## PART 1 - GENERAL

This section of the Telecommunications Construction Guide Specification has references, products, procedures, processes, and work descriptions/summaries that are common to many Washington State University Pullman (WSUP) campus telecommunications projects. This information is provided in specification format to serve as a guide to the Designer in producing a CSI-compliant specification that will meet the unique requirements of WSUP Telecommunications projects. However, this document is not intended to be a Master Specification. The information included in this section is not intended to be all-inclusive for any given project.

The Designer shall edit this section (adding and/or removing content where required) to meet the requirements of a given project.

Prior to publishing the specifications for bid or construction purposes, all edits shall be made using the MS Word Tracking Changes feature. *When submitting the specifications for review at each progress milestone, print the specifications showing the revision markings*.

Text in shaded boxes (such as this text) is included to aid the Designer in understanding areas of this section that may require modification for a particular circumstance. Although this text is generally written in declarative form, the Designer shall consider it guidance only. The Designer shall not assume that the content of this specification section is suitable or sufficient for any given project in its current form, and shall remain responsible for developing a thorough and complete specification that meets the requirements of the project being designed.

#### 1.1 SUMMARY

A. Provide all materials and labor for the installation of specialty telephone equipment.

## 1.2 SYSTEM DESCRIPTION

Review and edit the following statement(s) for applicability to this project, restricted to describing performance, design requirements and functional tolerances of a complete system.

- A. Furnish, install, and place into satisfactory and successful operation all materials, devices, specialty telephone equipment, and necessary appurtenances to provide complete, permanent emergency telephone systems as hereinafter specified and/or shown on the Contract Documents. The systems shall be compatible with the Owner's existing emergency telephone systems and with the local E911 emergency call handling center.
- B. The work shall include all materials, equipment and apparatus not specifically mentioned herein or noted on the plans but which are necessary for a complete working system.

#### PART 2 - PRODUCTS

Ensure that products listed under the PART 2 – Products paragraphs have corresponding installation instructions in PART 3 – Execution, or in another specification section if furnished but not installed under this section.

WSUP has standardized on certain manufacturers and certain products for all new Structured Cabling Systems in WSUP facilities. Products shall be specified accordingly. The Designer shall ensure that the latest part numbers are used for specified products. Any substitutions require WSUP pre-approval before specification. If the Designer wishes to use products that deviate from WSUP standards, a Standards Variance Request shall be made, as described in the Technology Infrastructure Design Guide (TIDG). If the alternative product is approved, the Designer shall adapt this to reflect the approved changes.

The products listed throughout Part 2 - Products below are not all-inclusive for any given project. The Designer shall ensure that all required products are specified. The Designer shall also verify that the most current part number of each specified product is listed in this section.

2.1 AREA OF REFUGE 2-WAY COMMUNICATION EMERGENCY TELEPHONES

Verify whether an Area of Refuge device is required for the project. If not, delete this paragraph and the corresponding paragraph in Part 3 below.

- A. Flush-mounted enclosure shall be ADA compliant.
  - 1. Enclosure:
    - a. GAI-Tronics, Model 397-001 Flush mount.
  - 2. Single button auto-dial (911) with speakerphone.
  - a. GAI-Tronics "Red Alert" Emergency Telephone, Model 397-001 Flush mount.
  - 3. Mounting and equipment shall be ADA compliant.

# 2.2 OUTDOOR RESCUE CALL STATIONS

Verify whether Outdoor Rescue Call Stations are required for the project. If not, delete this paragraph and the corresponding paragraph in Part 3 below.

- A. Pedestal type exterior phones with blue light strobe, 114 inches tall, weather-resistant, durable powdercoated 3/16 inch cold-rolled steel, architectural bronze finish for exterior use, labeled with "EMERGENCY" on all four sides. Equipment shall be ADA compliant.
  - 1. GAI-Tronics Model 234 Stanchion
- B. Single button auto-dial (911) with speakerphone.
  - 1. GAI-Tronics "Red Alert" Emergency Telephone, Model 397-001 Flush mount.
- C. Blue strobe light beacon. 1. GAI–Tronics Model 530-001
- D. 8-ft #6 copper grounding rod

## PART 3 - EXECUTION

Ensure that products incorporated into the project under PART 3 paragraphs have corresponding Product information in PART 2 – Products, or in another specification Section if installed but not supplied under this Section.

The following paragraphs include installation requirements written specifically for the Products listed in Part 2 above. If other products are approved, the Designer shall ensure that appropriate Part 3 installation requirements are added/removed or modified as applicable and described in equal or greater detail to the following paragraphs.

All installation requirements shall be consistent with the manufacturer's requirements.

- 3.1 GENERAL
  - A. Perform all work in accordance with manufacturer's instructions and as required below.
  - B. Install all equipment in an arrangement ensuring that access to the equipment remains ADA compliant.
- 3.2 AREA OF REFUGE 2-WAY COMMUNICATION EMERGENCY TELEPHONES
  - A. Provide a 2-way communication emergency enclosure and telephone unit for each Area-of-Refuge location.
  - B. Electrical:
    - 1. Provide power conduit and circuits as shown on Contract Documents and as required by manufacturer.
    - 2. Provide bonding jumper between outlet box or conduit and telephone.
  - C. Telecommunications:
    - 1. Provide telecommunications conduits, outlet boxes and circuits as shown on Contract Documents and as required by manufacturer.
    - 2. Provide patch cord between outlet and telephone.
- 3.3 OUTDOOR RESCUE CALL STATIONS
  - A. Provide one outdoor rescue call station unit for each location noted on Contract Documents.
  - B. Concrete Base:
    - 1. Provide concrete base as shown on Contract Documents and as required by manufacturer.
    - 2. The freestanding unit shall be mounted onto four bolts that are set in concrete.
    - 3. Standard  $3/4 \times 24$  inch galvanized anchor bolts with galvanized nuts and washers shall be used per manufacturer requirements.
    - 4. Unit shall be mounted one-half inch above the concrete to allow air movement.
  - C. Electrical:
    - 1. Provide power conduit and circuits as shown on Contract Documents and as required by manufacturer.
    - 2. Provide ground rod. Bond steel housing to grounding rod.
  - D. Telecommunications:
    - 1. Provide copper telecommunications cable as shown on Contract Documents and as required for device operation.
    - 2. Provide entrance protection at building entrance.
    - 3. Bond cable shield to the grounding busbar at building entrance and to grounding rod.
- 3.4 COMMISSIONING
  - A. Work with the Owner's designated Telecommunications Representative to identify suitable telephone circuits for each telephone device. Connect telephone circuits to telephones and verify that calls can successfully be placed.
- 3.5 TESTING
  - A. Testing of all cable and devices shall be conducted by the Contractor in accordance with manufacturer's requirements and shall demonstrate that the devices interoperate with the Owner's existing systems.

B. All tests shall be coordinated through and witnessed by the Owner's designated Telecom Representative.

END OF SECTION