## MASTER CLOCK SCOPE

The replacement systems to be provided under the Base Bid shall include:

• A centralized Network Time Protocol (NTP) synchronization source (to be located at the SLPS District Offices) for synchronization of all master clock-program systems at all of the schools listed.

Clock-program systems administration software for management of all master clock-program schedules, for all of the schools, from 3 central personal computer (PC) workstations located at the SLPS District Offices at 801 N. 11<sup>th</sup> Street and the Buildings and Grounds. The systems administration software shall be installed and programmed on several PC workstations provided by SLPS. Initial programming of the administration software shall be provided under the construction contract and training of SLPS personnel for ongoing administration of this software shall also be provided.

- Master clock-program controllers at each school. Either a wireless or hardwired clock system solution is acceptable but all conduit and wiring shall be provided for any wired solution proposed. Primary power for wireless secondary clocks shall be provided via dedicated power wiring. Battery powered secondary clocks will not be accepted. Where wireless clocks systems are proposed for replacement of an existing wired clock systems the reuse of existing clock system wiring (to distribute secondary clock power) is acceptable provided the wiring is adequate to distribute the power required and also meets local codes. Where wired system replacement solutions are proposed utilization of the existing conduit and wiring system is acceptable provided that the wiring is compatible with the system being proposed and meets local code requirements. For wireless clock system solutions, all required antennas, receivers, primary transmitters and secondary transmitters shall be provided for distribution of the synchronization signals. FCC licenses for wireless systems operation shall also be applied for and provided under the contract (including individual licensing fees require for each school site).
- Network horizontal data wiring and connections of the Master Clock and Program Controller at each school to the SLPS district Wide Area Network (WAN). Network switching equipment to be utilized will consist of existing SLPS switchers (with available ports) or additional switching equipment that will be provided by SLPS as required.
- Intercommunications systems head-end equipment including controller, switching equipment, preamplifiers, power amplifiers, tone generators, microphones (or handsets), and other components as require for a complete operational system along with housings and equipment racks required for mounting of the equipment.
- Clock and intercom systems devices inclusive of secondary clocks, speakers assemblies (speakers, transformers, housings with grilles, and mounting hardware), call-in switches, etc. Signal wiring, power wiring and power supplies shall also be included. Device quantities shall be based on the quantities indicated in the Table 1 above.
- Systems programming, setup, testing, and commissioning.
- SLPS staff training on operation, programming, and maintenance.

Pricing shall be provided for total systems replacement for all of the schools with an individual line item price provided for each school location as indicated on the attached (revised) proposal bid sheet. Systems replacement pricing for individual school locations shall be considered stand-alone pricing (per school) and shall not be based on the purchase of systems replacement for all of the schools listed in Table 1 of this RFP. Unit pricing (including equipment and labor) shall also be provided for each type of system device, i.e. speaker, clock, call switch, etc., as indicated on the bid sheet.