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**700 Broad St.**

**St. Joseph, Michigan 49085**

**October 31, 2016**

**REQUEST FOR PROPOSAL**

**TELEPHONE SYSTEM REPLACEMENT  
AT VARIOUS LOCATIONS**

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## **SPECIFICATIONS**

### **INTRODUCTION**

This Request for Proposal (RFP) is being issued by the City of St. Joseph, herein also referred to as the City, for the purpose of procuring hardware and software solutions for an on-premise, IP based phone system, covering eight (8) facilities, ninety-one (91) telephone lines. The successful Bidder shall have experience in furnishing, maintaining, and installing such systems for government entities and other organizations of similar size and complexity in the region, and have the staff capacity and expertise to do so for the City of St. Joseph.

The City of St. Joseph welcomes suggestions related to design, setup and configuration of the phone system to insure proper redundancy, thereby minimizing downtime and future issues.

The information contained in this RFP is a suggested configuration. The City would invite the Bidder's suggestions for an improved and/or a more cost effective solution. The ShoreTel brand, model, system, or specifications listed in this request establishes the acceptable level of quality only and is not intended to reflect a preference for, or in any way favor, a particular brand or vendor. Bidders may bid alternates to a listed model or brand provided that the alternate is at least equal to the model or brand and complies with the required specifications. The equality of any alternate being bid shall be determined by the City at its sole discretion. Any Bidder bidding an alternate model or brand shall clearly identify the alternate items in its bid and shall include manufacturer's specifications, product literature, and/or any other relevant documentation demonstrating the quality of the alternate items. Failure to provide information for alternate items may be grounds for rejection of a Bidder's bid.

Favorable pricing will be one element of the selection process, but the experience of the firm, qualifications, experience and ability of assigned staff, completeness of the level of service proposed and timeliness of service proposed by the Bidder will be significant factors in award of this contract. Final decision on selection of the Bidder for this project will be determined by the City Commission. The City reserves the right to reject any or all proposals or parts of proposals. The City also reserves the right to waive any irregularities, inconsistencies, or take what other action is appropriate as determined by the City to be in the best interest of the City.

## **1.0 PROPOSAL FORMAT**

### Instructions to Bidders

- 1.1 A Mandatory Pre-Bid Meeting will be conducted at 1:00 P.M., Thursday, November 10, 2016 in the Conference Room of the City Administrative Offices, 700 Broad Street in St. Joseph, Michigan.** This will be a mandatory conference for clarification of any questions on the project scope of work, specifications, and site conditions. Inspection of the sites may be included at the end of this meeting. All prospective Bidders must attend in order to submit a proposal. Pre-bid meeting attendees will be required to sign in as a record of their attendance. Failure to attend this meeting will result in your proposal being deemed non-responsive, and the proposal will be rejected. During the site inspection phase, the City will point out specific job conditions, which may be difficult to describe. Questions that require additional clarification will be covered by an addendum, which will be issued following the Pre-Proposal meeting.
- 1.2 Sealed bids are due at the at the St. Joseph City Clerk's Office no later than 2:00 PM, Tuesday, November 29, 2016.**
- 1.3** Proposals shall be mailed or delivered to the City of St. Joseph City Clerk, 700 Broad Street, St. Joseph, Michigan 49085. Sealed envelopes should be plainly marked:

Attention: City Clerk

Re: Telephone System Replacement and Installation

700 Broad Street

St. Joseph, MI 49085

It is the sole responsibility of the Bidder to see that its proposal is received within the required time period. The City is not responsible for any errors or irregularities with the delivery method utilized for submittal of the Proposal. Any proposals received after the closing date and time will be returned unopened.

**1.4** Four (4) signed proposals shall be submitted in a sealed envelope to the advertised location.

The sealed envelope shall be identified on the face with the following:

- Name and address of the Bidder
- Project Name
- Date and time proposal is due
- Mailing address for delivery to the City of St. Joseph

**1.5** EXAMINATION OF PROPOSAL DOCUMENTS AND SITE:

Before submitting a proposal, each proposer must (a) examine the proposal documents thoroughly; (b) familiarize himself/herself with Federal, State, and local laws, ordinances, rules and regulations affecting performance of the work; and, (c) carefully correlate his/her observations with the requirements of the proposal documents.

The proposer shall be responsible for investigating and evaluating physical conditions at the site of the work. The proposer shall be solely responsible for all necessary site investigations and measurements to ensure the proposal is based on conditions, which exist at the project site.

The submission of a proposal will constitute an incontrovertible representation by the proposer that he/she has complied with and understands every requirement of these instructions. Failure or omission of the proposer to do all of the foregoing shall in no way relieve the proposer from any obligations in respect to his/her proposal.

Pre-opening Inquires and Response: Any explanation desired by a proposer regarding the meaning or interpretation of this RFP and attachments must be requested to the City of St. Joseph, attention Mr. Greg Grothous at [ggrothous@sjcity.com](mailto:ggrothous@sjcity.com). **The deadline for submitting final questions is no later than 3:00 P.M. on November 17, 2016.**

**1.6** Proposals shall be as thorough as necessary to establish the Bidder's ability to complete the project in a timely and successful manner.

**1.7** Each Bidder shall submit its proposal to include the Library as an “**alternate**”.

All proposals shall address the following information:

- 1.7.1** Cover letter from an authorized individual who can commit to the terms and conditions of the proposal.
- 1.7.2** A description of the firm, its background, and present location of business. The description shall include a list of corporate officers, names of partners if partnership, or members if a limited liability company.
- 1.7.3** A statement of qualifications to demonstrate capability of performing and completing the requested services.
- 1.7.4** A summary of current projects being performed by the firm.
- 1.7.5** A breakdown of typical project clients (private development, government, etc.)
- 1.7.6** A summary of previous projects and clients of similar conducted work.
- 1.7.7** A list of at least three references for which the Bidder has performed work within the past two years substantially similar to this project. Include the client name, address, contact person, phone number, and project name or identification number.
- 1.7.8** A technical summary of the included Scope of Services outlining the work to be performed, summarizing the proposed work effort, and indicating any proposed modifications to the Scope of Services. Suggested modifications shall include a description of the change to the design services.
- 1.7.9** The names, job classifications, and experience of all personnel who shall be assigned to this project.
- 1.7.10** A list of any subcontractors to be employed on this project, which shall include all information required of the submitting firm.
- 1.7.11** The firm's single point of contact through proposal acceptance. The City of St. Joseph shall communicate solely through this contact regarding all issues of acceptance. A correct e-mail address, postal address, phone number, and fax number shall be provided for the point of contact.
- 1.7.12** A bid price that includes the price for services provided under the Contract, and shall be signed by an individual authorized to bind the Bidder contractually.
- 1.7.13** Each proposal must be accompanied by a Bid Bond, in the form attached, or a certified check on a bank that is a member of the Federal Deposit Insurance Corporation, payable to the order of the City of St. Joseph, Michigan., in the amount equal to ten percent (10%) of the maximum possible bid price. The maximum possible bid price is the sum

of the total base bid, spare parts, maintenance tools, and all positive amounts for alternates. Each Bidder agrees that, if its proposal is one of the three low proposals, its Bid Bond or check shall be held by the City until a proposal is accepted and a Contractor's Performance Bond is furnished by the successful Bidder and such acceptance has been approved by the City. If such proposal is not one of three low proposals, the Bid Bond or check will be returned to the Bidder within a period of thirty (30) days.

**1.7.14** The successful Bidder shall be required to furnish to the City a Contractor's Performance Bond in conformance with the requirements of Insurance for Contractors, Engineers, and Architects. Should the successful Bidder fail to furnish a Contractor's Performance Bond within thirty (30) days after the written notification of award of the contract by the City, the Bidder will be considered to have abandoned the proposal. In such event, the City shall be entitled to enforce the Bid Bond in accordance with its terms, or to retain from the proceeds of the certified check the difference between the amount of the proposal and such larger amount for which the City may in good faith contract with another party to construct the project. The term "successful Bidder" shall be deemed to include any bidder whose proposal is accepted after another Bidder has previously refused or has been unable to execute the contract or to furnish a Contractor's Performance Bond.

**1.7.15** Submittal of a proposal indicates acceptance by the Bidder of the conditions contained in this request. The City reserves the right to reject without prejudice any or all responses. The City reserves the right to waive formalities and negotiate with any Bidder. The City reserves the right to amend the specifications of this RFP and request new and/or updated proposals at any time prior to award of contract.

**1.7.16** The City shall select the best proposal based upon the most responsive Bidder as determined by the City in its sole discretion. Proposals shall be valid for ninety (90) days following the opening date. No proposal may be withdrawn or changed during this period.

## **2.0 COMPETENCY OF FIRM**

The City shall make such investigations, as it deems necessary, to determine the ability of the Bidder to perform the services required by the Scope of Services. Upon request, the Bidder shall furnish evidence satisfactory to the City that it has the necessary facilities, ability, and financial resources to fulfill the project's Scope of Services. Bidder shall be authorized to conduct business in the State of Michigan and provide a certificate of good standing.

## **3.0 EXCLUSIVITY REQUIREMENT**

It is the intent of the City that the successful Bidder shall be independent from other professionals assigned to this project. Selected firms or individuals will be expected to provide an agreement of exclusivity to ensure non-concurrent representation of or affiliation with the development firms, developers, engineering firms, or other entities involved in development applications within the City of St. Joseph. The City reserves the right to reject any proposals where conflicts may exist.

## **4.0 INCURRING COSTS**

The City is not liable for any costs related to respondents' preparation of their proposal.

## **5.0 WITHDRAWAL OF PROPOSAL**

Any Bidder may withdraw its proposal in person, by facsimile, or by letter, any time prior to the scheduled closing time for receipt of proposals. Thereafter, each proposal shall be considered binding and in effect for a period of Ninety (90) days after the closing date.

## **6.0 OPENING OF PROPOSALS**

Proposals will be opened and evaluated as soon as practical after the closing date.

## **7.0 EVALUATION OF PROPOSALS**

It is the intent of the City to evaluate all proposals quickly. Proposals shall be as thorough and detailed as possible so that the City of St. Joseph may properly evaluate the capabilities of respective firms to provide the required services.

## **8.0 INSURANCE**

During the term of the services provided as part of this RFP, the successful Bidder must procure and maintain the following insurance with carriers acceptable to the City and admitted to do business in the State of Michigan, and provide proof of the same to the City:

**8.1** Worker's Compensation Insurance, including employers' Liability coverage, in accordance with Michigan law.

**8.2** Commercial General Liability Insurance on an "Occurrence Basis" with limits of liability not less than \$1,000,000 per occurrence and aggregate. Coverage shall include the following extensions: A) contractual liability, B) Broad form general liability extensions or equivalent.

**8.3** Motor Vehicle Liability Insurance, including Michigan No-Fault coverages, with limits not less than \$1,000,000 per occurrence combined single limit for bodily injury and property damage. Coverage shall include all owned vehicles, non-owned vehicles, and hired vehicles.

The Commercial General Liability Insurances shall include an endorsement naming as an additional insured the City of St. Joseph, all elected and appointed officials, employees, volunteers, boards, commissions, and/or authorities and boards, including members, employees and volunteers thereof.

All insurance shall include an endorsement that contains a 30-day advance written notice of cancellation to the City Manager, City of St. Joseph, Michigan, 700 Broad Street, St. Joseph, Michigan 49085.

## **9.0 NONDISCRIMINATION**

The successful Bidder shall not discriminate against an employee or applicant for employment with respect to hire, tenure, terms, conditions, or privileges of employment, or a matter directly or indirectly related to employment, because of race, color, religion, national origin, age, sex, height, weight, marital status, or because of a disability that is unrelated to the individual's ability to perform the duties of a particular job or position. Breach of this covenant may be regarded as a material breach of this Agreement.

## **10.0 PAYMENT TERMS**

The City shall make payments to the successful Bidder for actual services rendered within thirty (30) days following receipt of an acceptable invoice; or as otherwise mutually agreed.

## **11.0 DESCRIPTION OF CURRENTLY USED TECHNOLOGY**

The City of St. Joseph is currently using a Nortel Meridian Norstar phone system. The phone system is in multiple City facilities:

City of St. Joseph Administrative Offices, including Police Department - 700 Broad Street

Fire Department – 923 Broad Street

Public Works Offices and Maintenance Garage – 1160 Broad Street

Water Department – 17801 Lions Park Drive

Four (4) other facilities are currently functioning as stand alone. These four facilities are:

Library - 500 Market Street

City Marina – 273 Marina Drive

Cemetery – 2925 Niles Road

Ice Arena – 2414 Willa Drive

## **12.0 SCOPE OF SERVICES**

**12.1** The Bidder shall provide a complete and operational system, which include a detailed site survey, design, furnish, deliver, install, configure, test, commission, and provide administrative and end user training.

**12.2** It is required that one VOIP system be deployed at the City’s Administration Facility with connectivity via fiber and broadband to all other functional departments and facilities.

**12.3** The phone system shall include feature sets for a typical phone system including, but not limited to, caller ID display, intercom, voicemail services, call recording and integration with various computers as well as Microsoft Outlook.

**12.4** All materials and equipment supplied to the City shall be new and unused. The successful Bidder shall supply all of the necessary hardware, software, licenses, maintenance, and warranties per the bill of material (BOM) for the IP phone solution; the installation and

configuration of the hardware and software; training of employees; and training for the IT staff to ensure that quality of service (QoS) and the IP solution is successfully deployed.

- 12.5** Post-Implementation Training and Support involves post-implementation system training and 60 hours of post-implementation support to be used for issue resolution and follow-up, as needed.
- 12.6** Once the phone system is installed and set up, the City desires to maintain the system in-house, performing basic setup of extensions and voicemail as needed without a call for further support

### **13.0 SYSTEM REQUIREMENTS**

The City of St. Joseph is seeking a ShoreTel VOIP system, or engineer-approved equivalent Internet Protocol (IP) PBX phone system. The proposed system shall provide telephone calls over IP data networks and PRIs. The technology shall include advanced communication features, scalability and robustness. The system and applicable related components shall meet the following criteria:

- 13.1 Modular** – The system shall be modular such that the City of St. Joseph can enable and/or add additional features, as needed.
- 13.2 Scalable** – The system shall be scalable to meet the City enterprise size requirements.
- 13.3 Survivability** – The system shall be capable of withstanding a power loss at the DPW complex and the Library for a minimum of fifteen (15) minutes. The furnishing and use of UPS appliances is acceptable.
- 13.4 Reliable** – The system shall be tested and proven to be reliable with the ability to make and receive telephone calls, which is considered to be a mission-critical function.
- 13.5 Interoperability** – The system shall be capable of integrating with the City of St. Joseph's existing network infrastructure.
- 13.6 Secure** – The system shall provide secure method(s) for administration via local/remote logon, administrative software, and/or web interface. Additionally, the system shall support secure/encrypted signaling and media transmission.
- 13.7 Recoverable** – The system shall support backup and the restoration of operations. Backup operations shall be automated such that the most recent copy of data can be restored (e.g., system crash, disaster recovery, etc.).

- 13.8 Reporting** – The system shall have reporting capabilities that include but are not limited to detailed call reports, infrastructure performance, etc.
- 13.9 Voicemail** – The system must include a voicemail system for all extensions as well as mailboxes for employees that have no extension. A minimum of 82 mailboxes would be required. The voicemail system needs to forward the appropriate message recording to each user via email and/or other electronic transmission when received.
- 13.10 Conferencing** – The system shall have multi-party conference with clock to conference, one number follow me/find me, personal call directory, recorded announcement, and messaging.
- 13.11 Call Recording** – The City of St. Joseph requires all incoming and outgoing calls to be recorded. Therefore, the new phone system shall include a recording feature.

The City of St. Joseph requires all incoming and outgoing traffic from the Police Department PRI trunk (main PD numbers only), along with St. Joseph Police Department radio traffic, be recorded automatically (The radio traffic requires one (1) analog channel).

Additionally, the system shall have the ability to press a button on the handset that will record the current call and forward it to the user in an electronic file via email or some type of electronic transmission.

#### **14.0 MANAGEMENT AND SYSTEM SOFTWARE VIRTUALIZATION**

The new system shall provide a solution where the management and system software could be utilized in a virtual setting.

- 14.1 Mobility:** The new phone system shall employ mobility services where each user could forward their calls to voicemail, another extension or another number or any combination of them. Additionally, the system shall have the capability for multiple extensions or phone numbers to ring at the same time.
- 14.2 Call Accounting:** The system shall have a call accounting feature to include but not limited to tracking incoming and outgoing calls, length of time spent on a call, numbers called, extensions called as well as customized reports for all call accounting.
- Also for security reasons, the City requires that the City Police Department data traffic be separate from the data traffic of other City Departments.

**14.3 Integration with computers and Outlook:** The City uses Windows based PC's. A preference would be given to a system where calls can be made from the users' computer by either highlighting a phone number on the computer screen or through Microsoft Outlook. The system must support Outlook 2003 and above.

Additionally, The City of St. Joseph would prefer a system that can allow each user to know other users presence and/or status.

**14.4 Intercom:** The system shall have the capability of providing intercom connection between any extension and for all calls.

**14.5 Service and Warranty:** The proposal shall include all licensing and appropriate hardware and software support for the initial one year warranty period. Costs involved beyond the first year, more specifically, warranties for the subsequent five (5) years, shall be disclosed but not included in the initial pricing.

## **15.0 HANDSET REQUIREMENTS**

The following handsets are required at each of the following locations:

- City of St. Joseph Administrative Office and Police Department:  
Forty three (43) IP telephone handsets, ShoreTel Model #480G  
Four (4) IP conference telephone sets, ShoreTel Model #655
- Fire Department  
Seven (7) IP telephone handsets, ShoreTel Model #480G  
One (1) IP conference telephone set, ShoreTel Model #655
- Public Works  
Twelve (12) IP telephone handsets, ShoreTel Model #480G  
One (1) IP conference telephone set, ShoreTel Model #655
- Water Department  
Seven (7) IP telephone handsets, ShoreTel Model #480G  
One (1) IP conference telephone set, ShoreTel Model #655
- City Marina  
Two (2) IP telephone handsets, ShoreTel Model #480G
- Ice Arena

- One (1) IP telephone handset, ShoreTel Model #480G
- Cemetery
- One (1) IP telephone handset, ShoreTel Model #480G
- Library  
Ten (10) IP telephone handsets, ShoreTel Model #480G  
One (1) IP conference telephone sets, ShoreTel Model #655
- Five (5) Spare IP telephone handsets, ShoreTel Model #480G

The Bidder shall include pricing for various models of telephone sets which meet the criteria listed above.

## **16.0 TRUNKING AND HARDWARE REQUIREMENTS**

The City of St. Joseph has one (1) PRI trunk for a total of 24 channels (12 channels in and 12 channels out), located in the City Administrative Offices. A total of ten channels (5 in and 5 out) are dedicated to the City's Police Department. The Administrative building, Public Works building, Fire Department, and Water Department complex are connected via fiber optic cables. The Library, the Marina, the Ice Arena, and the Cemetery are currently stand-alone facilities. However, these four facilities have broadband services provided by Comcast. The required equipment for these various buildings are:

- City Hall includes Administrative Offices and Police (Hub)
  - Voice switch, ShoreTel Model #ST100DA
  - POE Switch, HP Layer 2 switch with Layer 3 routing capability
  - RJ45 patch panels
  - Unified Communications Management System
- Public Works: Connection over existing fiber
  - POE Switch, HP Layer 2 switch with Layer 3 routing capability
  - RJ45 patch panel
  - UPS appliance
- Water Department: Connection over existing fiber
  - POE Switch, HP Layer 2 switch with Layer 3 routing capability s
  - RJ45 patch panel
- City Marina

VPN over the Broadband Network

If no existing POE Switch, place power injectors

- Ice Arena
  - VPN over the Broadband Network
  - Power injectors
- Cemetery
  - VPN over the Broadband Network
  - Power injectors
- Library
  - VPN over the Broadband Network, Shoregear 30
  - POE Switch, HP Layer 2 switch with Layer 3 routing capability
  - RJ45 patch panel
  - UPS appliance
- Fire Department: Connection over existing fiber
  - POE Switch, HP Layer 2 switch with Layer 3 routing capability
  - RJ45 patch panel

## 17.0 ANALOGUE EXTENSION NEEDS

There exist a total of six (6) Fax lines throughout the various buildings, an elevator line at the City's Administrative Building, a security/fire system line and a tracer line for the HVAC in the library. The Fax lines shall be converted to direct inward dialing (DID) extensions, while the elevator line, security/fire line, and the HVAC tracer line shall remain as is.

## 18.0 NEW PHONE STATIONS

A total of sixteen (18) new telephone stations shall be added as new construction. The construction shall consist of a new, plenum rated, category 6e inside wire, installed between the communication rooms and the locations as indicated on the attached plans. The inside, category 6e wires shall be terminated at new RJ45 jack outlets. Cover plates shall be installed at each new jack outlet location and shall match existing. The delineated areas are as follows:

Twelve (13) at DPW

Three (3) at the Library

Two (2) at City Hall/Police Department

Note: These stations are included in the 91 total stations.

All wall and floor penetration shall be sealed with fire stop material at the end of the construction. This construction shall be conducted in accordance with BICSI standards.

### **19.0 MAINTENANCE PLAN REQUIREMENTS**

The Bidder shall provide the City of St. Joseph with a response time for all system related service calls. The response time shall not exceed two (2) hours from the time the initial service call is placed.

The Bidder shall provide the City with a timeframe as to how long it will take to resolve the issue. The Bidder shall provide the City with a history report containing all system related issues and resolutions.

The Bidder shall provide the City with an annual maintenance plan that can be utilized 24 hours a day, 7 days a week, and 365 days a year.

The Bidder shall maintain sufficient inventory levels of critical electronics on hand at all times in the event that there is a failure of the IP phone system.

### **20.0 DECOMMISSIONING OF EXISTING SYSTEM**

At the conclusion of the implementation and integration of the new system, and after acceptance of the newly installed system by the City, the successful Bidder shall decommission, remove, and properly dispose of the existing undesired, non-essential equipment of the existing system, including all the existing unwanted cabling and wiring in accordance with the National Electrical Code (NEC).

### **21.0 LICENSES AND PERMITS**

The successful Bidder shall furnish proof of any licenses required by the State of Michigan, and proposed equipment manufacturer's certifications contained in the specifications prior to Contract award regardless of whether or not that requirement is listed above.

The Bidder agrees that it has procured all licenses, permits, or other like permission required by law to conduct or engage in the activity requested within this RFP; that it will procure all additional licenses, permits, or like permission required by law during the term of the Contract; and that it

will keep such licenses, permits, and permissions in full force and effect during the term of the Contract.

## **21.0 IMPLEMENTATION**

The successful Bidder shall provide a project schedule. The project schedule shall begin with a City of St. Joseph Notice to Proceed, and shall end upon final system acceptance. The project schedule shall include project tasks performed, including tasks that are the responsibility of the City of St. Joseph as part of the implementation process. **The construction and installation shall be completed no later than April 28, 2017.**

## **22.0 WARRANTY, MAINTENANCE, SUPPORT, AND RELIABILITY**

The City of St. Joseph intends to enter into a relationship with a Bidder that can maintain the latest IP phone system functionality for the City, with minimal disruption. Bidders shall provide sufficient detail for the City to fully consider future costs of the system.

All equipment, software, and services furnished by the bidder under the resulting contract shall be warranted free from defects in material and workmanship, and shall conform to this RFP and the Bidder's response thereto, with any and all exceptions agreed to by the City. In the event any such defects in equipment, software, or services become evident within the warranty period, the bidder shall correct the defect by (1) repairing or replacing any defective component of the equipment; (2) correcting any reproducible and/or recurring software defects; or (3) replacing the faulty services. The Bidder is responsible for all charges incurred in returning defective parts to the vendor's, subcontractor's, or suppliers' plants, and in shipping repaired or replacement parts to the City. Labor to perform warranty services shall be provided at no charge during the warranty period. Thereafter, the City of St. Joseph will provide the maintenance and service of the system's equipment and wiring.

The Bidder further warrants that during the warranty period that any equipment and software furnished under the contract shall operate under normal use and service as a complete system, which shall perform in accordance with this RFP and the bidder's response thereto, with any and all exceptions agreed to by the City in writing. The warranty period shall be a period of no less than 12 months from the date of final system acceptance as defined herein. Claims under any of

the warranties herein are valid if made within 90 days after termination of the warranty period. In addition, the following specific requirements shall apply to the Bidder's warranty:

- 22.1** The Bidder shall also obtain any warranties from subcontractors or suppliers and shall apply the same to the benefit of the City of St. Joseph.
- 22.2** The Bidder shall remedy at its own expense any damage caused by the Bidder to City of St. Joseph owned or controlled real or personal property. The Bidder shall be liable to the City for supply of information, materials, and labor necessary for mandatory revisions determined by the manufacturer for the duration of the warranty period at no cost to the City of St. Joseph.
- 22.3** The "acceptance" of systems/equipment by the City of St. Joseph shall not limit the City's warranty rights set forth above with respect to defects in materials or workmanship. It is the City of St. Joseph's position that the Bidder should be capable of accurately projecting the technology that will be available in the market at the time of delivery. It is expected that the Bidders will respond to this RFP accordingly. It is the intent of the City of St. Joseph to purchase the latest in current technology.

### **23.0 MAINTENANCE**

1. Describe what is included in your standard maintenance program including any software updates, enhancements, upgrades and services.
2. Describe method and timing of notification of software updates and enhancements.
3. Detail manufacturer software updates, enhancements and upgrades intervals.
4. Prior to the final acceptance, any new releases, version updates, or platform changes made available shall automatically be installed (with the City's approval) free of charge.

### **24.0 SUPPORT**

1. Provide a copy of the Bidder's standard support agreement.
2. Describe the account management resources available to the City.
3. Describe the Bidder's standard support services.
4. For telephone support, provide the following information:
  - Define the Bidder's average support call duration.
  - Define the Bidder's average time to resolve issues.

- Define the Bidder's first-call resolution percentage.

## **25.0 RELIABILITY**

Successful operation is defined as the absence of any major failure of equipment, software, equipment or software function, which results in the disabling of a major equipment item, resulting in the inability of the overall system to perform as specified. Minor failures, such as operational problems and adjustments normally encountered during implementation of a new system, shall not constitute a failure in achieving successful operation.

A reliability test period of ninety (90) consecutive calendar days of successful error free operation after installation and performance verification shall constitute a successful performance period. During the ninety (90) day reliability period, the City of St. Joseph shall utilize the system for its intended purpose (in service) to test all operational modes and equipment configurations, with the system fully loaded to peak activity, to ensure that all operational modes function properly and that all system "bugs" have been corrected.

## **26.0 PROPRIETARY AND CONFIDENTIAL INFORMATION**

The Bidder shall mark as "proprietary" those parts of its proposal that it deems confidential and proprietary. Proprietary information from competing Bidders shall not be disclosed to the public or competitors.

All proprietary computer programs will be released only in accordance with the Bidder's Software License/Service provisions contained within the contract documents, including the applicable agreements to be entered into between the City of St. Joseph and the Bidder governing the City's use of software, or as required by Michigan Statute or court order. All other material and information of a confidential nature as designated by the Vendor will be released as necessary under the following conditions:

- The City of St. Joseph shall exercise reasonable and prudent measures to keep these items in confidence to the maximum extent permitted under law.
- The City of St. Joseph shall not disclose confidential items without the Bidder's permission, unless the bidder makes them public.

Notwithstanding the obligations on disclosure and confidentiality set forth herein, the City of St. Joseph may disclose confidential items to third parties where required pursuant to Michigan Statute, or insofar as necessary to satisfy a court order, subpoena, litigation discovery demand, or administrative or regulatory proceeding.

## **27.0 E911 COMPATIBILITY**

Michigan's proposed enhanced 911 (E911) legislation obligates operators of multi-line telephone systems and private branch exchange systems of multi-story and/or multi-building campuses to route 911 calls and precise location information to the appropriate local Public Safety Answering Point (PSAP) when 911 is dialed. The proposed legislation requires that the location information sent to the PSAP must indicate the precise location of the caller. Therefore, the VOIP system offered by the Bidder shall be capable of integrating the E911 feature with the proposed Unified Communications Manager (SUCM).

## **28.0 GENERAL SYSTEM DESIGN AND SPECIFICATIONS**

### **28.1 System Design**

The VOIP system equipment shall include the following:

1. H.323 or the Session Initiation Protocol (SIP) signaling protocols that sets up, maintain and terminate a VoIP call.
2. Media Gateway Control Protocol (MGCP) that provides a signaling and control protocol between VoIP gateways and traditional PSTN (Public Switched Telephone Network) gateways.
3. H.323 protocol is secured by using TLS and S/MIME encryption for SIP.
4. Adequate physical security is in place to restrict access to key VoIP servers and components.
5. Firewalls designed for VOIP protocols are employed to secure the VOIP systems.
6. VOIP Terminals are secured through password authentication and user authorization. User accounts shall be administered and managed by the Information and Communications Technology (ICT) units.
7. WI-FI Protected Access (WPA) where mobile units are to be integrated with the VOIP system.

8. Where softphones are used, PCs should be adequately secured to protect from worms, viruses, and other malicious software.
9. Creating awareness to users on how to secure VOIP systems.
10. Real-Time Transport Protocol.
11. Session Initiation Protocol.
12. ITU-T H.323
13. Media Gateway control protocol
14. IP security (IPsec), TLS and S/MIME for encryption
15. Other provisions
  - I. Traditional calling features including call by name, caller, ID, last number redial, hold, call waiting, call forwarding, transfer, divert, park, retrieve, voice mail, return call and call conferencing
  - II. Call Coverage make it easy to ensure that important calls are answered by administrative assistants or team members, via user-controlled Delegation and Team Calling respectively.
  - III. Telephone Directory
  - IV. Maintain Call history

### 28.2 Functionality Checklist

Complete the following tables by selecting the correct column (**Y / N / M**) for each requirement.

If additional explanation is required, information may be included in the comments column.

**Y = Yes** - The proposed system meets or exceeds the requirement.

**N = No** - The proposed system cannot meet the requirement.

**M = Modification**- The system must be modified in order to meet the requirement. Provide explanation, estimated costs and proposed delivery date. Description

		Y	N	M	Comments
1	Alphanumeric display				
2	Able to access voice mailbox				
3	Automatic outside line answer/hold				
4	Built-in full duplex capability speakerphone				

5	Call forwarding				
6	Call park				
7	Call pick-up				
8	Call transfer				
9	Caller ID				
10	Capable of monitoring multiple voice mailboxes for messages				
11	Capable of using a headset wired				
12	Capable of using a headset wireless				
13	Check voicemail from outside line				
14	Delayed ringing				
15	Distinctive ringing				
16	Do Not Disturb				
17	Feature button display can be hardware or software				
18	Intercom capability with audible tone distinguishable from the regular ring				
19	Last number redial				
20	Message indicator for voicemail				
21	Multiparty conferencing capability from the phone set				
22	Mute function				
23	Paging accessible to all stations or group function				
24	Station and system speed dial				
25	Ability of a single phone to monitor multiple extensions				
26	User programmable keys				
27	Volume control				
28	Extension look-up/directory for internal staff				
29	Dial by name directory				
30	Change voicemail settings from outside line				
31	Message only information or business mailbox				
32	Ability to retrieve deleted messages				
33	Call history				
34	Voicemail forwarding				

35	Voicemail caller ID/time of message				
36	Transfer of voicemail to email or vice versa				
37	Remote access to all voicemail boxes				
38	E911 Compatibility				

BID BOND

KNOW ALL MEN BY THESE PRESENTS, that we \_\_\_\_\_ as  
Principal, hereinafter called the Bidder, and \_\_\_\_\_  
\_\_\_\_\_ as Surety,  
are held and firmly bound unto the CITY OF SAINT JOSEPH, MICHIGAN, hereinafter called the Obligee, in the penal  
sum of \_\_\_\_\_ (\$ \_\_\_\_\_ ) lawful money of the United States, for the payment  
of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators, and successors, jointly and  
severally, firmly by these presents.

WHEREAS, the bidder has submitted the accompanying bid, dated the \_\_\_\_\_ day of  
\_\_\_\_\_.20\_\_\_\_\_.

NOW. THEREFORE, the conditions of the obligation are such that if the bid be accepted as to any or all of the items of  
material and workmanship proposed to be furnished thereby, or as to any portion of the same, and if the said bidder will  
within ten (10) days after notice of the award of contract enter into contract with the Obligee to furnish all work and materials  
at the prices offered by said bid and will furnish bond with good and sufficient surety or sureties as may be required for the  
faithful and proper fulfillment of said contract and such other and further bonds as may be required under the ordinances of  
the Obligee, or statutes of the State of Michigan, then this obligation shall be void. And the surety hereby binds itself and  
its successors to pay the Obligee, in case the bidder fails to enter into such contract and give such bonds within ten (10) days  
after such notice of award of contract to pay to the Obligee the damages which Obligee may suffer by reason of such failure  
not exceeding the penalty of this bond.

IN WITNESS WHEREOF, the above-bounded parties have executed this instrument under their several seals this  
\_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_. the name and corporate seal of each corporate party being hereto affixed,  
and these presents duly signed by its undersigned representative, pursuant to authority of its governing body.

In Presence of: \_\_\_\_\_ L.S.  
\_\_\_\_\_ L.S.  
\_\_\_\_\_ Surety

NOTE: If CONTRACTOR is Partnership, all partners should execute BOND.  
IMPORTANT: Surety companies executing BONDS must appear on the Treasury Department's most current list (Circular  
570 as amended, [www.fms.treas.gov/c570/c570.html](http://www.fms.treas.gov/c570/c570.html)) and must be authorized to transact business in the State of Michigan.

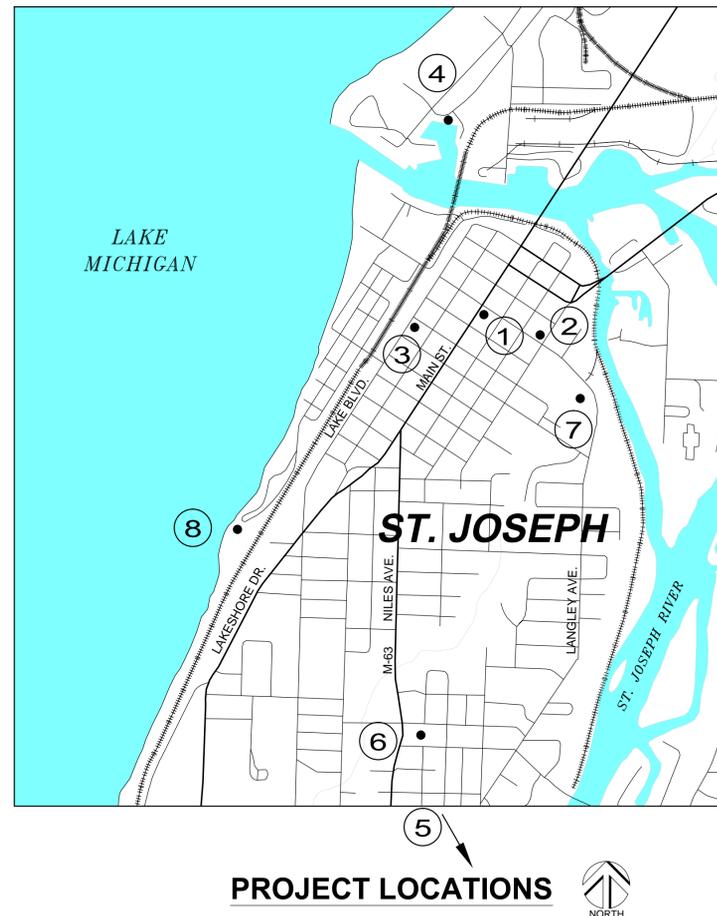


# TELEPHONE SYSTEM REPLACEMENT

## AT VARIOUS LOCATIONS

**MAP KEY:**

1. CITY HALL - 700 BROAD ST.
2. FIRE STATION - 923 BROAD ST.
3. LIBRARY - 500 MARKET ST.
4. MARINA - 273 MARINA DR.
5. CEMETERY - 2925 NILES RD.
6. ICE RINK - 2414 WILLA DR.
7. DPW COMPLEX - 1160 BROAD ST.
8. WATER PLANT - 1701 LIONS PARK DR.



LOCATION MAP

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CITY OF ST. JOSEPH, MICHIGAN  
TELEPHONE SYSTEM REPLACEMENT

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PROJECT #: 584-001

SHEET TITLE:  
COVER

SHEET #:

C

# ELECTRICAL SYMBOL LEGEND

<b>SWITCHES</b> SINGLE POLE TOGGLE SWITCH THREE-WAY TOGGLE SWITCH FOUR-WAY TOGGLE SWITCH SINGLE OCCUPANCY/VACANCY SENSOR SWITCH DUAL OCCUPANCY/VACANCY SENSOR SWITCH KEYPAD WALL SWITCH KEYPAD WALL SWITCH-THREE-WAY KEYPAD WALL SWITCH-4-WAY WALL TOGGLE SWITCH W/RED PILOT LIGHT SINGLE POLE SWITCH W/WEATHER PROOF COVER PLATE INCANDESCENT DIMMER LED DIMMER SWITCH PROJECTION SCREEN SWITCH MANUAL MOTOR STARTER SWITCH MANUAL MOTOR STARTER SWITCH WITH PILOT LIGHT LOW VOLTAGE SWITCH TIMER SWITCH EXPLOSION PROOF SWITCH PROJECTION SCREEN SWITCH COMBINATION DUPLEX RECEPTACLE AND AND TOGGLE SWITCH PUSHBUTTON STATION EMERGENCY POWER OFF PUSHBUTTON WITH KEY RESET	<b>RECEPTACLES (CONT'D.)</b> CLOTH ROUGH-IN CLOCK RECEPTACLE (WALL) CLOCK RECEPTACLE (CEILING) SINGLE FACE CLOCK DUAL FACE CLOCK MASTER CLOCK PANEL <b>COMMUNICATIONS</b> EXISTING WALL MOUNTED COMMUNICATIONS BOX PROPOSED WALL MOUNTED COMMUNICATIONS BOX EXISTING PEDESTAL MOUNTED COMMUNICATIONS BOX EXISTING FLOOR MOUNTED COMMUNICATIONS BOX EXISTING DATA OUTLET <b>JUNCTION BOXES</b> WALL MOUNTED JUNCTION BOX FLOOR MOUNTED JUNCTION BOX CEILING MOUNTED JUNCTION BOX	<b>EQUIPMENT</b> TRANSFORMER CONTACTOR TIME CLOCK TRANSIENT VOLTAGE SURGE SUPPRESSOR PHOTO-ELECTRIC EYE MOTOR SINGLE OR THREE PHASE MOTOR THERMOSTAT HUMIDSTAT ELECTRIC METER BUSWAY DISCONNECT SWITCH FUSED DISCONNECT SWITCH FUSED DISCONNECT SWITCH/MOTOR STARTER MOTOR STARTER CIRCUIT BREAKER FUSIBLE SWITCH PANEL-SURFACE MOUNT PANEL-RECESSED MOUNT SWITCHBOARD GROUND BUS BAR	<b>SPECIAL SYSTEMS SYMBOLS (CONT'D.)</b> <b>SECURITY SYSTEM</b> SECURITY SYSTEM CONTROL PANEL DOOR CONTACTOR MAGNETIC CONTACTOR VISUAL STROBE(WEATHER PROOF) MOTION DETECTOR MOTION DETECTOR (INFRARED) MOTION DETECTOR (INFRARED) KEY PAD AUDIO/VISUAL ALERT VISUAL ALERT FLOOD MOTION DETECTOR: MICROWAVE & INFRARED 40° TEMPERATURE SENSOR REQUEST TO EXIT MOTOR DETECTOR EMERGENCY RELEASE BUTTON (MUSHROOM) CARD READER MAGNETIC DOOR-AJAR DETECTOR ELECTRIC DOOR STRIKE MAGNETIC DOOR LOCK AUTO-BOND SENSOR EXPOSED EXTERIOR <b>FIRE ALARM SYSTEM</b> FIRE ALARM CONTROL PANEL PHOTOELECTRIC SMOKE DETECTOR /SUB-FLOOR PHOTOELECTRIC SMOKE DETECTOR HEAT DETECTOR PULL STATION VISUAL STROBE FIRE AUDIO/VISUAL ALERT WATER FLOW SWITCH TAMPER SWITCH FIRE STROBE (WEATHER PROOF) FIRE ALARM HORN FIRE ALARM BELL DUCT SMOKE DETECTOR CARBON MONOXIDE DETECTOR CARBON MONOXIDE ALERT VISUAL SIGNAL REMOTE ANNUNCIATOR <b>GENERAL NOTES:</b> EXISTING SYMBOLS - THIN LINE NEW SYMBOLS - THICK LINE DEMO - DASHED LINE WALL MOUNT
<b>RECEPTACLES</b> 20A DUPLEX RECEPTACLE SPLIT-WIRED 20A DUPLEX RECEPTACLE 20A QUADPLEX RECEPTACLE 20A DUPLEX RECEPTACLE ON EMERGENCY POWER 20A EXPLOSION PROOF DUPLEX RECEPTACLE 20A DUPLEX RECEPTACLE W/BUILT-IN GROUND FAULT INTERRUPTER CIRCUIT (GFI) SAME AS GFI W/WEATHER PROOF ENCLOSURE 20A CEILING MOUNTED DUPLEX RECEPTACLE 20A GFI DUPLEX RECEPTACLE MOUNT BEHIND WATER COOLER COMBINATION 20A DUPLEX RECEPTACLE WITH 2-PORT USB CHARGERS 20A DUST & MOISTURE RESISTANT DUPLEX RECEPTACLE 20A ISOLATED GROUND DUPLEX RECEPTACLE 20A FLOOR MOUNTED DUPLEX RECEPTACLE 20A SINGLE RECEPTACLE 30A SINGLE RECEPTACLE SINGLE RECEPTACLE RECEPTACLE TO MATCH EQUIPMENT 20A DUPLEX RECEPTACLE MOUNTED AT 6" ABOVE COUNTER TOP TO BOTTOM OF DEVICE 20A QUADPLEX RECEPTACLE MOUNTED AT 6" ABOVE COUNTER TOP TO BOTTOM OF DEVICE WALL MOUNTED SPECIAL PURPOSE CONNECTION FLOOR MOUNTED SPECIAL PURPOSE CONNECTION CEILING MOUNTED SPECIAL PURPOSE CONNECTION CEILING MOUNTED DUPLEX RECEPTACLE, 20A, 277V PLUG STRIP COMBINATION POWER/COMMUNICATIONS FLOOR BOX POWER POLE DUAL COMPARTMENT POWER/COMMUNICATIONS POLE VERTICAL RISER FOR DUAL COMPARTMENT SURFACE RACEWAY DUAL COMPARTMENT SURFACE RACEWAY WITH BRING DEVICES AS INDICATED ON PLANS	<b>FIXTURES</b> SURFACE MOUNT PENDANT MOUNT RECESSED DIRECTIONAL SURFACE MOUNT DIRECTIONAL RECESSED MOUNT TRACK WITH HEADS SURFACE MOUNTED CEILING FIXTURE EXHAUST FAN/LIGHT - PROVIDE SEPARATE SWITCHES EXIT SIGN-SINGLE FACE EXIT SIGN-DUAL FACE EMERGENCY LIGHT EMERGENCY LIGHT W/REMOTE HEAD <b>LIGHTING CONTROLS</b> OCCUPANCY SENSOR-DUAL TECHNOLOGY OCCUPANCY SENSOR-PASSIVE INFRARED OCCUPANCY SENSOR-ULTRASONIC POWER PACK <b>CONDUITS</b> CONCEALED CONDUIT-CURVED LINE EXPOSED CONDUIT-DRAWN STRAIGHT 2" CONDUIT STUB WITH NYLON BUSHINGS ABOVE CEILING-U.N.D.	<b>SPECIAL SYSTEMS SYMBOLS</b> <b>BELL SYSTEM</b> BELL BUTTON BELL CHIME (3 TONE) PROGRAM BELL <b>PUBLIC ADDRESS SYSTEM</b> PAGING HORN PAGING SPEAKER INTERCOM STATION SPEAKER WITH VOLUME CONTROL <b>SOUND RE-INFORCEMENT</b> SPEAKER MICROPHONE OUTLET-WALL MICROPHONE OUTLET-CEILING SPEAKER VOLUME CONTROL	

# ELECTRICAL ABBREVIATIONS

A or AMP	AMPERE	GALV	GALVANIZED	NAC	NOTIFICATION APPLIANCE CIRCUIT
AC	ALTERNATING CURRENT	GF, GFI or GFCI	GROUND FAULT CIRCUIT INTERRUPTOR	NC	NORMALLY CLOSED
ADJ	ADJACENT	GFP	GROUND FAULT PROTECTION	NFOS	NON-FUSIBLE DISCONNECT SWITCH
AF	AMPERE FUSES	GND	GROUND	NO	NORMALLY OPEN
AFB	ABOVE FINISHED FLOOR	GRC	GALVANIZED RIGID CONDUIT	NEC	NATIONAL ELECTRICAL CODE
AFG	ABOVE FINISH GRADE	HD	HAND DRIVER	NI	NOT IN CONTRACT
AIC	AMPERE INTERRUPTION CAPACITY	HP	HORSE POWER	NLS	NOT TO SCALE
AL	ALUMINUM	HPS	HIGH PRESSURE SODIUM	NPS	NOT TO SCALE
ALT	ALTERNATE	HZ	HERTZ	OC	ON CENTER
ATS	AUTOMATIC TRANSFER SWITCH	IC	INTERCOM	P	POLE
AUTO	AUTOMATIC	IES	ILLUMINATING ENGINEERING SOCIETY	PA	PUBLIC ADDRESS
AWG	AMERICAN WIRE GAUGE	IMC	INTERMEDIATE METAL CONDUIT	PBS	PUSH BUTTON STATION
BFO	BELOW FINISHED GRADE	INCAND	INCANDESCENT	PE	PHOTOELECTRIC CONTROL
C	CONDUIT	INV	INVERTER	PH	PHASE
C.B. or CKT BRKR	CIRCUIT BREAKER	JB	JUNCTION BOX	PNL	PANEL OR PANELBOARD
C.T	CABLE TRAY	KMIL or MCM	THOUSAND CIRCULAR MILS	PVC	POLYVINYL CHLORIDE CONDUIT
CKT	CIRCUIT	KD	KNOCKOUT	RECP	RECEPTACLE
CLG	CEILING	KV	KILOVOLTS	REL	RELIGATE
CMSS	COMBINATION MOTOR STARTER/ FUSIBLE DISCONNECT SWITCH	KVA	KILOVOLT AMPERES	RLA	RUNNING LOAD AMPERES
COMT	CONTACTOR	KW	KILOWATT	RMC	RIGID METAL CONDUIT
CP	CEILING PROJECTOR	KWH	KILOWATT HOURS	SCH	SCHEDULE
CT	CURRENT TRANSFORMER	LC	LIGHTING CONTACTOR	SPD	SURGE PROTECTION DEVICE
CU	COPPER	LED	LED LIGHTING	SPKR	SPEAKER
D	DATA	LFP	LIGHTING CONTROL PANEL	SSLB	SOUND SYSTEM JUNCTION BOX
DC	DIRECT CURRENT	LE	LIGHTING CONTROL PANEL LIGHT EMITTING DIODE	SW	SWITCH
DA	DIAMETER	LT	LIGHTING PANEL	TC	TIME CLOCK
DISC	DISCONNECT	LTG	LIGHTING	TCL	TOTAL CONNECTED LOAD
DIST	DISTRIBUTION	M	MONITOR	TEA	TO FLOOR ABOVE
DSP	DISTRIBUTION PANEL	MAC	MINIMUM CIRCUIT AMPACITY	TB	TO FLOOR BELOW
DPM	DIGITAL POWER MONITOR	MCA	MINIMUM CIRCUIT AMPACITY	TV	TELEVISION
EA	EACH	MCC	MOTOR CONTROL CENTER	TYP	TYPICAL
EC	ELECTRICAL CONTRACTOR	MCP	MOTOR CONTROL CENTER	UNO	UNLESS NOTED OTHERWISE
ELEC	ELECTRIC OR ELECTRICAL	MCP	MOTOR CONTROL CENTER	V	VOLT
EM	EMERGENCY	MDB	MAIN DISTRIBUTION BOARD	VC	VOLUME CONTROL
EMT	ELECTRICAL METALLIC TUBING	MG	MOTOR GENERATOR	VFD	VARIABLE FREQUENCY DRIVE
EP	ELECTRICAL PANEL	MH	MASTER GROUND BAR	VF	VERIFY IN FIELD
EPO	EMERGENCY POWER OFF	MIN	MINIMUM	W	WATTS
ETBR	EXISTING TO REMAIN	MLB	MAIN LUGS ONLY	WG	WIRE GUARD
EWC	ELECTRIC WATER COOLER	MLO	MAIN LUGS ONLY	WM	WATTHOUR METER
EX	EXISTING	MS	MOTOR STARTER	WP	WEATHER PROOF
EXP	EXPOSED	MSWB	MAIN SWITCHBOARD	XFR	TRANSFORMER
EXT	EXTERIOR	MW	MICROWAVE		
F	FUSE				
FA	FIRE ALARM				
FAAP	FIRE ALARM ANNUNCIATOR PANEL				
FACP	FIRE ALARM CONTROL PANEL				
FC	FOOT CANDLE				
FDS	FUSIBLE DISCONNECT SWITCH				
FLOOR	FLOOR				
FT	FOOT OF FEET				

SHEET	DESCRIPTION
TEC	COVER & LOCATION MAP
TE0.0	ELECTRICAL SYMBOL LEGEND, ABBREVIATIONS & DRAWING INDEX
TE1.0	CITY HALL BASEMENT LEVEL - TELEPHONE STATIONS
TE1.1	CITY HALL FIRST LEVEL - TELEPHONE STATIONS
TE1.2	CITY HALL SECOND - TELEPHONE STATIONS
TE2.1	FIRE STATION - TELEPHONE STATIONS
TE3.1	LIBRARY LOWER LEVEL - TELEPHONE STATIONS
TE3.2	LIBRARY UPPER LEVEL - TELEPHONE STATIONS
TE4.1	MARINA - TELEPHONE STATIONS
TE5.1	CEMETERY OFFICE - TELEPHONE STATIONS
TE6.1	ICE RINK - TELEPHONE STATIONS
TE7.1	DPW COMPLEX - TELEPHONE STATIONS
TE8.1	WATER PLANT LOWER LEVEL - TELEPHONE STATIONS
TE8.2	WATER PLANT UPPER LEVEL - TELEPHONE STATIONS
TE9.0	ONE-LINE DIAGRAM

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CITY OF ST. JOSEPH, MICHIGAN  
 TELEPHONE SYSTEM REPLACEMENT  
**INDEX SHEET**

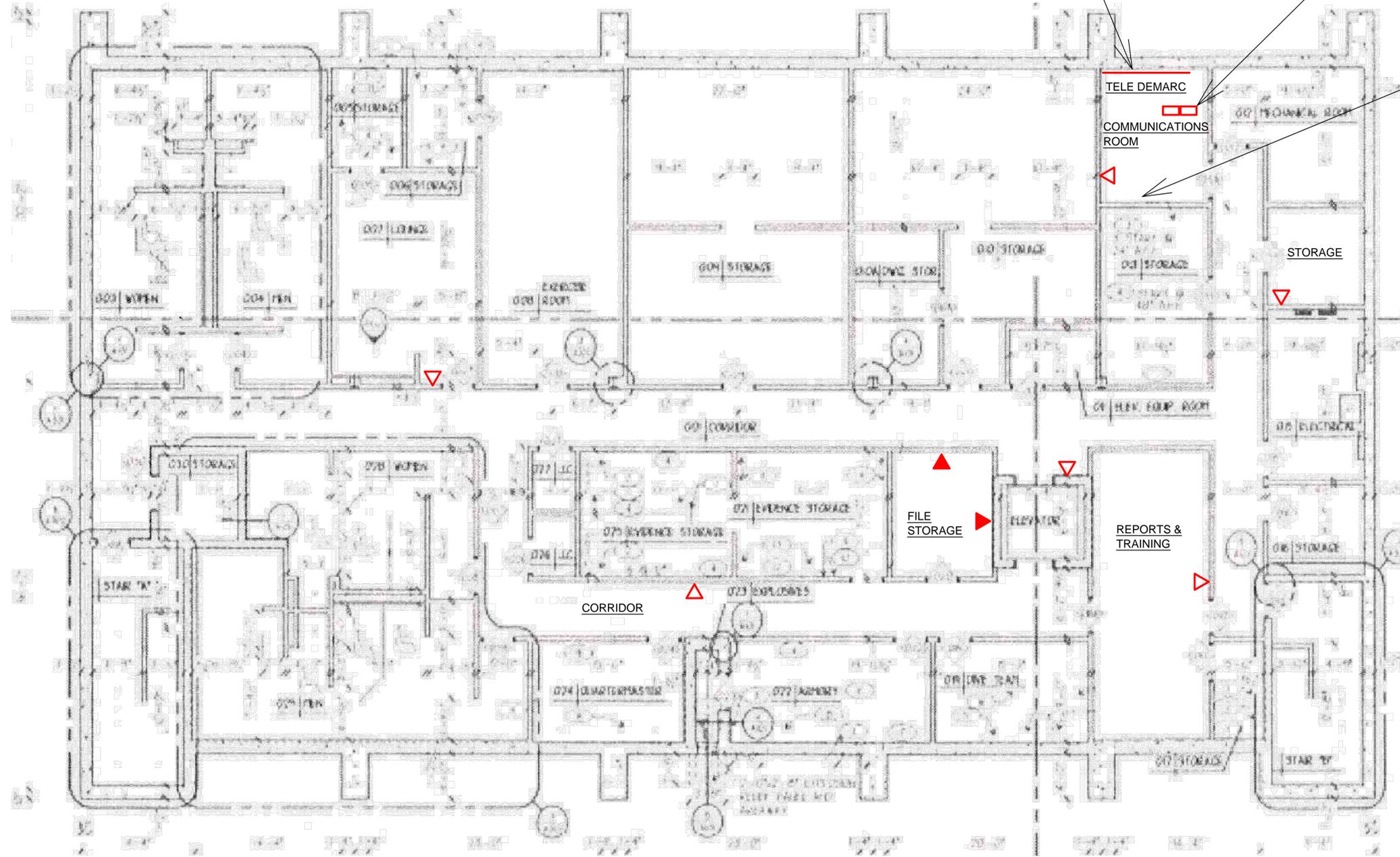
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PROJECT #: 584-001  
 SHEET TITLE:  
 LEGENDS, & SHEET INDEX  
 SHEET #:

**TE0.0**

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 TELEPHONE SYSTEM REPLACEMENT  
 CITY HALL  
 BASEMENT LEVEL

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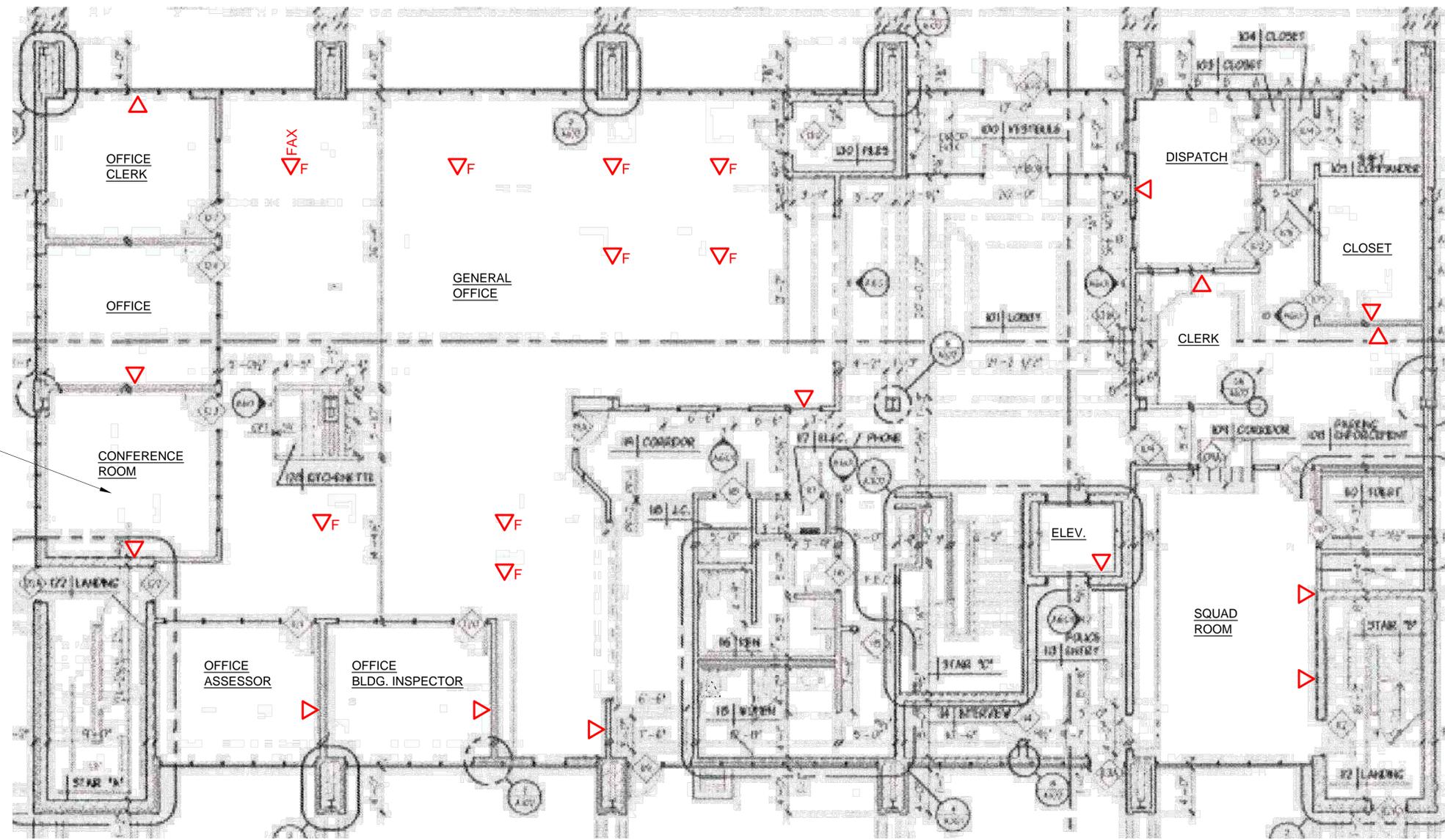
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SHEET TITLE:  
 BASEMENT  
 TELEPHONE  
 STATIONS

SHEET #:

TE1.0

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**TELEPHONE SYSTEM REPLACEMENT**  
**CITY HALL**  
**FIRST LEVEL**

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 SHEET TITLE:  
 FIRST LEVEL TELEPHONE STATIONS  
 SHEET #:

**TE1.1**



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 TELEPHONE SYSTEM REPLACEMENT  
 FIRE STATION

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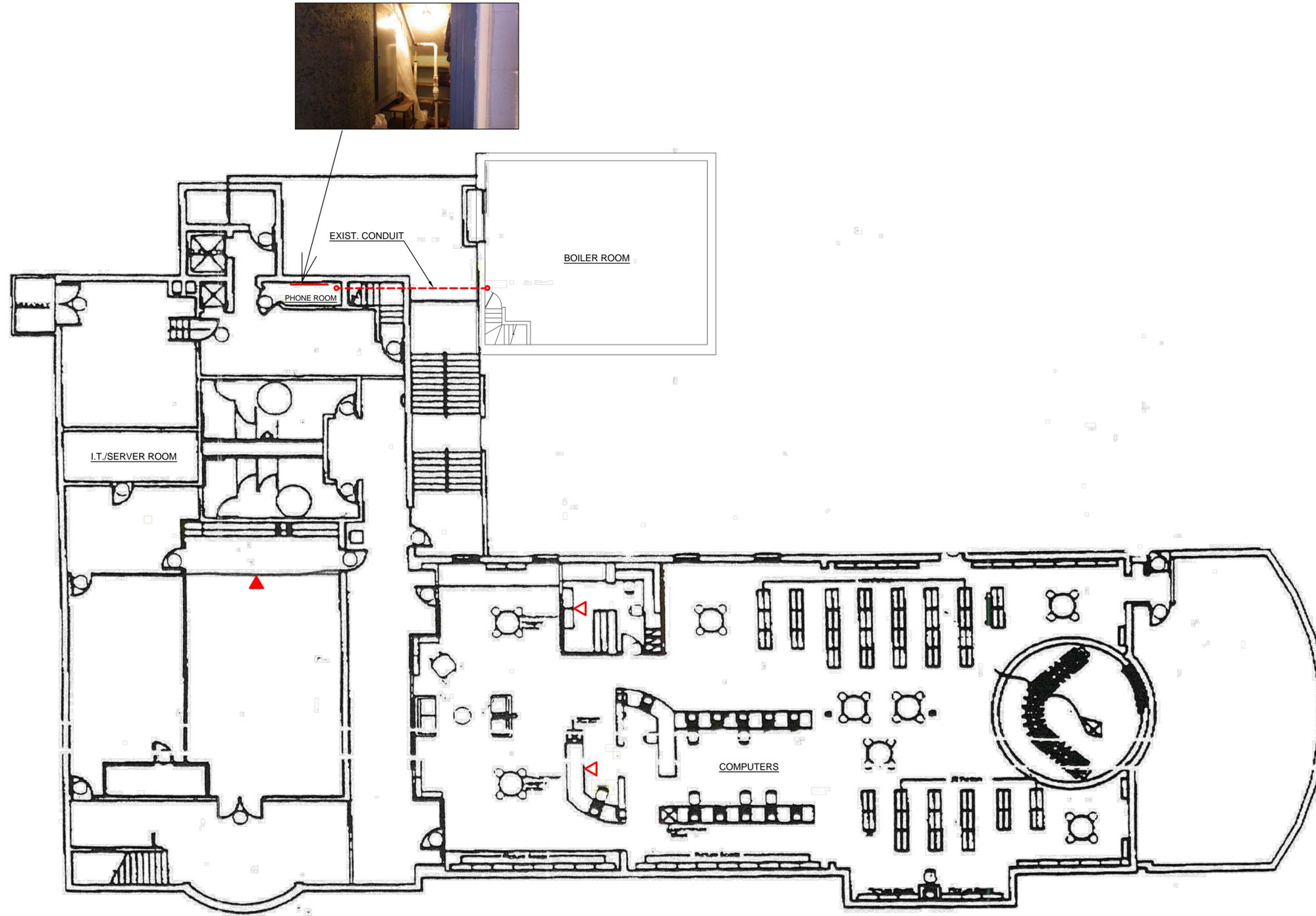
PROJECT #: 584-001

SHEET TITLE:  
 FIRE STATION  
 TELEPHONE  
 STATIONS

SHEET #:

TE2.1

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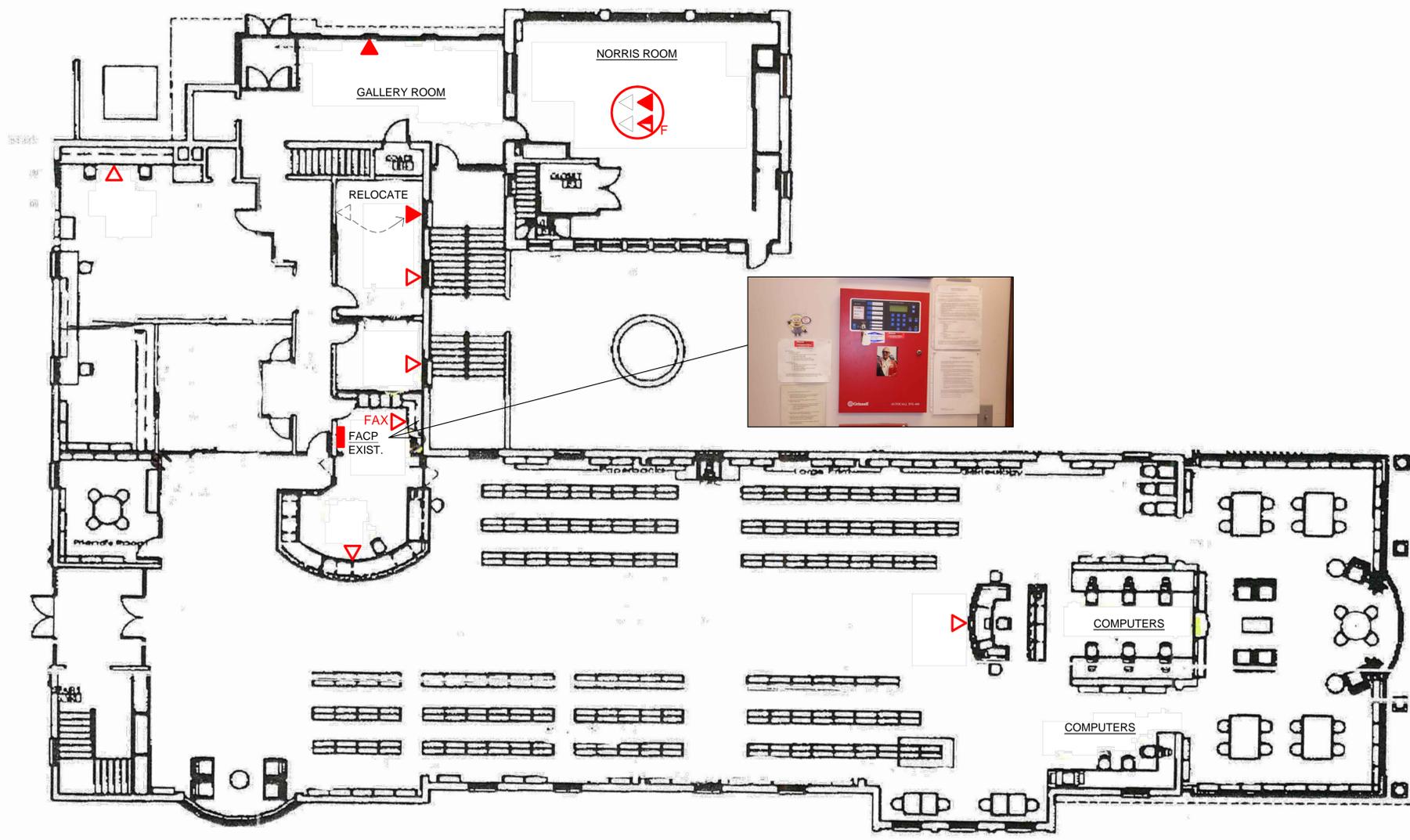
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SHEET TITLE:  
 LIBRARY  
 LOWER LEVEL  
 TELEPHONE  
 STATIONS

SHEET #:

TE3.1

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 TELEPHONE SYSTEM REPLACEMENT  
 LIBRARY  
 UPPER LEVEL

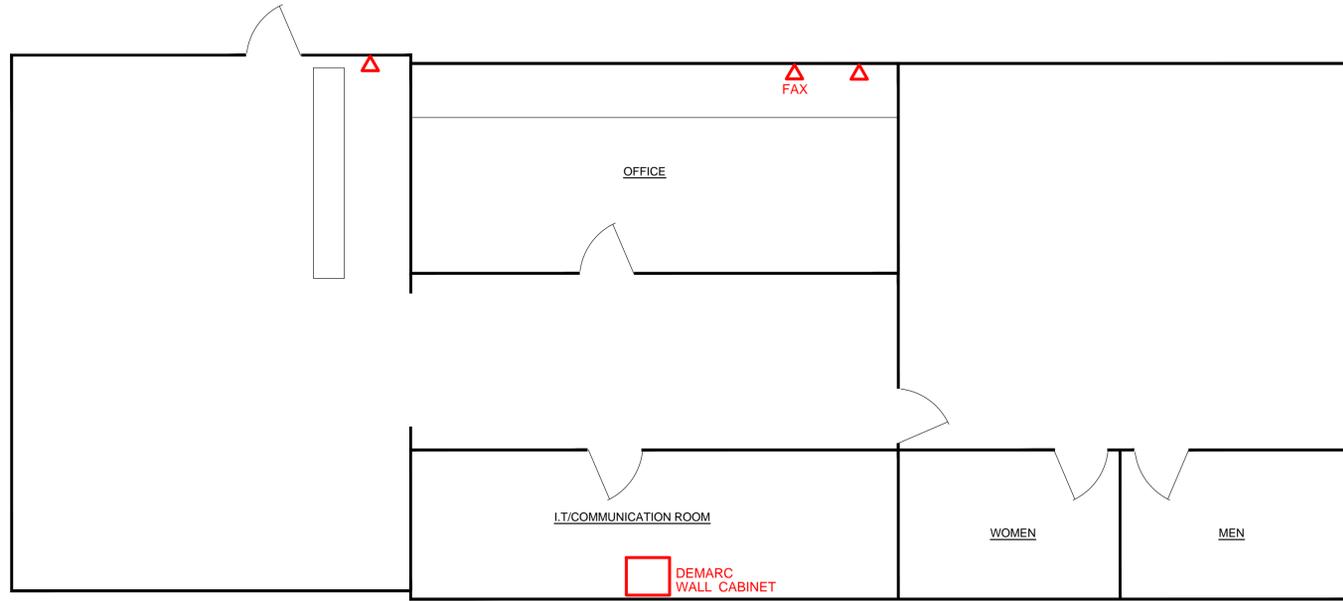
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PROJECT #: 584-001  
 SHEET TITLE:  
 LIBRARY  
 UPPER LEVEL  
 TELEPHONE  
 STATIONS

SHEET #:  
**TE3.2**

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**CITY OF ST. JOSEPH, MICHIGAN**  
**TELEPHONE SYSTEM REPLACEMENT**  
**MARINA**

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PROJECT #: 584-001

SHEET TITLE:  
 MARINA  
 TELEPHONE  
 STATIONS

SHEET #:

**TE4.1**

01  
 TE4.1 MARINA - TELEPHONE STATIONS

SCALE: NOT TO SCALE

FOR REFERENCE



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**CITY OF ST. JOSEPH, MICHIGAN**  
**TELEPHONE SYSTEM REPLACEMENT**  
**CEMETERY OFFICE**

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 CEMETERY OFFICE  
 TELEPHONE  
 STATIONS

SHEET #:

**TE5.1**

01  
 TES-1

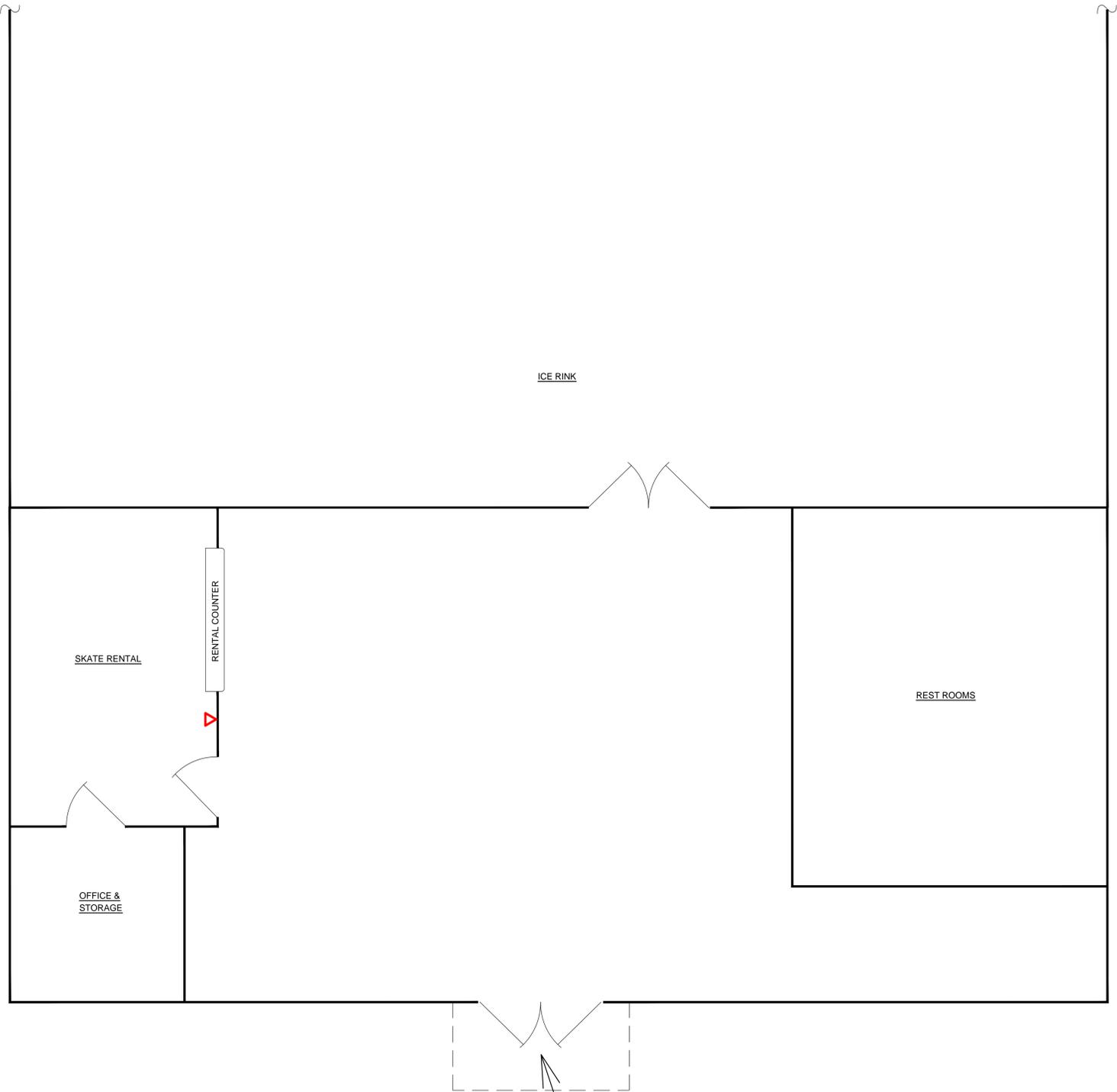
**CEMETERY OFFICE - TELEPHONE STATIONS**

SCALE: NOT TO SCALE

FOR REFERENCE



Z:\\_CLIENTS\894 - CITY OF ST. JOSEPH\001 - Telephone System Design\DRAWINGS\TE6.1 ICE RINK.dwg, 10/20/2016 5:21:13 PM, 1:1



01  
TE6.1

ICE RINK - TELEPHONE STATIONS

SCALE: NOT TO SCALE

FOR REFERENCE



DATE:	ISSUED FOR:
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CITY OF ST. JOSEPH, MICHIGAN  
TELEPHONE SYSTEM REPLACEMENT  
ICE RINK

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4900 Cascade Road, S.E., Grand Rapids, Michigan 49516

PROJECT #: 584-001

SHEET TITLE:  
ICE RINK  
TELEPHONE  
STATIONS

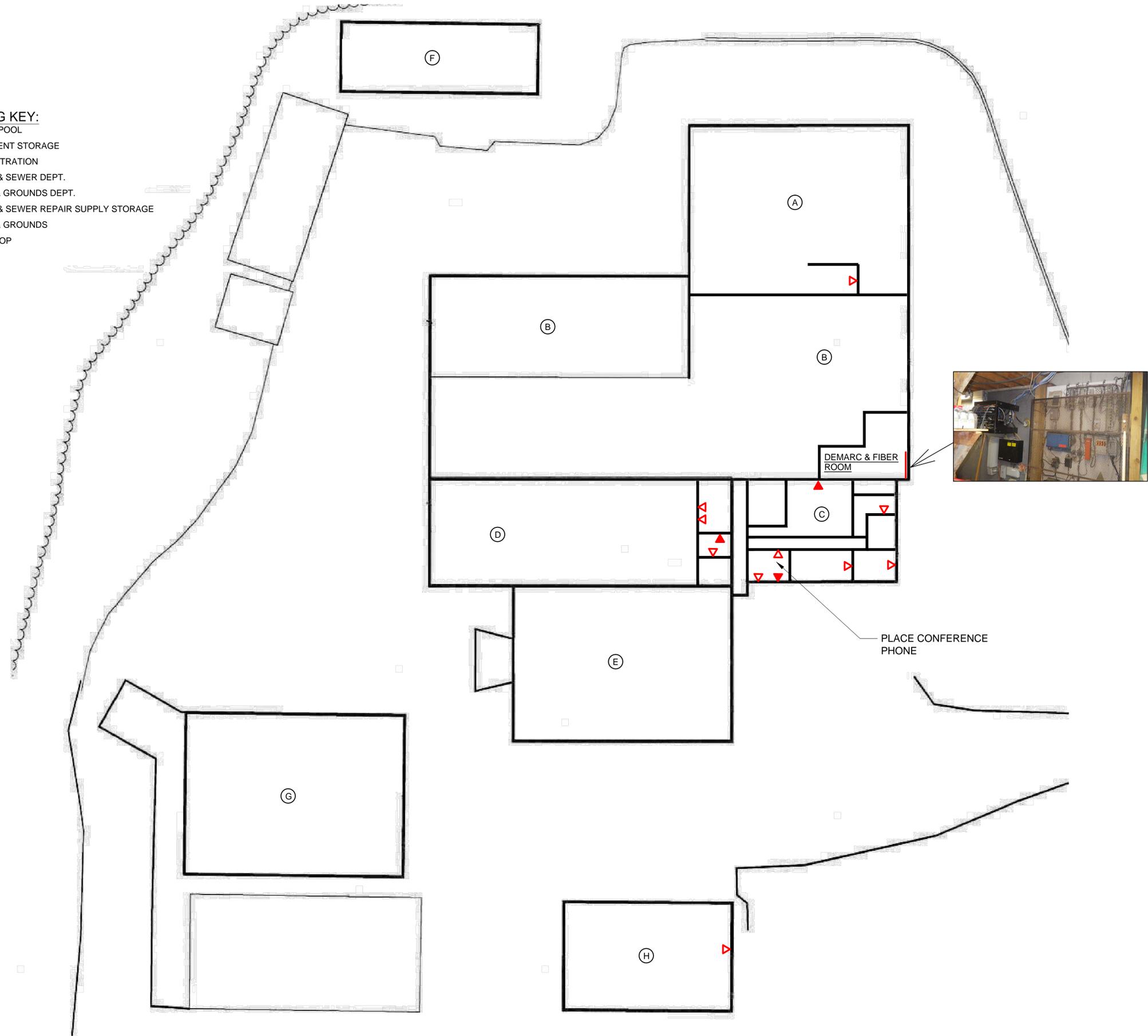
SHEET #:

TE6.1

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**BUILDING KEY:**

- A. MOTOR POOL
- B. EQUIPMENT STORAGE
- C. ADMINISTRATION
- D. WATER & SEWER DEPT.
- E. PARKS & GROUNDS DEPT.
- F. WATER & SEWER REPAIR SUPPLY STORAGE
- G. PARKS & GROUNDS
- H. SIGN SHOP



01  
TE7.1

**DPW COMPLEX - TELEPHONE STATIONS**

SCALE: NOT TO SCALE

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DATE:	ISSUED FOR:
10/21/16	FOR BIDS

**CITY OF ST. JOSEPH, MICHIGAN**  
**TELEPHONE SYSTEM REPLACEMENT**  
**DPW COMPLEX**

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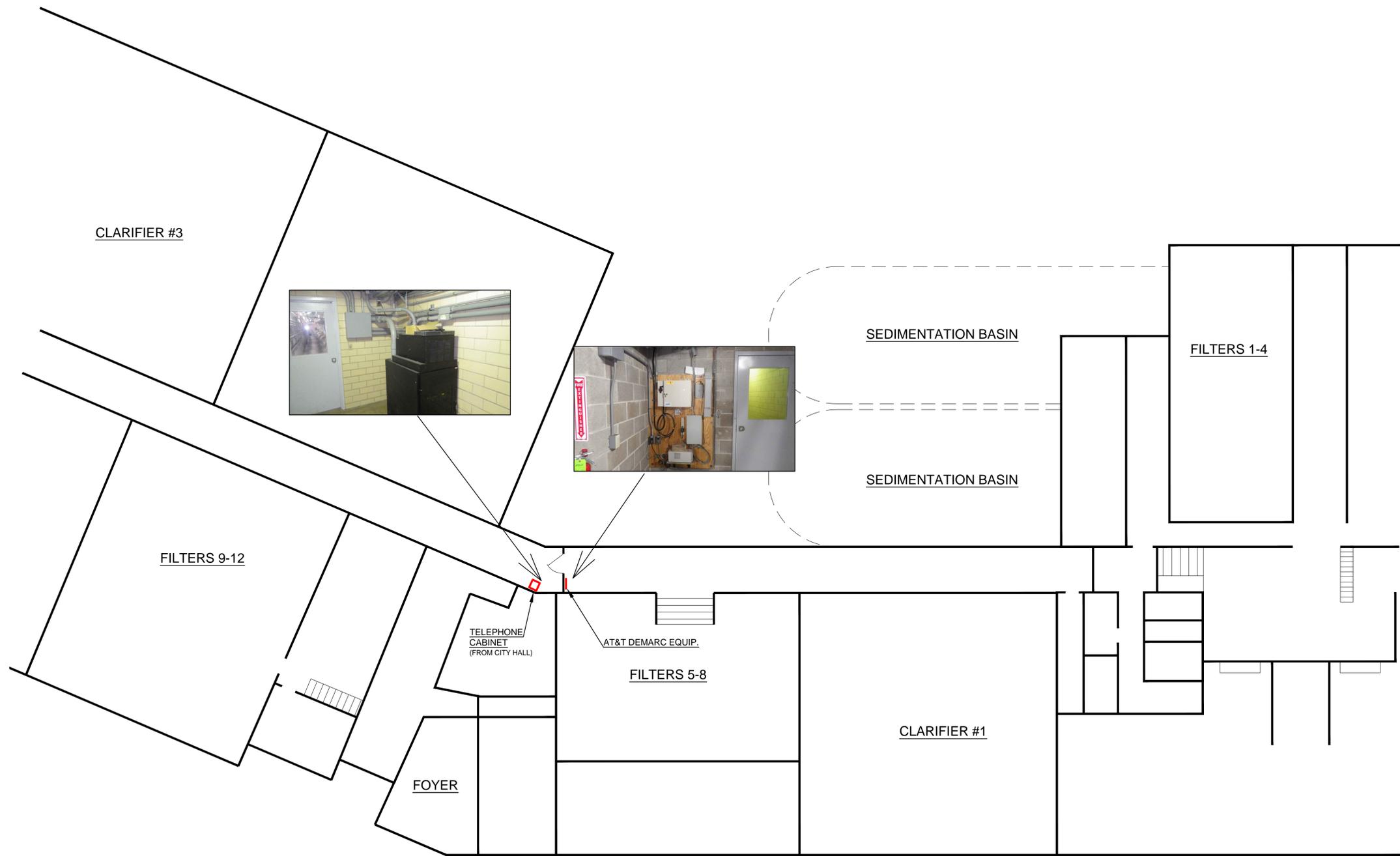
PROJECT #: 584-001

SHEET TITLE:  
DPW COMPLEX  
TELEPHONE  
STATIONS

SHEET #:

**TE7.1**

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CITY OF ST. JOSEPH, MICHIGAN  
TELEPHONE SYSTEM REPLACEMENT  
WATER PLANT  
LOWER LEVEL

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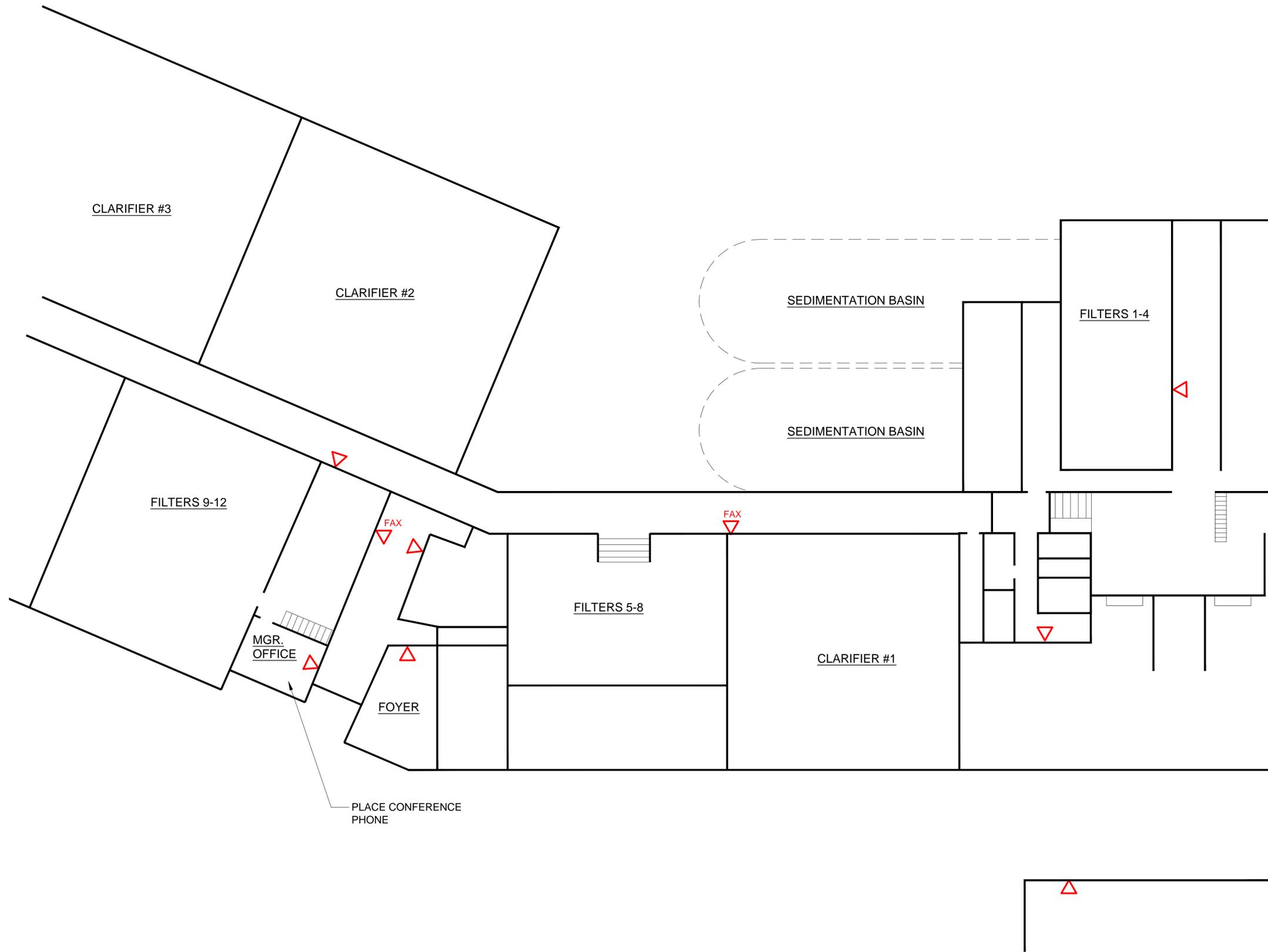
PROJECT #: 584-001

SHEET TITLE:  
WATER PLANT  
LOWER LEVEL  
TELEPHONE  
STATIONS

SHEET #:

TE8.1

Z:\\_CLIENTS\984 - CITY OF ST. JOSEPH\W001 - Telephone System Design\DRAWINGS\TE8.2 WATER PLANT UPPER LEVEL.dwg, 10/20/2016 5:11:53 PM, 1:1



PLACE CONFERENCE PHONE

01  
TE8.2

WATER PLANT UPPER LEVEL - TELEPHONE STATIONS  
SCALE: NOT TO SCALE (PARTIAL PLAN)  
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CITY OF ST. JOSEPH, MICHIGAN  
TELEPHONE SYSTEM REPLACEMENT  
WATER PLANT  
UPPER LEVEL

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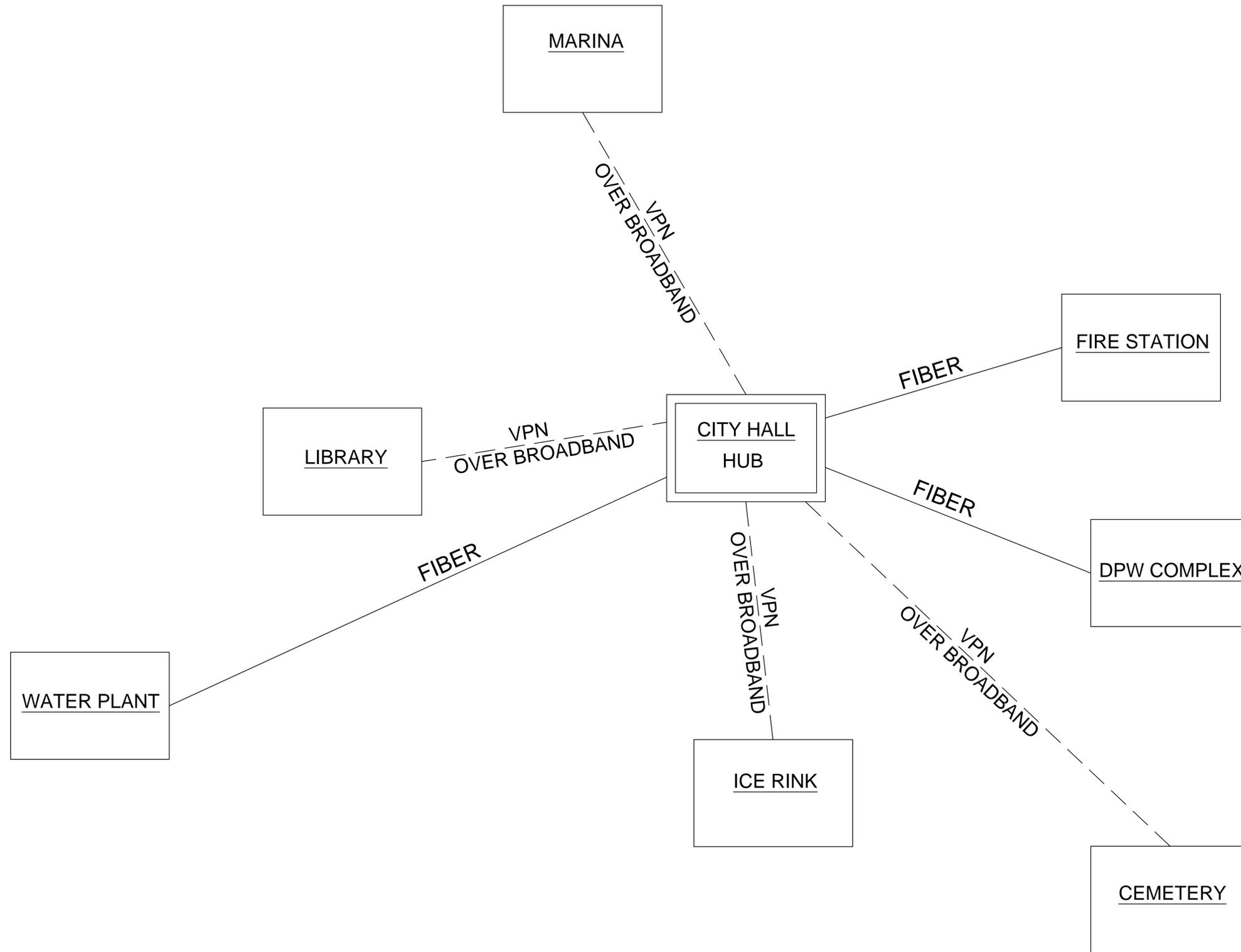
PROJECT #: 584-001

SHEET TITLE:  
WATER PLANT  
UPPER LEVEL  
TELEPHONE  
STATIONS

SHEET #:

TE8.2

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01 ONE-LINE DIAGRAM  
 TE9.0 SCALE: NOT TO SCALE

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CITY OF ST. JOSEPH, MICHIGAN  
 TELEPHONE SYSTEM REPLACEMENT  
 ONE-LINE DIAGRAM

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PROJECT #: 584-001

SHEET TITLE:  
 ONE-LINE DIAGRAM

SHEET #:

TE9.0