December 21, 2007

Invitation and Request for Bids-Public Access Wireless Network Project

The Board of Trustees of the Huntsville Madison County Public Library is accepting sealed bids for the installation of a public wireless network, including lines, equipment, and configuration on our existing point-to-point network. The network links the Main Library with eleven branches, all of which are located in Madison County (Appendix A).

Responses to this request are required to meet all bid specifications, including the provision of bid and performance bonds as detailed in this invitation.

Bids should include pricing for all necessary equipment and all installation costs associated with completion of the project. All equipment must be listed by brand name and model, and the Library reserves the right to reject any bid quoting inferior, generic or out-of-production equipment.

Necessary Ethernet cabling may be submitted separately from any other portion of this bid—bids proposing to complete the line installation component only should be labeled as such on the sealed packet. (See Bid Timeline and Delivery Instructions, below, for details) **Performance and Bid Bonds are not required if bidding ONLY on cable installation portion of this invitation.**

Existing equipment may be utilized where possible-any component that the manufacturer has identified as "End of Life" is to be considered for replacement and pricing may be included. Inclusion of pricing for this equipment does not mean that replacement will be accepted if the existing equipment, such as a firewall or router, can be effectively utilized after the upgrade in its current capacity and is still eligible for service contract coverage. Applicable equipment trade-up discounts should be detailed in bid response for any replacement equipment quoted.

Prices quoted shall be delivered prices, exclusive of all federal or state excise, sales and manufacturer's taxes. The Huntsville Madison County Public Library is tax exempt.

Section I. Bidder Requirements

Bid Bond
Bidders must obtain and submit along with their bid a Bid Bond in the amount of $2,000. The Bid Bond shall be in the form of a firm commitment such as an original Bid Bond, postal money order, certified check, cashiers check or irrevocable letter of credit. **No company checks will be accepted.**
If a bidder is selected to receive the contract and fails to negotiate, or fails to deliver a fully executed contract after negotiation, the bid bond will be immediately forfeited to the Huntsville Madison County Public Library. The contract must be negotiated and delivered within 7 days from the date the bids are opened. **Bids submitted without an appropriate bid bond will be rejected.**

Performance Bond
The successful contactor shall provide an acceptable Performance Bond in the amount of $5,000 to be maintained over the entire term of the contract. The Performance Bond must be delivered to the Huntsville Madison County Public Library within 7 days of the awarding of the contract.

References
Bidders must provide five references for customers similar to the Huntsville Madison County Public Library, including the name of the organization and contact information. Governmental references are desirable.

Financials
Bidders must provide a copy of the most recent audited Financial Statement. The Bidder must disclose the details of any bankruptcy, disbarment, or contract default over the past five years.

Bid Timeline and Delivery Instructions
Bids are to be mailed or delivered to Melissa Shepherd, Huntsville Madison County Public Library, P.O. Box 443, Huntsville, AL 35804, or 915 Monroe Street, Huntsville, AL 35801. The words **"Sealed Bid—Public Wireless Network"** must be on the outside of the envelope for all bids
Bids must be received by 10:00 A.M. on Wednesday, January 23, 2008. The bids will be opened at 10:00 A.M. in the Board Room located on the third floor of the Main Library, 915 Monroe Street. Late bids will not be considered. The Library will not be responsible for any carrier's failure to deliver a bid.

The Library reserves the right to reject any and all bids. The Library also reserves the right to implement all or portions of the bid. Failure to comply with specifications for bidding will result in a bid's rejection. The Library reserves the right to terminate, without cause, any award made as a result of this bid solicitation by providing a 30-day letter of cancellation notification to the successful bidder.

For further information, please contact Melissa Shepherd at 256-532-5963, or by email at mdshep@hpl.lib.al.us.

Section II. Project Objective

The Objective of the Public Access Wireless Network Project is:

1.   To provide robust filtered public wireless Internet (http and https) access, with reasonable building-wide coverage to patrons using their own wireless-enabled portable hardware at all locations of the Huntsville Madison County Public Library by February 2008.

Method 1:
The objective may be achieved by additions to the Library's existing WAN, and proposals for this should include cost estimates for the entire project, including:

   a.   The upgrade, addition or replacement of essential switches at core network nodes and POE injection for WAP drops.
   b.   Complete installation & configuration of new equipment, including:
      i.   Reconfiguration of subnets as needed in all locations to accommodate VLANs.
      ii.   Any and all necessary setup of VLANs including any trunking or other necessary configuration to virtually separate wireless traffic from traffic on wired network, including limiting or throttling bandwidth on wireless segment
      iii.   Forwarding of wireless transactions to filtering appliance on Main Library and branch existing networks. CIPA(Children's Internet Protection Act) requires use of filtering on all Internet provided by public libraries receiving federal funds. The Library is willing to consider filtering compliant with CIPA which may be achieved through other means.
      iv.   Setup of switches, access points, wireless control gateways etc. to function on separate drops in VLANs separate from Library's existing wired network which supports the Library's existing wired workstations and servers.
      v.   Configuration of any bandwidth throttling/limitation or management on new wireless VLANs and subnets.
      vi.   Configuration of user authentication against existing user database.
   c.   Ongoing support contract option.
   d.   Ongoing SmartNet (if Cisco is quoted) or other maintenance on hardware if not covered by c.

Please see Appendix A for estimated WAPs, drops, receptacles & switches needed for each location if Method 1 is configured.

Method 2:
The objective might alternately be achieved through use of an Additional fiber pair (unused) which runs from the datacenter at the Main Library to the City of Huntsville datacenter. Costs for internet access using this method must be included, as well as details for how the access will be filtered for CIPA.

Method 3:
The objective might alternately be achieved through wide area wireless. Coverage potential at each location should be detailed, cost for each, and cost for the total project.

See Appendix A for list of locations and addresses. Costs for internet access using this method must be included, as well as details for how the access will be filtered for CIPA.

Section III. Implementation Requirements

Requirements and guidelines for wireless solution:

1. **Requirement:** users of the new wireless network must be authenticated against the Library's existing user database. The Library uses the SirsiDynix Unicorn automation system (BRS database). (See Appendix B for vendor contact) SirsiDynix recommends 3M's SIP2 protocol for tapping the user database for authentication, as this provides real time access to database changes. If a solution is proposed that uses either LDAP or RADIUS**,** one possible method is that the Library install an extra server for authentication, and use API scripting to regularly pull a database copy to the extra server for the wireless gateway to authenticate users. As this represents an extra cost to the Library in terms of hardware, support, and labor, and a time-lag for authentication, **products which can script directly to the user database, such as any using the SIP2 protocol are preferred**.
2. **Requirement:** Solution must be compatible with caching proxy server/filters, and filtering appliances such as Webwasher, Cymphonix or Barracuda, and configurable for mandatory filtering meeting Federal CIPA requirements. The Library currently uses an ISA server on the internal network, which would require redirection of traffic at the wireless gateway, or at a managed switch, but may upgrade to an inline filtering appliance.
3. **Requirement:** *No brand of equipment is preferred*, but the central gateway controller must communicate with all access points and repeaters in the WAN (802.11ag).
4. **Requirement:** Any proposed equipment/solution must have configurable time limits (open hours) configurable by staff through a web or simple software management interface.
5. **Requirement:** Any proposed solution must allow for staff to block problem MACs and user equipment.
6. **Requirement:** Any proposed solution must attempt to provide for the wireless segment to travel a separate virtual LAN from the existing public and staff wired network. All drops for wireless equipment will terminate at the location's network core to facilitate this requirement. Solution should provide reasonable security for the existing wired network.
7. **Requirement:** The proposed solution will allow configurable protocol limitation (option for http & https only).
8. **Requirement:** Proposals for the wireless network which include ethernet drops must price the cost and installation of the drops separately from the equipment and installation of the wireless network, WAPs, controllers, switches, POE injectors.
9. **Guideline:** A proposed solution may include bandwidth management or traffic throttling features.
10. **Guideline:** Proposals based on partnerships between specialized vendors are encouraged.

Appendix A. Worksheet

Fiber to City of Huntsville Datacenter

Main Library 915 Monroe Street Huntsville, AL 35801 Phone: (256)532-5940 10.1.2.1 255.255.255.0	Current Equipment: **Cisco Pix 515E** 44406180056 Also serves as VPN access point for remote entry, NAT. **Cisco 3845 Router** FTX1027A38M Serves T-1 circuits to branches. **Cisco Catalyst 3550-48 port managed (layer 3) switch** CAT0803N38F **Windows 2003 ISA Server proxy/filter appliance** From Cisco Pix **FL to 10Base-T Media Converter** follows fiber to City of Huntsville datacenter, currently terminates at AREN Cisco router located within datacenter. Network equipment configuration and installation was provided by BellSouth in July 2006.	
Additional core network equipment?	Additional switch with POE required	
Est. # of WAPS	6- 3 on 1st floor, 2 on second floor, 1 on third floor	
Est. # of controllers	1 WLAN controller	
Est. equipment installation costs		
Est. configuration costs		
Est. ongoing support costs		
Est. # of new ethernet drops	6	
Est. # of POE	6	
Fractional point-to-point T1 to Main Library		
Madison 130 Plaza Blvd. Madison, AL 35758 Phone: (256)461-0046 10.2.139.1 255.255.255.255	Current Equipment: **1 Cisco 1841-T1 w/wic-1dsu-t1-v2** FTX1028W33D **1 Cisco Catalyst 2950T-48-SI 48 port Layer 2 Managed Switch** SN FHK0849W07W	
Additional core network equipment?	Additional switch or router?	
Est. # of WAPS	3	
Est. # of controllers		
Est. equipment installation costs		
Est. configuration costs		
Est. ongoing support costs		
Est. # of new ethernet drops	3	
Est. # of POE	3	
Bailey Cove 1409 Weatherly Plaza Huntsville, AL 35803 Phone: (256)881-0257	Current Equipment: **1 Cisco 1841-T1 w/wic-1dsu-t1-v2** FTX1026W33Y **1 Cisco Catalyst 2950T-48-SI 48 port Layer 2 Managed Switch** SN FHK0849X0K2	
Additional core network equipment?	Additional switch or router?	
Est. # of WAPS	3	
Est. # of controllers		

Est. equipment installation costs		
Est. configuration costs		
Est. ongoing support costs		
Est. # of new ethernet drops	3	
Est. # of POE	3	
Bessie K. Russell 3011-C Sparkman Drive Huntsville, AL Phone: (256)859-9050	Current Equipment: **1 Cisco 1841-T1 w/wic-1dsu-t1-v2** FTX1026W33S **NetGear FS-516NA Fast Ethernet unmanaged switch**	
Additional core network equipment?	Additional switch or router?	
Est. # of WAPS	1	
Est. # of controllers		
Est. equipment installation costs		
Est. configuration costs		
Est. ongoing support costs		
Est. # of new ethernet drops	1	
Est. # of POE	1	
Eleanor Murphy 7910 Charlotte Drive Huntsville, AL 35802 Phone: (256)881-5620	Current Equipment: **1 Cisco 1841-T1 w/wic-1dsu-t1-v2** FTX1026W33N **SMC Networks 24 port Fast Ethernet unmanaged switch**	
Additional core network equipment?	Additional switch or router?	
Est. # of WAPS	1	
Est. # of controllers		
Est. equipment installation costs		
Est. configuration costs		
Est. ongoing support costs		
Est. # of new ethernet drops	1	
Est. # of POE	1	
Showers Center 4600 Blue Spring Road Huntsville, AL 35810 Phone: (256)851-7492	Current Equipment: **1 Cisco 1841-T1 w/wic-1dsu-t1-v2** FTX1026W33Q **Netgear FS116 Fast Ethernet unmanaged switch**	
Additional core network equipment?	Additional switch or router?	
Est. # of WAPS	1	
Est. # of controllers		
Est. equipment installation costs		
Est. configuration costs		
Est. ongoing support costs		
Est. # of new ethernet drops	1	
Est. # of new power receptacles	1	

Hazel Green 131 Knowledge Drive Hazel Green, AL 35750 Phone: (256)828-9529	Current Equipment: **1 Cisco 1841-T1 w/wic-1dsu-t1-v2** FTX1026W33Z **1 Asante 12 port 10Base-T Hub**	
Additional core network equipment?	Additional switch or router?	
Est. # of WAPS	1	
Est. # of controllers		
Est. equipment installation costs		
Est. configuration costs		
Est. ongoing support costs		
Est. # of new ethernet drops	1	
Est. # of POE	1	
Monrovia 1960 Jeff Road Huntsville, AL 35806 Phone: (256)837-6153	Current Equipment: **1 Cisco 1841-T1 w/wic-1dsu-t1-v2** FTX1026W33J **1 Netgear 12 port 10/100 Hub**	
Additional core network equipment?	Additional switch or router?	
Est. # of WAPS	1	
Est. # of controllers		
Est. equipment installation costs		
Est. configuration costs		
Est. ongoing support costs		
Est. # of new ethernet drops	1	
Est. # of POE	1	
Oscar Mason 149 Mason Court Huntsville, AL 35805 Phone: (256)535-2249	Current Equipment: **1 Cisco 1841-T1 w/wic-1dsu-t1-v2** FTX1026W33R **1 SMC 24 port Fast Ethernet unmanaged switch**	
Additional core network equipment?	Additional switch or router?	
Est. # of WAPS	1	
Est. # of controllers		
Est. equipment installation costs		
Est. configuration costs		
Est. ongoing support costs		
Est. # of new ethernet drops	1	
Est. # of POE	1	
Triana 280 Zierdt Road Madison, AL 35758 Phone: (256)772-3677	Current Equipment: **1 Cisco 1841-T1 w/wic-1dsu-t1-v2** FTX1026W341 **1 Asante 8 port 10Base-T Hub**	
Additional core network equipment?	Additional switch or router?	

Est. # of WAPS	1	
Est. # of controllers		
Est. equipment installation costs		
Est. configuration costs		
Est. ongoing support costs		
Est. # of new ethernet drops	1	
Est. # of POE	1	
Gurley 225 Walker Street Gurley, AL Phone: (256)776-2102	Current Equipment: **1 Cisco 1841-T1 w/wic-1dsu-t1-v2** FTX1026W33P **NetGear FS-516NA Fast Ethernet unmanaged switch**	
Additional core network equipment?	Additional switch or router?	
Est. # of WAPS	1	
Est. # of controllers		
Est. equipment installation costs		
Est. configuration costs		
Est. ongoing support costs		
Est. # of new ethernet drops	1	
Est. # of POE	1	
New Hope 5496 Main Street New Hope, AL 35760 Phone: (256)723-2995	Current Equipment: **1 Cisco 1841-T1 w/wic-1dsu-t1-v2** FTX1026W340 **NetGear FS-516NA Fast Ethernet unmanaged switch**	
Additional core network equipment?	Additional switch or router?	
Est. # of WAPS	1	
Est. # of controllers		
Est. equipment installation costs		
Est. configuration costs		
Est. ongoing support costs		
Est. # of new ethernet drops	1	
Est. # of POE	1	

For further information, router configurations, current network setup & subnets, and building diagrams please contact Melissa Shepherd at 256-532-5963 or mdshep@hpl.lib.al.us

Appendix B: Library Automation Vendor Contact Information

SirsiDynix
101 Washington Street
Huntsville, Alabama 35801
800.917.4774 or 256.704.7000   http://www.sirsidynix.com

Protocol – 3M's SIP2