

PART 1 - GENERAL

1.1 Description of System

- .1 Incoming telephone service facilities from property line to fireguarded telephone backboard in conduit and direct buried as required.

1.2 Co-ordination with Telephone Authority

- .1 Co-ordinate with telephone authority to ensure availability of service.

PART 2 - PRODUCTS

2.1 Materials

- .1 Fireguard backboard to Utility Requirements.
- .2 Grounding in accordance with Section 26 05 28.
- .3 Direct buried cable in accordance with Manitoba Telephone System requirements.
- .4 Telephone raceway system in accordance with Utility requirements.

PART 3 - EXECUTION

3.1 Installation

- .1 Install telephone service facilities as indicated and as required by telephone utility. Co-ordinate with utility provided drawings.
- .2 Install acceptable fireguarded backboard in each telephone room.
- .3 Install grounding facilities and make connections.
- .4 Connect owners conduits to those of telephone company.
- .5 Trench and backfill as required.

PART 1 - GENERAL

1.1 Description of System

- .1 Panic alarm system shall be an integrated interactive voice communication system for panic alarm and with mass notification ability.
- .2 System includes (but is not limited to):
 - .1 Wall mounted voice communication units (two per side of station).
 - .2 Wall mounted amplified speaker enclosures.
 - .3 Telephone connection to 911 network including IP communication server and all related EMS and notification software.
 - .4 All associated power supplies, wiring, connectors, programming, etc. to provide a complete and operational panic alarm and mass notification system to the satisfaction of the Contract Administrator.

1.2 Requirements of Regulatory Agencies

- .1 System:
 - .1 To Underwriters Laboratories of Canada
 - .2 Canadian Electrical Code - Latest Edition
 - .3 CSA electrical bulletins in force at time of tender.

1.3 Shop Drawings

- .1 Submit shop drawings in accordance with Section 26 05 01.
- .2 Include:
 - .1 Layout of equipment.
 - .2 Complete wiring diagram, including schematics of equipment and interconnection of all devices.
- .3 Panic alarm system manufacturer shall prepare system circuit wiring diagrams after award of contract. Drawings shall be approved by Contract Administrator prior to roughing.

1.4 Operation and Maintenance Data

- .1 Provide data for incorporation into maintenance manual specified in Section 26 05 01.
 - .2 Operation and Maintenance Manual to include:
 - .1 Operation and maintenance instructions for complete panic alarm system to permit effective operation and maintenance.
 - .2 Technical data - illustrated parts lists with parts catalogue numbers.
 - .3 Copy of approved shop drawings.
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1.5 Maintenance

- .1 Provide one year's free maintenance with two inspections by manufacturer during the year. Submit inspection report to Contract Administrator. Second inspection to be performed during the last month of warranty period.
- .2 Warranty service is to be provided no later than the first business day following the report of service required.

PART 2 - PRODUCTS

2.1 Materials

- .1 Wall mounted interactive voice communication unit with public address system.
 - .1 Brushed stainless steel finish, minimum 12 gauge.
 - .2 LED beacon/strobe.
 - .3 Speaker and microphone for half-duplex communication.
 - .4 Integral CCTV camera.
 - .5 Analog telephone connection with phone line surge suppressor.
 - .6 Weather and vandal resistant. Water-proof.
 - .7 ADA compliant.
 - .8 Code Blue PAS 2-e FP1 or approved equal.
- .2 Wall mounted interactive public address amplified speaker enclosure.
 - .1 ABS plastic enclosure.
 - .2 180 degree sound dispersion with three speakers per unit.
 - .3 Complete with controller board to directly integrate with mass notification software.
 - .4 Weather and vandal resistant. Water-proof.
 - .5 Code Blue WN-180 or approved equal.
- .3 IP Communication Server
 - .1 Integrates analog and IP devices for communication system.
 - .2 Minimum Pentium dual-core duo processor with 2GB of RAM, DVD-ROM, onboard LAN and video.
 - .3 Rack mountable.
 - .4 Complete with EMS and mass notification software.
 - .5 Code Blue ToolVox or approved equal.

2.2 Equipment and Devices

- .1 All new equipment must operate without causing interference to other building equipment.

2.3 Manufacturers

- .1 Acceptable manufacturers for panic alarm system: Code Blue or approved equal.
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2.4 Qualified Installers

- .1 Acceptable installers to have the following qualifications:
 - .1 Be certified by the system manufacturer.
 - .2 On site personnel to be experienced, competent trades people.
 - .3 Maintain offices and service personnel in the Province of Manitoba.
 - .4 Maintain a minimum of two 24-hour service numbers made available to the Contract Administrator.
 - .5 Maintain a level of local stock capable of replacing any part that may prove defective.

2.5 Conductors

- .1 System wiring shall be copper. Power circuits sized for maximum 3% voltage drop. Joints in junction boxes are to be labelled. The colour scheme for the wiring shall be adhered to throughout the building.
- .2 Panic alarm and public address system wiring to manufacturer's recommendations.

PART 3 - EXECUTION

3.1 Installation

- .1 Locate and install panic alarm system components at locations as indicated, and connect to server, telephone and LAN lines and power supply.
- .2 Final connection to be done by the manufacturer's representative.
- .3 Final program systems at the completion of project to the satisfaction of the Contract Administrator.
- .4 Conduit is required for all cabling.
- .5 Provide 120V circuits as required for power supplies.
- .6 Locate server in heated electrical room.

3.2 Commissioning

- .1 Commissioning of the system shall be done by the manufacturer with the assistance of the Electrical Contractor and the Contract Administrator. Costs for the complete commissioning shall be included in this contract. All the connections of all the equipment shall be verified to ensure:
 - .1 That the system is installed as per plans and specifications and is operating and acceptable to the Contract Administrator.
 - .2 That the system is installed as per the recommendations of the manufacturer.
 - .3 That all call stations and speakers shall be checked for proper operation and calibration.
 - .4 That any necessary changes to conform to Article .1, .2, .3 above are made where necessary by the Electrical Contractor. The necessary technical assistance to carry out these changes shall be provided by the manufacturer.
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.5 During the period of commissioning, the Electrical Contractor shall furnish one (1) journeyman electrician.

3.3 Instruction

- .1 Provide personal instruction and training to system users on complete system operation.
- .2 Provide customer software support for a period of one (1) year including user mistakes.

3.4 Warranty

- .1 The system shall carry a one year warranty from the date of the Contract Administrator's final acceptance.

3.5 Tests

- .1 Perform tests in accordance with Section 26 05 01.