmanship.
- B. Functional system tests shall include:
 - 1. One hundred percent functional testing of all fibers.

END OF SECTION 17260

SECTION 17265 - TELEPHONE BACKBONE CABLING SYSTEM

PART 1 - GENERAL

1.1 DESCRIPTION OF WORK:

A. Work Covered By This Section:

1. Furnish, install, test, and document complete and working Telephone Distribution Backbone Cabling System using multi-pair cabling and related equipment. Terminate all pairs for future connection to telephone instruments and other equipment to be provided by others.
2. The work specified by this section is also covered by Section 17000 (Data Communications Systems, General).

B. Related Work:

1. Section 17250, Telephone/Data Communications Systems
2. Section 17270, Horizontal Cabling System

1.2 DESCRIPTION OF SYSTEM:

- A. Multi-pair distribution system analog or digital telephone communications. Consisting of dedicated runs of multi-pair cable as shown in the drawings.
- B. Separate voice cables will be installed from the MDF to the various IDFs to support the inmate telephone network. Cable terminations blocks (MDF/IDF) for the inmate telephone system will be dedicated and separated from the other voice cables.

PART 2 - PRODUCTS

2.1 PATCH PANELS AND RELATED HARDWARE:

A. Telephone Distribution Backboard Terminations

1. General Description: All telephone distribution and riser wiring shall terminate on backboards in the telephone closet IDFs and on the MDF in the main ISSD Room (U201) on AT&T 110 style blocks. All telephone drop cable pairs shall be cross connected to the assigned riser pairs.
2. All Inmate phone cables shall terminate on their own blocks at both IDFs and MDF. The section where the inmate phone cables are terminated in the IDFs and MDF shall be labeled "FOR INMATE USE ONLY".

2.2 MULTI-PAIR TELEPHONE CABLES:

A. Telephone Riser Cable:

1. General Description: Telephone riser cable shall comply with the transmission requirements of the EIA/TIA 568A wiring standard for UTP cable and with the requirements for Category 3 cable.
2. Electrical Specifications: Cable shall consist of 25, or 100 unshielded twisted pairs, 24 AWG, with an overall aluminum shield and PVC jacket.
3. Cable Specifications: Cables shall consist of:
 - 1 - 25 pair cable for inmate telephone
 - 1 - 100 pair cable for administrative telephone
4. Impedance @ 1.0 to 16 MHz shall be 100 ohms \pm 15%
5. Attenuation at 16 MHz shall be less than 40 dB per 1000 feet

6. Products: Lucent 2001E series or approved equal.

PART 3 - EXECUTION

3.1 INSTALLATION:

- A. Comply with applicable sections of the National Electrical Code (NEC).
- B. Install, test, and adjust equipment and components in accordance with the manufacturer's recommendations.
- C. Seal cut ends of multi-pair cables with wax and tape to form a watertight seal prior to pulling into conduits or installing in areas subject to presence of moisture.
- D. During installation, maintain minimum bending radius of 12 inches. Install for maximum possible permanent bending radius; maintain minimum bending radius of 12 inches.
- E. Install multi-pair cables in continuous run from IDF to MDF without splices.
- F. Support vertical runs of multi-pair cables at intervals of 15 feet, minimum. Support horizontal runs of cable at intervals of 2.5 feet, minimum. Install supports to be tight enough to prevent slippage, but not tight enough to deform the jacket.

3.3 TESTING AND ADJUSTMENT:

- A. Conduct acceptance testing in accordance to direction given by The Owner. Testing will be supervised and witnessed by the designated The Owner representative(s). Acceptance of the system shall be based on several factors including system availability, functional and electrical performance to the requirements of these specifications and the manufacturer's specifications, and the overall system workmanship.
- B. Functional system tests shall include:
 1. One hundred percent continuity testing of all pairs.

END OF SECTION 17265

SECTION 17270 - HORIZONTAL CABLING SYSTEM

PART 1 - GENERAL

1.1 DESCRIPTION OF WORK

- A. Work Covered By This Section: Furnish, install, test, and document telephone and data cable from telecommunications outlet locations shown on drawings in buildings to the associated communications closets. The requirements of Section 17000 apply to this section.
- B. Related Work Specified Elsewhere:
 - 1. Section 17250 - Telephone/Data Communications Systems
 - 2. Section 17260 - Fiber Optic Backbone Cabling System
- C. System Description: The contractor shall furnish separate data and telephone cabling from the communications closets to the telecommunications outlets as shown on the plans.
- D. The system shall consist of the outlets mounted on walls or in floor boxes, the drop cables, and their terminations.
- E. Separate drop cables shall be provided to each combined outlet from the respective telephone and data backboards.
- F. The system shall consist of a dedicated Inmate Phone cabling system. These cables shall be separate from the facility's voice cables.
- F. In general, the cables shall be installed in conduit.

PART 2 - PRODUCTS

2.1 OVERALL REQUIREMENTS

- A. The cabling, connectors and other products provided and installed under this specification section shall be those of a single vendor offering a written wiring system performance warranty of at least twenty (20) years from the date of final acceptance on the installed system. Said warranty shall include cabling, receptacles, connection blocks and their installation over the warranty period. Installers shall be certified by the vendor under a recognized installer certification program.
- B. Vendor's product lines acceptable under this specification shall be AMP/Tyco 110 connect system or approved equal.

2.2 EQUIPMENT SUMMARY:

- A. The following minimum equipment complement shall be provided in accordance with the specifications and drawings. This list is provided for the convenience of the contractor in preparing its bid; omission from this list of any items required elsewhere in the specifications, shown in the drawings, or necessary to achieve the functional requirements or workmanship standards of these specifications shall not relieve the contractor of the obligation to supply such items. The contractor must refer to the drawings to determine quantities required, cable lengths and quantities of distribution racks, patch panels, terminal blocks, etc.

2.3 PRODUCT SPECIFICATIONS:

A. Outlets:

1. Telephone/Data outlets shall consist of a single gang plate and be provided with 2 RJ-11 type jacks for telephone and 2 RJ-45 type jacks for data. Outlets shall be mounted over a four-inch square backbox and appropriate plaster ring and device cover, or in a Walker floor box (or equivalent).
2. Data outlets shall consist of a single gang plate and be provided with 4 RJ-45 type jacks for data. Outlets shall be mounted over a four-inch square backbox and appropriate plaster ring and device cover, or in a Walker floor box (or equivalent).
3. The only exceptions to this cabling scheme shall be outlets installed for wall and inmate phones where only a telephone cable and jack shall be required.

B. Telephone Drop Cable:

1. General Description: Telephone drop cable shall comply with the transmission requirements of the TIA/EIA 568 wiring standard for UTP cable and specifically with the requirements for Category 5E cable in the TIA/EIA 568-A-5.
2. All telephone cables must be the same color and readily distinguishable from the data cables. Telephone drop cable shall be white in color.
3. Cable shall be listed for use in return air plenums
4. Cable Specifications: Cable shall consist of four unshielded twisted pairs, 24 AWG, with an overall jacket.
5. Products: AMP/Tyco or approved equal.

C. Data Drop Cable

1. General Description: Data drop cable shall comply with the transmission requirements of the EIA/TIA 568 wiring standard for UTP cable and specifically with the requirements for Category 5E cable in the EIA standard 568-A-5.
2. All data cable must be a different color than the telephone drop cable. One data drop cable to each outlet shall be blue in color. The second shall be green in color.
3. Cable shall be listed for use in return air Plenums.
4. Cable Specifications: Cable shall consist of four unshielded twisted pairs, 24 SWG, with an overall jacket.
5. Products: AMP/Tyco 57825-6 or approved equal.

D. Telephone Distribution Backboard Terminations

1. General Description: All telephone distribution and riser wiring shall terminate on the backboards in the telephone closet IDFs and on the MDF in the SOC telephone room on AT&T 110 style blocks. All telephone drop cable pairs shall be cross connected to the assigned riser pairs.
2. All Inmate phone cables shall terminate on their own blocks at both IDFs and MDF. The section where the inmate phone cables are terminated in the IDFs and MDF shall be labeled "FOR INMATE USE ONLY".

3. Products: Lucent, AMP, Siemon or approved equal.

E. Data Distribution Backboard Terminations

1. General Description: All data distribution wiring shall terminate on RJ-45, AMP 110 style patch panels located in the data communications racks.
2. Connectors shall be equipped with gold plated contacts and shall be rated for not less than a 300 Mb/second data rate.
3. Patch panels shall be 19" rack mount units with two rows of 24 jacks each. Panels shall be 3-1/2" high.
4. Jacks shall meet category 5E requirements.
5. Products: AMP/Tyco 110 Connect System or approved equal.

PART 3 - EXECUTION

3.1 COORDINATION:

- A. The contractor shall coordinate the installation work with the work of other trades. The cabling contractor will also be required to coordinate closely with other contractors who will also be placing equipment in the riser closets.
- B. The contractor shall verify that conduit and other building appurtenances required to support the system are correctly shown in the drawings and shall immediately report any changes which will impact the installation.
- C. Defects or changes in the work of other trades which affect this work shall be immediately reported to the Architect.

3.2 INSTALLATION:

- A. The contractor shall field-verify outlet locations.
- B. All equipment and materials should be installed in accordance with the published recommendations of the equipment manufacturers.
- C. All cables shall be installed under the floor or above the ceiling in raceways or conduit to be provided for this purpose. All floor and fire penetrations shall be firestopped per code requirements.
- D. Layout of patch panels and distributing frames, and other work shall be performed in accordance with recognized industry standards and practices and the requirements of this specification.
- E. One telephone type cable and two data type cable shall be installed to each system telephone/data outlet. The four pairs of telephone wire in each telephone cable shall be connected to required RJ-11 jacks, and the four pairs of data wire in each data cable shall be connected to required RJ-45 jacks
- F. Telephone cable pair connections at the AT&T 110 series connector blocks and RJ-11 jacks shall follow applicable industry standards.
- G. The data cables shall be connected to their respective RJ-45 jacks (at the telephone/data outlets and patch panel jacks) to the TIA/EIA T568 standard.

3.3 LABELING:

- A. All labeling should be in accordance with the TIA/EIA 606 standard.

3.4 TESTING:

- A. Each completed cable run shall be tested to conform with the requirements of the TIA/EIA-568 standard as those appropriate for the cable type. Data cables will be tested for compliance with Category 5E and telephone cables for compliance with Category 3. No data cable shall exceed 180 feet in length.
- B. The contractor shall test and document the cabling system and resolve any problems encountered prior to notifying the Architect that it is ready to conduct acceptance testing. Copies of the contractor's completed test results shall be submitted at that time. The Owner's technical representative will then schedule a mutually agreeable time to conduct acceptance testing which will consist of a verification of the submitted test results.
- C. Cable performance testing shall be accomplished by using a certified testing.

END OF SECTION 17270

MEDIUM DRAWING INDEX

SS0.1 SYMBOL LEGEND, AND DRAWING INDEX
SS0.2 GENERAL NOTES AND ABBREVIATIONS

SS1.1 MEDIUM EXPANSION TEMPORARY SITE PLAN

SS2.1.AA MAIN FLOOR - AREA AA - SPECIAL SYSTEMS PLAN

SS2.1.BB MAIN FLOOR - CORE AREA AAB, AREA BB - SPECIAL SYSTEMS PLAN

SS2.2.AA UPPER FLOOR - AREA AA - SPECIAL SYSTEMS PLAN

SS2.2.BB UPPER FLOOR - CORE AREA AAB, AREA BB - SPECIAL SYSTEMS PLAN

SS2.2.C MAIN FLOOR - AREA C - SPECIAL SYSTEMS PLAN

SS2.2.D MAIN FLOOR - AREA D - SPECIAL SYSTEMS PLAN



SS3.1 ENLARGED PLAN DETAILS

SS4.1 TYPICAL MEDIUM HOUSING CONTROL PANEL

SS5.1 SEGMENT DIAGRAMS

SS5.2 SEGMENT DIAGRAMS

SS5.3 SEGMENT DIAGRAMS

SS5.4 SEGMENT DIAGRAMS

SS6.1 (NOT USED)

SS6.2 SYSTEM DIAGRAMS

SS6.3 (NOT USED)

SS6.4 SYSTEM DIAGRAMS

COFFEE CREEK MEDIUM

ADDENDUM 1 - 8/18/05

SCALE: NONE

REF SHEET SS0.1

SS01 SYMBOL LEGEND AND DRAWING INDEX



CONTROL PANEL (SEE SHEET SS4.2 FOR A DESCRIPTION)

MINIMUM DRAWING INDEX

SS0.3 SYMBOL LEGEND AND DRAWING INDEX

SS0.4 GENERAL NOTES AND ABBREVIATIONS

SS2.1 MAIN FLOOR - AREA F - SPECIAL SYSTEMS PLAN

SS2.2 MAIN FLOOR - AREA G - SPECIAL SYSTEMS PLAN

SS4.2 TYPICAL MINIMUM HOUSING CONTROL PANEL



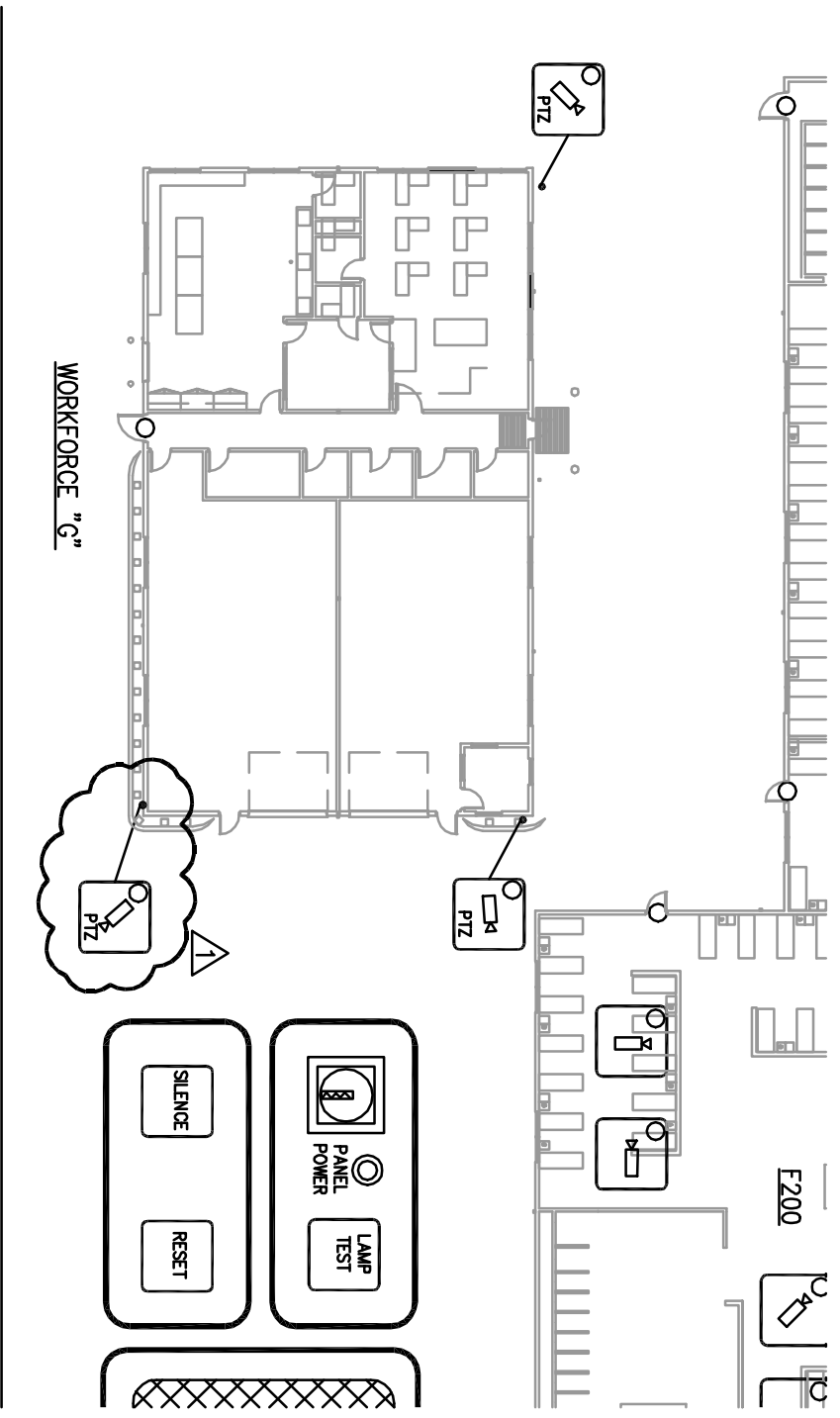
COFFEE CREEK MINIMUM

ADDENDUM 1 - 8/18/05

SCALE: NONE

REF SHEET SS0.3

SS02 SYMBOL LEGEND AND DRAWING INDEX



COFFEE CREEK MINIMUM

SCALE: NONE

REF SHEET SS4.2

SS03 TYPICAL MINIMUM HOUSING CONTROL PANEL

ADDENDUM 1 - 8/18/05