CHARTER TOWNSHIP OF SHELBY
REQUEST FOR PROPOSAL

Voice over IP System

The Charter Township of Shelby is soliciting proposals to install a complete Voice over IP telephone system, including call control and voicemail systems, handsets, cabling services, and installation/configuration services.

PROJECT: Voice over IP System

PROJECT ADDRESS: 52700 Van Dyke, Shelby Township, MI 48316

OWNER: Charter Township of Shelby, 52700 Van Dyke, Shelby Township, MI 48316

OWNER CONTACT: Nils Larson, IT Director
Phone: (586) 803-2070 Email: nlarson@shelbytwp.org

SCOPE OF WORK: The scope of work is defined in Attachment A - Scope of Work

DUE DATE: Sealed proposals are due on or before Friday, March 30, 2012, 3 p.m. local time to the owner, at the Charter Township of Shelby Municipal Offices – Clerks Department, 52700 Van Dyke, Shelby Township, Michigan, 48316. Proposals received after this date and time will not be accepted. No oral, facsimile, or electronic proposals will be considered. Proposals shall be submitted along with Attachment B, a township supplied cost proposal form, in a sealed envelope labeled “Voice over IP System Proposal – attention Township Clerk”. Submit three (3) complete copies of the proposal and the cost proposal form. Proposals received will be publicly opened and read aloud starting at 3:05 p.m. on Friday, March 30, 2012.

QUESTIONS: Any questions regarding this project shall be directed to the Owner Contact, Nils Larson at (586) 803-2070 or via email to nlarson@shelbytwp.org.

Any requests for information or clarifications shall be made in writing via email so that all prospective respondents may be notified.

MANDATORY MEETING: A mandatory meeting to review the proposed work areas will be held on Wednesday, March 14, 2012 at 2 p.m. local time at Hope Chapel on the campus grounds of the Charter Township of Shelby – 52700 Van Dyke, Shelby Township, Michigan, 48316.

Respondents are required to register for the meeting by providing an email notification to the Owner Contact, Nils Larson, at nlarson@shelbytwp.org no later than Tuesday, March 13, 2012 at 3 p.m. local time.

PROPOSAL: At a minimum, proposals shall include the following:

Qualifications: A brief description of your firm, qualifications and direct experience with relevant projects.
Technical: Describe in detail the specific equipment, materials and services your firm proposes that demonstrates your firm understands the scope of work. Provide responses to all questions in Attachment A – Scope of Work.

Warranty: Provide detailed information on warranties offered for equipment, materials and services.

Project References: Give name, address, phone number and e-mail address of client representatives for at least 3-5 projects you have completed which are similar to this project. Briefly describe the scope and budget of each referenced project.

Sub-consultants or sub-contractors: Identify proposed sub-consultants and/or sub-contractors who will be involved in the project, if any. Include the information described above for each sub-consultant and sub-contractor.

Cost Proposal: Complete the township provided pricing form – Attachment B.

Bill of Materials: Provide a bill of materials listing all components included in your proposal.

Miscellaneous: Provide evidence of insurance coverage, statement of current claims/judgments and disclosure of conflicts of interest as outlined elsewhere in this request for proposal.

RIGHTS RESERVED BY THE OWNER: The Owner reserves the right to waive any informalities in bidding, reject any or all bids, accept any bid when, in the opinion of the Owner such action will serve the best interests of the Charter Township of Shelby, consistent with competitive bidding requirements.

No bid may be withdrawn after the above date and time for receiving bids for a period of ninety (90) days.

The Charter Township of Shelby prefers that interested contractors have a business located in the State of Michigan, in Macomb, Oakland or Wayne Counties.

CONFLICTS OF INTERESTS: All respondents agree to disclose any, direct or indirect, current or future, conflict of interest between themselves and the Charter Township of Shelby, and the employees of said entity. If questions arise about potential conflicts of interest, please contact Robert Huth, Township Attorney, (586) 412-4900, rhuth@khlplc.com, prior to submitting proposal.

ERRORS AND OMISSIONS IN PROPOSAL: The Charter Township of Shelby shall not be liable for any errors or omissions in proposals. The Charter Township of Shelby has the right to request clarification or additional information from the respondents.

CURRENT CLAIMS/JUDGMENTS: A statement shall be provided in the proposal regarding any claims, judgments, arbitration proceedings, or suits pending or outstanding against your firm or its officers, principals, employees, and/or sub-contractors under your firm’s supervision.
The selected firm shall be required to enter into a formal contract with the Charter Township of Shelby. The Charter Township of Shelby reserves the right to terminate the contract should the contractor fail to perform to the satisfaction of the Township.

The selected firm shall provide professional liability insurance coverage prior to the beginning of any work, with the Charter Township of Shelby named as additional insured. Such insurance shall be maintained throughout the life of the contract. The selected firm shall carry no less than $1,000,000 general liability; $1,000,000 professional liability; and statutory workers compensation insurance.
(1) System requirements

(A) General

1. The proposed system must be designed and administered as a single centralized system.

   Confirm that the proposed system meets this requirement.

2. The proposed system must use a high-availability, redundant design with automatic failover in the event of any component failure (N+1 design).

   Describe how the high-availability features operate in the proposed system.

3. The system hardware must be rack-mountable.

   Confirm that the proposed system meets this requirement and describe rack-space and power requirements.

4. The system must support a routed network environment i.e. the system and the telephone devices will be on separate Layer-2 subnets.

   Confirm that the proposed system meets this requirement.

5. The system must use DHCP to assign IP addresses to telephone devices. The system can utilize either the Township's existing Windows Server 2008-based DHCP servers if possible, or a separate high availability DHCP server.

   Describe how DHCP is implemented in the proposed system.

6. Describe the system capacity as configured including maximum number of devices, concurrent calls, PRI’s, etc.

7. Describe the manufacturer warranty or any other warranties that are included with the system.

(B) Administrative interface

1. The proposed system must provide a web-based administration interface.

   Confirm that the proposed system meets this requirement.
   List web browsers/versions supported by the administration interface.
2. The administration interface must be user authenticated with the ability to assign roles and permissions to different users.

Describe how the proposed system meets this requirement.

3. The administration interface must provide the township with the ability to provision and configure handsets, extensions (including DID numbers), and voicemail boxes.

Confirm that the proposed system meets this requirement.

4. The administration interface must be user-friendly and usable by non-technical users.

Provide screenshots of the administrative interface.

5. The proposed system must provide the ability to perform a scheduled and/or manual backup of the complete system configuration.

Describe how the proposed system meets this requirement.

(C) PSTN connectivity
1. Proposed system must provide connectivity to the Public Switch Telephone Network via (2) PRI’s.

Describe how the proposed system provides PSTN connectivity.

2. Proposed system must support direct-inward dial (DID) telephone numbers.

Confirm that the proposed system meets this requirement.

3. PSTN connectivity should be implemented in a redundant fashion, e.g. all PRI’s should not be connected to the same gateway.

Describe how the proposed system meets this requirement.

4. Vendor will coordinate with existing telephone vendor(s), PRI providers and Shelby Township IT staff, as necessary, to migrate the Township’s PRIs and DID numbers to the new system.

Confirm that your proposal includes these services.

(D) Police department integration
1. The proposed system must integrate with a Mitel 3300 IP phone system in the Police Department, including direct extension dialing. This integration can be done using a SIP connection, T1, or another method identified by the vendor.

Explain how the proposed system will integrate with the Mitel system.
(2) **Telephony features**

For each of the following features, indicate if the feature is standard, upgradable for additional cost, or not available.

<table>
<thead>
<tr>
<th>Feature</th>
<th>Standard</th>
<th>Upgrade</th>
<th>Not Available</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hunt groups</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Call parking</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Music-on-hold</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Automatic call distribution (ACD)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Integrated voice response</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Call pickup</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Directory search from phone</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intercom</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>User-defined speed dials</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conference bridge (meet-me line)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Full-color video calling</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Call accounting / billing</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Extension mobility / roaming users</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Soft phone</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SIP trunks</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Key expansion module available</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Analog telephone adapter available w/ fax support</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fax-to-email gateway</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(3) **Telephone instruments**

The project will include installation of approximately 130 telephone instruments.

All devices must adhere to the following requirements:

1. Must be powered via Power over Ethernet (IEEE 802.3af)
2. Must use a dedicated Voice VLAN with an 802.1q uplink
3. PC data port must use a Data VLAN which is separate from the Voice VLAN
4. Must be compatible with Cisco network infrastructure, including use of CDP to set Data and Voice VLANs
5. Must use DHCP for IP address assignment
6. Must support Quality of Service using DSCP markings

Vendor will mount phones to the wall as needed (estimated 4 phones without Fire Dept add-on, 23 phones with Fire Dept add-on).

**Basic phone**

Provide and install (4) telephones with the following features:
1. Wall-mountable
2. 12-key dial pad
3. Ability to have an automatic ringdown to administrator-specified number

**Standard phone**

Provide and install (137) telephones with the following features:

1. Support minimum of 2 lines (extensions)
2. Gigabit Ethernet data port for desktop PC connection
3. Hold feature
4. Transfer feature
5. Volume controls
6. Full-duplex speakerphone
7. Conference call feature
8. Call forwarding (user-initiated)
9. LCD display
10. Caller ID
11. Message waiting indicator light

**Advanced phone**

Provide and install (5) telephones with the following features:

1. Support minimum of 4 lines (extensions)
2. Gigabit Ethernet data port for desktop PC connection
3. Hold feature
4. Transfer feature
5. Volume controls
6. Full-duplex speakerphone
7. Conference call feature
8. Call forwarding (user-initiated)
9. Full color LCD display – 5” or larger
10. Caller ID
11. Message waiting indicator light

For each telephone model, confirm the device meets all requirements and provide specifications and at least (1) picture.

Provide pricing and specifications on any other available phone models and options for the Township’s consideration.
(4) Voicemail system

(A) Requirements
The proposed system must include a voicemail system which meets the following specifications:

1. Full integration with proposed IP telephone system.
2. Installed support for a minimum of 250 mailboxes.
3. Expandable to support a minimum of 500 mailboxes.
4. Support for auto attendant (call tree) functionality.
5. Support for users to record a personal greeting.
6. Allow users to transfer a telephone call directly to a voicemail box.
7. Provide a dial-in number for users to check their voicemail messages from an offsite telephone.
8. Provide a web-based user interface where users can check their voicemail messages from a computer.

Confirm that the proposed system meets each of these requirements.

(5) Cabling services
Vendor must provide installation of data cabling to (21) locations where data connectivity is not currently available. Additional locations may be determined once the project is under way; please provide pricing to add additional drop locations as needed.

Cabling must meet the following specifications:

1. Category 5e or Cat6 cabling
2. Cables will be terminated with Panduit executive style, or equal, faceplates on wall outlets.
3. Cables will be terminated at designated IDF’s in each building. Existing patch panels are available in each IDF location.
4. Each jack location will be labeled to match the termination point in the corresponding IDF. The labeling scheme shall be coordinated with the Shelby Township IT Department.
5. Cables shall be plenum rated and be installed splice free. Provide all necessary materials for mounting the cables above ceilings and routing them to Township supplied conduits at the work area outlets.
6. Cabling work must comply with all applicable building codes.
7. At the conclusion of the work, the cabling shall be tested to industry standards and the Township shall be provided with digital test results.

(6) Installation and support

(A) Installation
1. Provide on-site installation and configuration of the IP telephone system, including handsets.
2. Configure telephone system, including telephone instruments and DID numbers to match current telephone system configuration where possible.
3. Provide training with Shelby Township IT staff on as-built configuration and move/add/change operations to enable them to support and maintain the system on a day-to-day basis.
4. Provide (1) day post-cutover onsite support to deal with any issues that arise.
(B) Migration / Cutover
1. Describe your proposed migration strategy. Can a gradual migration be performed phone-by-phone or department-by-department, or is a one-time cutover needed?

(C) Maintenance / Service
1. Please provide recurring maintenance / service contract pricing including:
   a. Hardware warranty
   b. Telephone / e-mail support
   c. Repair of any issues that arise in the system, hardware or software

(7) Alternates

(A) Fire Department add-on
The Township is currently considering extending a fiber WAN to the Fire Department. Please provide separate pricing to add an additional (50) telephones and (34) network drop locations to add the Fire Department to the proposed VoIP system at the Township's option.

- (19) Basic phones
- (30) Standard phones
- (1) Advanced phone
- (34) additional network drops
## Attachment B
Shelby Township Voice over IP System
Pricing Form

### Overall project costs

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Base system price</td>
<td></td>
</tr>
<tr>
<td>Telephone instruments</td>
<td></td>
</tr>
<tr>
<td>Cabling</td>
<td></td>
</tr>
<tr>
<td>Network equipment</td>
<td></td>
</tr>
<tr>
<td>Professional services</td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL COST</strong></td>
<td></td>
</tr>
</tbody>
</table>

### Fire Department – additional costs to add Fire Department - see section (7)(A)

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Add to base system price (if any)</td>
<td></td>
</tr>
<tr>
<td>Telephone instruments</td>
<td></td>
</tr>
<tr>
<td>Cabling</td>
<td></td>
</tr>
<tr>
<td>Professional services</td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL COST TO ADD FIRE DEPT</strong></td>
<td></td>
</tr>
</tbody>
</table>

### Unit pricing

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Price per additional telephone – basic</td>
<td></td>
</tr>
<tr>
<td>Price per additional telephone – standard</td>
<td></td>
</tr>
<tr>
<td>Price per additional telephone – advanced</td>
<td></td>
</tr>
<tr>
<td>Price per additional network drop</td>
<td></td>
</tr>
<tr>
<td>Price per 24-port Panduit patch panel (if needed)</td>
<td></td>
</tr>
</tbody>
</table>

### Recurring costs

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Recurring maintenance cost including equipment warranty and software upgrades</td>
<td></td>
</tr>
</tbody>
</table>