

This Renewal Agreement will be posted on the CPS website.

**AGREEMENT EXERCISING THE OPTION TO RENEW
THE LOCAL AREA SYSTEM IMPROVEMENT SERVICES AGREEMENT**

This Agreement Exercising the Option to Renew the Local Area System Improvement Services Agreement ("First Renewal Agreement") is effective as of the 1st day of July, 2013, and is entered into by and between the Board of Education of the City of Chicago (the "Board"), with offices located at 125 S. Clark Street, Chicago, Illinois 60603 and Sentinel Technologies, Inc. ("Vendor"), with offices located at 2550 Warrenville Road, Downers Grove, Illinois, 60515.

RECITALS:

- A. The Board and Vendor entered into that certain Local Area System Improvement Services Agreement, effective July 1, 2010 ("Agreement"); and
- B. Pursuant to the terms of the Agreement, the Board desires to exercise its first option to renew the Agreement for one (1) additional year, and Vendor accepts this option to renew on the terms and conditions set forth in this First Renewal Agreement. The Board has one (1) option remaining to renew for a period of one (1) year.

NOW, THEREFORE, for good and valuable consideration, the parties hereto agree as follows:

- 1. **Incorporation of Recitals:** The matters recited above are hereby incorporated into and made a part of this First Renewal Agreement.
- 2. **Definitions:** Any and all capitalized terms contained in this Renewal Agreement, and not defined herein, shall have the definition as set forth in the Agreement.
- 3. **Term:** The parties agree to renew the Agreement for a period commencing July 1, 2013 and ending June 30, 2014 ("First Renewal Period"), unless terminated sooner as provided in the Agreement.
- 4. **Compensation:** The total compensation for services or products provided to the Board during the First Renewal Period shall not exceed Twenty-Three Million Nine Hundred Ninety-Seven Thousand Six Hundred Nineteen Dollars and Thirty-Seven Cents (\$23,997,619.37) ("Maximum Compensation") of which approximately Fifteen Million One Hundred Forty-One Thousand Eight Hundred Fifty-Nine Dollars and Seventeen Cents (\$15,141,859.17) ("Discounted Amount") is the Discounted Portion of Eligible E-rate Services and Products to be funded by the Schools and Libraries Division of the Universal Service Administration Company ("SLD/USAC") under the E-rate program. The Board will only be responsible for the remaining Non-Discounted Portion of E-rate Eligible Services and/or Products and the cost of ineligible Services and/or Products, which shall not exceed Eight Million Eight Hundred Fifty-Five Thousand Seven Hundred Sixty Dollars and Twenty Cents (\$8,855,760.20), the sum authorized by the Board pursuant to the applicable Board Report, as may be amended from time to time (the "Board's Total Cost"). The Board will not be obligated to pay for any Services and/or Products not in compliance with this First Renewal Agreement. Compensation shall be based on actual Services performed and Products delivered during the First Renewal Period. In the event of early termination of this First Renewal Agreement, the Board will only be obligated to pay the compensation due up to the date of termination. In no event will the Board be liable for any costs incurred or Services performed and/or Products delivered after the effective date of termination as provided herein. No Board funds will be disbursed for Eligible E-Rate Services or Products if E-Rate funding is denied except for Priority 2 Basic Maintenance Services as defined by SLD/USAC.

This Renewal Agreement will be posted on the CPS website.

If SLD/USAC denies funding for all or any portion of the Services and/or Products, knowledge of such denial by SLD/USAC may not be known by the Parties prior to the July 1, 2013 renewal date. The Board may only pay the Non-Discounted Portion of E-Rate Eligible Services and/or Products and the cost of the Ineligible E-Rate Services and/or Products. If funding for all or any portion of the Eligible E-Rate Services and/or Products is denied, Vendor and the Board will immediately collaborate to develop by written amendment to the Agreement a reduced scope of services to be compensated within the Board's Total Costs as set forth herein.

5. **Services:** Vendor will continue to provide the Board with project management, installation, network equipment, services and associated construction at the schools, as further described in Exhibits A through J, attached hereto.
6. **Agreement:** Except as expressly provided in this First Renewal Agreement, all terms and conditions of the Agreement are and shall remain in full force and effect during the First Renewal Period.

IN WITNESS WHEREOF, the parties hereto have executed this First Renewal Agreement as of the date set forth in the beginning of this document.

THE BOARD OF EDUCATION
OF THE CITY OF CHICAGO

SENTINEL TECHNOLOGIES, INC.

By: David J. Vitale
David J. Vitale, President

By: Dale Owens

Attest: Susan J. Narrajos
Susan J. Narrajos, Assistant Secretary

Signature: [Signature]

Date: 2/6/13

Title: Vice President of Sales

Board Report No. 13-0227-PR13-1

Date: March 4th 2013

Approved as to legal form: [Signature]

James L. Bebley
James L. Bebley, General Counsel

This Renewal Agreement will be posted on the CPS website.

Attachments:

Exhibit A – Scope of Services / Statement of Work

Exhibit B – Pricing Schedule

Exhibit C – Key Personnel

Exhibit D – Compliance Language for E-rate Program

Exhibit E1 & E-2 – Audit Requirements, E-rate Year 16 (7/1/13-6/30/14)

Exhibit F -- Pre-Qualified Contractors

Exhibit G -- Service Level Agreement ("SLA")

Exhibit H - Wiring Contractor's Special Terms and Conditions

Exhibit I - Project Close-out Checklist

Exhibit J - Amendment to Board Infrastructure Standards

**ATTACHMENTS FOR AGREEMENT EXERCISING THE FIRST OPTION TO RENEW THE
LOCAL AREA NETWORK SYSTEM IMPROVEMENTS AGREEMENT DATED JULY 1, 2010
BY AND BETWEEN THE BOARD OF EDUCATION OF THE CITY OF CHICAGO ("BOARD")
AND SENTINEL TECHNOLOGIES, INC. ("SENTINEL") ("FIRST RENEWAL AGREEMENT")**

**In the event of a conflict between these exhibits and the First Renewal Agreement or the
Local Area Network System Improvements Agreement dated July 1, 2010 ("Agreement"),
the terms and conditions of the Agreement will supersede and control.**

Exhibit A – Scope of Services / Statement of Work

Exhibit B – Pricing Schedule

Exhibit C – Key Personnel

Exhibit D – Compliance Language for E-rate Program

Exhibit E1 & E-2 – Audit Requirements, E-rate Year 16 (7/1/13-6/30/14)

Exhibit F – Pre-Qualified Contractors

Exhibit G – Service Level Agreement ("SLA")

Exhibit H – Wiring Contractor's Special Terms and Conditions

Exhibit I – Project Close-out Checklist

Exhibit J – Amendment to Board Infrastructure Standards

EXHIBIT A

STATEMENT OF SERVICES – STATEMENT OF WORK

This Statement of Services - Statement of Work ("SOW") is governed by the terms and conditions of the Agreement and the First Renewal Agreement between the Board and Sentinel (collectively the "Parties").

Overview

- A. Sentinel will be implementing system improvements of Local Area Networks ("LAN") at approximately one hundred (100) Board locations per E-Rate funding year (the "Project") as defined in this SOW. The Project will include, but is not limited to:
1. Infrastructure assessment of the facility necessary for the implementation of the equipment. The pricing in Exhibit B is based on estimates assuming an average building size of 82,000 square feet, and 35 classrooms, 1 lab, 1 library, 14 switches, 10 wireless access points, 4 UPS devices, and 50 Network Interface Cards ("NIC") installations per school. Actual pricing will be based on assessments and scopes of work per school.
 2. Coordination of the ordering of equipment
 3. Staging of new equipment
 4. Removal and replacement of obsolete hubs, switches, wireless access points and other network devices. Removal of equipment previously purchased with E-Rate discounts must be in compliance with E-Rate regulations. Sentinel will assist the Board in drafting any equipment removal notifications to the SLD/USAC.
 5. Trade-in of removed equipment to offset the cost of the project. The trade-in value must be deducted from the pre-discounted (E-Rate) amount of the new equipment, and reflected in the invoicing.
 6. If a school has an existing wireless infrastructure in place, then Sentinel will perform the following additional activities in "Normal Scope" schools:
 - a. A wireless assessment of the building including the development of floor plans as necessary to support the wireless system upgrades. The Board agrees to make every effort to supply these diagrams in an acceptable electronic format to Sentinel whenever possible. In the event the Board cannot supply the diagrams, Sentinel agrees to create floor plan diagrams, for the applicable areas within SOW, in an acceptable electronic format for those schools without diagrams. At no additional cost, Sentinel agrees to provide these floor plan design services for up to a maximum of ten (10) schools.
 - b. Installation of wireless access points
 - c. Installation of wireless NICs in Windows and Apple computers
 - d. Overseeing and coordinating any incidental construction activities that may result from the removal and installation of new access points.
 - e. The Board estimates that the construction work for a Normal Scope site will be approximately \$12,000. This number is merely for budgetary purposes and the actual per school cost will vary based on the scope of the assessment. The Board reserves the right to update these budgetary figures at any time.
 7. If a school does not have any existing Hardwired LAN system or needs significant portions of its LAN built out, then Sentinel will perform the following additional activities in "Full Scope" schools:
 - a. A wiring assessment of the building including the development of floor plans as necessary. The Board agrees to make every effort to supply these diagrams in an acceptable electronic format to Sentinel whenever possible. In the event the Board cannot supply the diagrams, Sentinel agrees to create floor plan diagrams, for the applicable areas within SOW, in an acceptable electronic format for those schools without diagrams. At no additional cost, Sentinel agrees to provide these floor plan design services for up to a maximum of ten (10) schools.
 - b. Installation Hardwired Computer Lab consisting of approx. 39 drops.
 - c. Installation Hardwired Library consisting of approx. 13 drops.
 - d. Installation Hardwired Classrooms consisting of approx. 10 drops each, an average school has approximately 13 classrooms.
 - e. Installation of new Concentrator Boxes as needed.
 - f. Installation of any Electronic Distribution Panels, Circuits, Wiring, Termination and miscellaneous power work needed to support LAN system.
 - g. Installation of additional Voice/Data lines for teachers in all classrooms.
 - h. Installation of associated conduit and raceway runs to support LAN system.

- i. Installation of connection wiring to provide link between Telephone Switch gear, NET POP and MDF (Main Distribution Frame) equipment.
- j. Overseeing and coordinating any incidental construction activities that may result from the removal and installation of new system requirements.
- k. Obtain all permits required; and shall coordinate the sequence of construction. Construction may include running of new Category 6 UTP or Multimode fiber optic cabling in accordance with current Board guidelines, re-termination of existing low voltage wiring, installation of T-1 extensions, coring, installation of mounting brackets for wireless access points (APs), patching and painting of walls, and installation of new and replacement c-boxes. All construction work must comply with the Board's published infrastructure standards and ITS supplemental requirements.

The Board's published standards are available via:

http://www.cps.edu/About_CPS/The_Board_of_Education/Pages/CPSInfrastructureHandbook.aspx. The ITS supplemental requirements are included in Attachment I. All construction related activity must be bid out to a pool of pre-qualified wiring contractors. A list of these contractors can be found at:

<http://www.csc.cps.k12.il.us/servlet/purchasing.bids.BidOpenings?CONTRACTORS=WIRING>.

- l. The Board shall provide written approval of site assessments prior to a construction project sent out for bid.
 - m. The Board estimates that the construction work for a Full Scope site will be approximately \$250,000. This number is merely for budgetary purposes and the actual per school cost will vary based on the scope of the assessment. The Board reserves the right to update these budgetary figures at any time.
- B. Sentinel will upgrade and replace all network devices with Board approved equipment defined in Exhibit B. Sentinel will provide support services to include installation, integration, configuration, and testing of the equipment. Sentinel will provide all products according to the pricing as shown in Exhibit B.
- C. Sentinel shall be responsible for maintaining the System Improvement Database and front-end interface. This service is not eligible for E-Rate discounts. Services include
- 1. Microsoft SQL Server (MS-SQL) upgrades to current version.
 - 2. MS-SQL patches for security and stability issues.
 - 3. Routine maintenance of the database.
 - 4. Provide for technical support and recovery services of the database and front-end.
 - 5. Enhancements to the front-end and database schema as requested in writing by the Board.
- The contract is limited to five hundred (500) hours of customization support per year.

Not included are hardware and operating system maintenance and licensing of the System Improvement Database

Project Management

- A. Sentinel will provide a full time Program Manager ("PM") to coordinate all tasks, activities, timelines, milestones, and Deliverables. This includes coordination with the Board and its vendors on the work provided under this SOW. This PM will initiate and moderate regularly scheduled Design and Engineering meetings with all vendors associated with this System Improvement Project and will act as primary contact for both the Board and Project team members at all levels of this Project. Sentinel's PM responsibilities will include:
- 1. Perform a Risk Analysis to identify and manage all known risks associated with this implementation.
 - 2. Provide Project status reports and maintain an outstanding issues list.
 - 3. Prepare Work Breakdown Structure and provide Project schedules in the form of Gantt charts, network diagrams, milestone charts, or text tables.

4. Continual review of Project objectives in order to provide Project status, approval, and address Project issues.
 5. Prepare Project Team Directory consisting of contacts, roles, and assignments chart.
 6. Manage requests for scope changes.
 7. Review the development of testing and turnover procedures.
 8. Resource management and tracking of Sentinel's and subcontractor's engineering staff. Resolve schedule problems and conflicts.
 9. Coordination of network device implementation services between all vendors as directed. Resolve Project conflicts and identify alternative courses of action.
 10. Manage the plan, schedule and control Project objectives with respect to performance, cost/budget, timeframes, Project scope, and the effective use of resources.
 11. Manage Project team to confirm commitment on Project Deliverables and ensure the Board's expectations are met.
 12. Coordinate communication of schedules, access, work to be performed and any network outages with the school Principal and local technical coordinator.
- B. Sentinel will develop a detailed Project plan to identify and track all the key dependencies for a successful implementation. This will include developing and coordinating with other Board initiatives as directed. The Board must approve of the Project Plan in writing.

Assessment/Design

- A. Sentinel will conduct site assessments to identify the current network environment at each school and gather detailed information on installed components. Network components including all electronics and patch cords will be identified in the MDF, IDF (Intermediate Distribution Frame) and Concentrator enclosures. Recommendations will be provided to replace non-intelligent Hubs, end of life switches, wireless access points, and other network devices in the current environment based on the results of the assessment to ensure that the proposed network environment will meet the performance standards as set forth by the Board. The performance standards will be agreed upon by the Board and Sentinel prior to the commencement of work.
1. The site assessment document shall include riser diagrams, quantities of equipment and patch cords by MDF/IDF and C-Box, wireless access point assessment information (if needed), proposed wireless design diagrams (If needed), recommended bill of materials, and shall identify all construction labor and material estimates. This assessment shall become the scope of work for the school and shall identify the exact equipment requirements and Services required based on current Board standards. Rendering Services and supplying Products shall commence upon approval of the scope of work for that site by the Board. Proposer shall provide a report tracking the devices required at each site. This information shall be entered into the ITS System Improvement Database. Proposer shall provide a sample assessment report detailing equipment needed for a school site.
- B. Sentinel shall conduct an active wireless site survey for the assessment phase and a passive site survey post installation to confirm proper wireless coverage for each school. The active site survey shall help to determine the best location for new or replacement Cisco wireless access point devices. The Board's current survey software standard is Airmagnet Surveyor. The Board requires the survey to include floor plans depicting AP placement, signal strength, and channels in order to visually depict wireless coverage. The Board shall attempt to provide scaled floor plans in digital format but if plans are not available Sentinel shall provide them. Sentinel is responsible for purchasing the licenses of the most current version of the Airmagnet Surveyor software as well as training the assessment team in said software's usage.
- C. Sentinel will provide coordination with the Principal and/or local technical staff at the schools for access to required areas and will provide notification to school staff regarding LAN outages due to installation work. Sentinel will coordinate communication of schedules, site visits, timeframes, and impact of outage to the schools prior to commencement of the work.
- D. Sentinel shall coordinate removal of existing network devices being replaced by new equipment. Removal of access points from walls may require patching and painting. The removal of equipment shall include collection and inventory of the removed devices to be replaced by new Products. The inventory shall include, but is not limited to serial number, IP address, host name, device location, and asset tag. Sentinel is expected to provide staging of old devices until the equipment is disposed of or traded in for credit for purchases of new Products for use in this Project. All equipment to be disposed must be disposed of in an environmentally sound manner and in compliance with all local, state and

federal regulations. The Board will ensure that any removed equipment complies with the SLD/USAC regulations with regards to the transfer of equipment.

- E. Sentinel will provide a complete inventory of installed equipment; this inventory will include but is not limited to device location, host name, date of installation, and IP address, serial number, Board asset tag number, and device configuration. This information will be provided to the Board in a predetermined electronic format. The Board has an asset management system initiative currently underway. Sentinel shall interface with the Board's System Improvement Inventory Database to update inventory records accordingly.

Installation

- A. Sentinel will install an agreed upon network device operating system and device configuration for all devices at the school. The Board Department of ITS Network Services ("NS") shall dictate the operating system and configuration standards. NS shall provide written notice to Sentinel of changes in these standards, with such changes to be effective upon receipt of said notice.
 - 1. The devices shall be installed at the schools in designated areas determined by assessments in accordance with the Board's guidelines. Sentinel will affix a Board Asset tag to each device and record the number in the inventory and device configuration report.
 - 2. The installation will include setup and connection to the network, and connectivity testing. The testing will include a functionality test to ensure the network device has the correct Internet access and LAN access to the school VLAN's (Virtual Local Area Network). This testing may include basic troubleshooting of the device and testing of the cabling in the MDF and IDF location at the school. If issues are found with previously installed wiring, Sentinel agrees to coordinate repair through designated and/or pre-qualified Board vendors.
 - 3. Based on the assessment, Sentinel will install Wireless NICs into the computers that require it for access.
- B. Sentinel will install and configure the wireless access points and associated wireless controller (if applicable) including any mounting and low voltage wiring needed. The wireless controller must be installed within the site's MDF room, unless otherwise directed by the Board in writing. The Wireless access points to be installed are capable of power over Ethernet therefore no electrical work for this portion of the Project is anticipated. Sentinel will provide documentation of the new location for the access point at a school. Survey Diagrams will show the location of the Wireless access point based on the Survey. Prior to the installation of the access points, the Board and Sentinel will predetermine the requirements for signal strength standards.
- C. Sentinel will provide Installation of Wireless NICs into predetermined computers at selected schools. The installation will include setup of the Wireless NIC, connection to the network, and testing connectivity. Any pre-existing wireless devices with the ability to connect securely to the new wireless network will also be configured and documented to match the Board standard configuration.
 - 1. Testing of the wireless NIC installation will include a functionality test to ensure the network device has the correct Internet access and access to the correct school VLANs. This testing may include basic troubleshooting of the device.

Wireless NIC Installation Plan

- 1. Confirm latest driver
 - 2. Confirm there are no hardware conflicts in device manager
 - 3. Confirm encryption settings
 - 4. Confirm connection status by doing the following:
 - 1. Check icon in bottom right hand tray for link (If configured to display)
 - 2. Perform an IPConfig at a command prompt to check IP Address
 - 3. Ping associated gateway (If list is provided ping key network devices)
 - 4. Check speed/link status in wireless utility to determine strength of signal
 - 5. Login to domain/network and test drive mappings and applications
 - 6. Confirm Internet browsing
- D. Sentinel will provide all labor, tools, and software necessary to perform the tasks as described within this Agreement. This includes, but is not limited to ladders, drills, screwdrivers, test equipment, survey software and other common tools and software.

- E. Sentinel will warrant all work provided under this Agreement and shall provide repair services as needed for a minimum of three (3) months after installation has been approved by the Board in writing, within the E-rate implementation deadline. Sentinel guarantees all work and will have an independent firm audit the results to validate the installation. Installation will be guaranteed for 90 days after installation has been approved by the Board in writing. Sentinel will dispatch a technical engineer to remediate the problem within a day's notice. The Board will be solely responsible for the systems and support after 90 days from the final written acceptance of each school's solution. After the three (3) month warranty period, Sentinel shall send a detailed inventory report of new and removed devices to the Board's current LAN Maintenance provider so they can add the new equipment to their maintenance contract. The inventory report shall include, but is not limited to: serial number, model number, hostname, IP address, location, school name and facility ID
- F. Sentinel may also be required to install UPS devices in the MDF, IDF or Concentrator Boxes of selected schools. The UPS devices will be installed in racks, powered up, charged, tested and E-Rate eligible network equipment designated by the Board will be plugged into the E-Rate eligible devices. Sentinel will inventory UPS systems installed, document locations and equipment plugged into these devices to be provided in the inventory and device configuration report.
- G. Sentinel shall provide highly qualified personnel working on the Board's network to ensure proper installation of equipment. The personnel are required to have an active CCNA (Cisco Certified Network Associate) certification or better. The installation team leads are required to have an active CCNP (Cisco Certified Network Professional) and an active CCDA (Cisco Certified Design Associate) or better. A dedicated wireless networking professional with a minimum of five (5) years field experience in WLAN implementations is also required to be included in the team. The wireless networking professional is required to be certified in the use of the Airmagnet Surveyor software. The Board shall be active in the selection of any assigned personnel, including technical and management personnel and reserves the right to remove personnel from the Project at their discretion. The Board shall be given the option to interview any proposed personnel prior to becoming engaged under the contract.

H. Test Plan for Network Devices

Switch Assessment

- Gain access to switch location. (MDF, IDF, Concentrator Box)
- Log into the switch with credentials from the authentication server.
- Verify that the switches have correct Location, Host name, IP Address, IP Default-Gateway and Serial number match master documentation.
- Verify correct IOS version installed.
- Ping DNS servers to verify connectivity.
- Test and verify proper port/VLAN configuration
- Test login connectivity to server farm through direct connection on switch

Access Point Assessment

- Gain access to access point location.
- Verify that the access point's configuration matches master documentation.
- Verify correct IOS version installed.
- Verify proper encryption settings and SSID
 - Verify access point is configured in any applicable management system
 - DHCP scope addresses working correctly on particular VLAN.
- Test authentication to access point
- Verify wireless coverage within scope guidelines

Closeout

- A. Sentinel will maintain and modify all associated documentation for the duration of this Agreement. All configurations, scripts, drawings, inventory lists (including serial and other identifying numbers), design documentation, and general documentation associated with the Board's network will be owned by the Board and will be available in electronic format upon request.

- B. Sentinel as needed will update and track the Project in the Board's Project management tool, Mercury IT Governance Center. Access and licenses to this tool will be provided by the Board.

Deliverables

1. As an integral part of Sentinel's response, Sentinel will provide a Project Management approach that includes developing an Engagement Project Management Office (PMO). The PMO will be directed by a full time Program Manager who will be the primary contact for the Board team and Sentinel team members. In addition, a Program Logistics and Cost Manager and a Communications and Planning Manager will be assigned and will report to Sentinel's Program Manager.
2. Sentinel will conduct site surveys at each site. Sentinel's team will assess the technology components, the physical infrastructure, wireless access capabilities, and any associated construction needs within each site. The assessment will yield a document that will be used to develop a recommended bill of materials and scope of work per site. This assessment, if approved by the Board in writing, will lead to Sentinel's Program Management to issue a bid package to the Board's pre-approved construction vendor list.
3. Sentinel will document and track all devices within each school's bill of materials and will provide a report of these devices upon final acceptance by the Board.

As a part of Sentinel's PMO Sentinel has included a Communications Manager who will be responsible for coordinating and establishing communications with each school affected. These communications will include contacting each school's Principal and Tech Coordinator as well as individuals from the Board ITS to coordinate the activities affecting each school.

4. Sentinel will coordinate the removal of existing network devices that are replaced by new equipment pursuant to the bill of materials of each school.
5. Sentinel will provide a complete inventory of equipment as identified within the bill of materials including configurations for each device.
6. Sentinel will install the agreed upon network device operating system and device configurations for all devices within the bill of materials. Sentinel's team will assist the Board with the development of a standard configuration that will be installed for all devices.
7. Sentinel will test wiring/cabling to verify that it is in working order during Sentinel's network assessment
8. Sentinel will install and configure all wireless access points. Additionally, any necessary moves, adds, and changes to the low voltage data wiring will be included in our subcontractors' scopes of work.
9. Sentinel will provide all necessary tools required to perform the tasks within the Project.
10. Sentinel guarantees all work and will have an independent firm audit the results to validate the installation. Installation will be guaranteed for 90 days from final written acceptance from the Board ("Warranty Period"). Sentinel will dispatch technical engineers to remediate the problem within a day's notice. The Board will be solely responsible for the systems and support after 90 days after final acceptance of each school's solution. Any device replaced during the ninety (90) day Warranty Period will be tracked by serial number. All repair and replacement activities will be tracked by Sentinel and the Board will be provided a monthly report detailing equipment make, model, serial number, and warranty activities. The report will specify the serial numbers of the old and new equipment if the equipment is replaced.
11. Sentinel will provide all necessary closeout documentation as further described in Exhibit I and understands that this information is the property of the Board. The Board and Sentinel will work together to provide a closeout package for each school to be given to both the Board and a copy that will be left with the School.

12. Sentinel will use the Board's PM Tool, Mercury IT Governance Center for updating and tracking events on the Project. Additionally, Sentinel will be using Microsoft's Project as the primary "tool" to manage the Project. Project's SharePoint features will be used to manage all Project related documentation. The Board and all authorized personnel related to this Project will have web portal access to the Project's documentation.

A number of various communication methods and reports will be available for establishing effective communication between the CIP/Board and the Program Manager:

- i. Status Reports
 - ii. Risk Meetings
 - iii. Budget Meetings
 - iv. Issues Resolution
 - v. Schedule
13. All items listed below will be provided to the Board either in paper, CD or e-mail format in specific areas related to the SOW.
 - a. Project Plan
 - b. Communication Plan
 - c. Project Milestone Dashboard
 - d. Risk Report
 - e. Issues Report
 - f. Budget Variance Reports
 - g. Resource Tracking Report
 - h. Removed Equipment Report
 - i. New equipment inventory
 - j. School Assessments
 - k. Riser Diagrams
 - l. Wireless Site Surveys
 - m. Visio Diagrams of school LANs
 - n. Testing/Acceptance Reports
14. Sentinel will provide cable inventory and detail on new cable run installations related to this Project. Existing cable that is assumed to work will be tested but not inventoried.
15. After each school is complete, an inventory report for that location will be provided to NS for an internal audit. This will provide for a mutual written sign-off that the equipment is installed and functional at the time the work has completed. This mutual written sign off will occur within 5 business days of school completion and acceptance by the Board. If Sentinel repairs or replaces a fiber or copper cable, Sentinel will provide the Board with a 15 year manufacturers or better warranty and will have certified installers completed work under the prime/subcontractor agreement.
16. Sentinel will utilize the Board's pre-selected wiring subcontractors per the Bid package pursuant to the Board's guidelines. In order to comply with the Board's guidelines throughout the Project, these wiring contractors will be selected through a bidding process, which may be on a school-by-school basis. The same wiring subcontractors may be used from school to school, with the prior written approval of the Board. All wiring subcontractors will be from the pre-qualified list. Sentinel will ensure that the construction and services provided by the wiring subcontractors shall be in compliance with Exhibit H attached and incorporated hereto.
17. Test & Verification results of the cable are to be included in the submitted closing documentation, per school.
18. The warranty period and redemption process, per manufacturer, will be included in the closing documentation, per school.
19. Sentinel understands that it will be tasked with providing an Internet ready infrastructure to up to one hundred (100) schools over a period ranging from 7-12 months. It is the Board's intent to file and receive funding for this Project in order to allow Sentinel a minimum of 7 months to complete the 100 schools. If for any reason the timeline is compressed shorter than seven months Sentinel and the Board will work together determine if anything can be done to complete the Project within the remaining timeline without incurring additional Project costs. If it is determined that the

Project cannot be completed within the compressed timeline Sentinel and the Board will work together determine the maximum amount of schools they can complete under a reduced scope. If the parties desire to reduce the scope, the parties agree to negotiate in good faith a written amendment to this Contract. The execution of the written amendment is subject to any necessary prior approval by the Chicago Board of Education via a Board report.

20. Cable inventory data may need to be entered into the Board's Cable Management System by Sentinel.

Change Management Process

This section establishes the process of Change Management for this Exhibit A. The SOW Change Management Process must clearly document the requested change. The SOW Change Management Process consists of the following:

- Change Initiation
- Change Validation
- Cost Estimate Preparation
- Change Implementation

The proposed change will be validated to determine if it is in the current scope of this Exhibit A. If it is within the current scope of this SOW, this decision will be carefully documented. All change orders shall be in writing. The change order shall contain a detailed description of the change in services or corresponding prices or other changes that are within the current scope of this Exhibit A. The approved change order shall be signed and dated by the Board's Chief Information Officer ("CIO") or Director of Infrastructure and an Officer of Sentinel (hereafter the "**Authorized Representatives**" of both Parties). After the change order has been signed by the Authorized Representatives of both Parties, the approved change will be implemented. This originates by a new task being appended to this Exhibit A.

Minor changes that do not change requirements and do not affect delivery dates, price, or performance need not follow the SOW Change Management Process. It is the responsibility of the Board to coordinate, review, and document changes with Sentinel.

All material revisions to this Exhibit A (SOW) and other exhibits shall require a written amendment to the Agreement, subject to prior approval by the Board as evidenced by a Board report. For purposes of this Agreement, "material revisions" means (i) increasing the costs of the Services beyond the maximum compensation amount approved by the Board as described in the authorizing Board report; (ii) substantial reduction of the scopes of services; (iii) expanding the scope of services beyond the authorized scope of services as described in this Exhibit A and the authorizing Board report; (iv) extending the time for performance of the Services beyond the time period approved by the Board.

Implementation Plan (Example):

OES LAN/WAN E-Rate Project High-Level Project Plan					
ID	Task Name	Start	Finish	Predecessors	Resource Names
1	WBS 1.1 - PMO	Tue 7/1/08	Mon 6/29/09		
2	Project Planning/Outgoing into Projects team	Tue 7/1/08	Mon 6/29/09		
3	General Project Work Breakdown Structure (WBS)	Tue 7/1/08	Tue 7/29/08		
4	Project Budget Structure	Tue 7/1/08	Tue 7/29/08		
5	Change Order Procedures	Tue 7/1/08	Fri 7/18/08		
6	E-Rate Support Team Setup	Tue 7/1/08	Fri 7/18/08		
7	Assessment Procedures Established	Tue 7/1/08	Tue 8/5/08		
8	Assessment Team as reflected in the Big Chart Per Schedule	Tue 7/1/08	Mon 7/28/08		
9	WBS 1.2 - Network/Wireless Assessment	Wed 8/6/08	Wed 10/29/08	7	
10	Assessment of 100 Schools	Wed 8/6/08	Wed 10/29/08	7	
11	Schools 1-100 Plan Expanded During Planning Period	Wed 8/6/08	Fri 10/10/08		
12	WBS 1.3 - Design Process	Mon 8/18/08	Mon 11/3/08		
13	Assessments Passed to the Design Team	Tue 8/19/08	Wed 10/22/08	11FS-32 days	
14	Designing of School's Requirements	Mon 8/18/08	Mon 11/3/08		
15	WBS 1.4 - Submit Design Requirements to the Bid Team	Tue 8/19/08	Wed 12/10/08		
16	Bid Team updates the Design Requirements	Tue 9/9/08	Mon 11/17/08	14FS-41 days	
17	RFI Responses are Reviewed	Tue 9/9/08	Tue 11/27/08		
18	Projects are Awarded	Tue 9/9/08	Wed 12/10/08		
19	WBS 1.5 - LAN Upgrade	Fri 11/7/08	Fri 11/7/08		
20	General LAN Upgrade per an Established Schedule	Fri 11/7/08	Fri 11/7/08	16FS-7 days	
21	WBS 1.6 - Testing & Integration	Mon 11/12/09	Mon 11/12/09		
22	As School Construction Complete the Team Follows	Mon 11/12/09	Mon 11/12/09	20FS-120 days	
23	WBS 1.7 - Report & Quality Control	Mon 4/13/09	Mon 4/13/09		
24	As School Construction Complete the RSC Team Follows	Mon 4/13/09	Mon 4/13/09	22FS-60 days	
25	WBS 1.8 Closeout	Fri 4/17/09	Thu 7/9/09		
26	School Closeouts	Fri 4/17/09	Thu 7/9/09	24FS-60 days	

Exhibit B - Pricing Schedule

Normal Scope Costs

Notes: Normal scope schools require minimal construction work and is primarily in need of an upgrade of the LAN electronics.
 Notes: Do NOT include the costs for the network equipment and cables listed on the Equipment tab in this section

	Cost						Per School Qty	Eligible Cost Per School	Ineligible Cost per School	Total Per School Cost
	Materials (Eligible)	Materials (Ineligible)	Labor (Eligible)	Labor (Ineligible)	Project Mgmt (Eligible)	Project Mgmt (Ineligible)				
Per Site Cost										
Design Work			\$ 3,025.45		\$ 1,207.50		1	\$ 4,232.95	\$ -	\$ 4,232.95
Detailed Hardware Design			\$ 2,526.75		\$ 1,037.50		1	\$ 3,563.25	\$ -	\$ 3,563.25
Hardware Activities										
Switch Configuration/Installation			\$ 205.25		\$ 175.00		14	\$ 5,323.50	\$ -	\$ 5,323.50
UPS Installation			\$ 190.95		\$ 110.20		4	\$ 1,239.00	\$ -	\$ 1,239.00
Other (Please Specify)							1	\$ -	\$ -	\$ -
Wireless Activities										
Site Survey			\$ 2,957.75		\$ 550.48		1	\$ 3,514.23	\$ -	\$ 3,514.23
AP Configuration/Installation			\$ 172.80		\$ 82.89		25	\$ 5,882.25	\$ -	\$ 5,882.25
Other (Please Specify)							1	\$ -	\$ -	\$ -
Workstation Activities										
Wireless NIC Installation/Configuration (PCI)			\$ 173.25		\$ 72.50		20	\$ 4,915.00	\$ -	\$ 4,915.00
Wireless NIC Installation/Configuration (PC-Card)			\$ 173.25		\$ 72.50		20	\$ 4,915.00	\$ -	\$ 4,915.00
Workstation Config (Non-Installation)			\$ 165.55		\$ 72.50		10	\$ -	\$ 2,380.00	\$ 2,380.00
Other (Please Specify)							1	\$ -	\$ -	\$ -
Total for 50 Schools (CPS and SLD)								\$ 1,236,724.40	\$ 2,380.00	\$ 1,239,104.40

	Cost						Per School Qty	Eligible Cost Per School	Ineligible Cost per School	Total Per School Cost
	Materials (Eligible)	Materials (Ineligible)	Labor (Eligible)	Labor (Ineligible)	Project Mgmt (Eligible)	Project Mgmt (Ineligible)				
Estimated Per Site Construction Cost										
Install New C-Box	\$ 990.00	\$ -	\$ 295.41	\$ -	\$ 135.64		0	\$ -	\$ -	\$ -
Install Patch Panel (Terminate 24 wires onto new patch Panel in existing C-Box)	\$ 173.25	\$ -	\$ 778.81	\$ -	\$ 135.64		2	\$ 2,175.39	\$ -	\$ 2,175.39
Upgrade 16x18x8 Hoffman enclosure to Standard C-Box	\$ 990.00	\$ -	\$ 295.41	\$ -	\$ 135.64		0	\$ -	\$ -	\$ -
Install/Terminate 1 Cat 5e Location	\$ 207.90	\$ -	\$ 230.96	\$ -	\$ 54.25		3	\$ 1,479.33	\$ -	\$ 1,479.33
Install/Terminate 6 strands of fiber	\$ 990.00	\$ -	\$ 541.41	\$ -	\$ 135.64		0	\$ -	\$ -	\$ -
T-1 Extension	\$ 4,455.00	\$ -	\$ 5,445.00	\$ -	\$ 3,600.00		0	\$ -	\$ -	\$ -
Misc Electrical Work	\$ -	\$ 742.50	\$ -	\$ 742.50	\$ -	\$ 500.00	1	\$ -	\$ 1,985.00	\$ 1,985.00
Coring	\$ 64.35	\$ -	\$ 349.12	\$ -	\$ 54.25		0	\$ -	\$ -	\$ -
Install/Terminate 1 Cat 5e Location	\$ 207.90	\$ -	\$ 230.96	\$ -	\$ 54.25		12	\$ 5,917.29	\$ -	\$ 5,917.29
Patch/Plum to cover old access point	\$ 49.50	\$ -	\$ 227.73	\$ -	\$ 169.27		1	\$ 446.50	\$ -	\$ 446.50
Total for 50 Schools (CPS and SLD)								\$ 1,236,724.40	\$ 2,380.00	\$ 1,239,104.40

Normal Scope Eligible and Ineligible Costs	
Eligible Project SLD Cost	\$ 1,962,152.31
Eligible Project CPS Cost	\$ 436,266.92
Ineligible CPS Cost	\$ 911,399.31
CPS Total	\$ 1,347,666.23
Total Full Scope School Costs	\$ 3,309,818.54

Exhibit B - Pricing Schedule

Full Scope Costs

Note: Full scope schools have sections of the building in need of hardware and include more construction work than normal scope schools.

	Cost						Per School Qty	Eligible Cost Per School	Ineligible Cost per School	Total Per School Cost
	Materials (Eligible)	Materials (Ineligible)	Labor (Eligible)	Labor (Ineligible)	Project Mgmt (Eligible)	Project Mgmt (Ineligible)				
Per Site Cost										
Design Work			\$ 5,610.75		\$ 1,662.35		1	\$ 7,163.10	\$ -	\$ 7,163.10
Manage Construction Bid Process					\$ 2,733.00		1	\$ 2,733.00	\$ -	\$ 2,733.00
Detailed Hardware Design			\$ 4,527.00		\$ 1,156.15		1	\$ 5,683.15	\$ -	\$ 5,683.15
Hardware Activities										
Switch Configuration/Installation			\$ 205.25		\$ 175.00		14	\$ 5,323.50	\$ -	\$ 5,323.50
UPS Installation			\$ 199.55		\$ 110.20		4	\$ 1,239.00	\$ -	\$ 1,239.00
Other (Please Specify)							1	\$ -	\$ -	\$ -
Wireless Activities										
Site Survey			\$ 4,005.45		\$ 2,561.00		1	\$ 6,566.45	\$ -	\$ 6,566.45
AP Configuration/Installation			\$ 172.00		\$ 62.69		25	\$ 5,882.25	\$ -	\$ 5,882.25
Other (Please Specify)							1	\$ -	\$ -	\$ -
Workstation Activities										
Wireless NIC Installation/Configuration (PCI)			\$ 173.25		\$ 72.50		20	\$ 4,915.00	\$ -	\$ 4,915.00
Wireless NIC Installation/Configuration (PC-Card)			\$ 173.25		\$ 72.50		20	\$ 4,915.00	\$ -	\$ 4,915.00
Workstation Config (Non-Installation)			\$ 166.55		\$ 72.50		10	\$ -	\$ 2,360.50	\$ 2,360.50
Other (Please Specify)							1	\$ -	\$ -	\$ -
Total for 25 Schools								\$ 10,941.55	\$ 2,360.50	\$ 13,302.05

	Cost						Per School Qty	Eligible Cost Per School	Ineligible Cost per School	Total Per School Cost
	Materials (Eligible)	Materials (Ineligible)	Labor (Eligible)	Labor (Ineligible)	Project Mgmt (Eligible)	Project Mgmt (Ineligible)				
Estimated Per Site Construction Cost										
Install New C-Box	\$ 990.00	\$ -	\$ 295.41	\$ -	\$ 135.64		7	\$ 9,947.33	\$ -	\$ 9,947.33
Install Patch Panel (Terminate 24 wires onto new patch Panel in existing C-Box)	\$ 173.25	\$ -	\$ 775.81	\$ -	\$ 135.64		2	\$ 2,175.39	\$ -	\$ 2,175.39
Upgrade 15x18X5 Hoffman enclosure to Standard C-Box	\$ 990.00	\$ -	\$ 295.41	\$ -	\$ 135.64		0	\$ -	\$ -	\$ -
Install/Terminate 1 Cat 5e Location - Library	\$ 202.95	\$ -	\$ 615.78	\$ -	\$ 205.00		13	\$ 13,308.49	\$ -	\$ 13,308.49
Install/Terminate 1 Cat 5e Location - Lab	\$ 202.95	\$ -	\$ 615.78	\$ -	\$ 205.00		39	\$ 39,925.47	\$ -	\$ 39,925.47
Install/Terminate 1 Cat 5e Location - Classroom	\$ 202.95	\$ -	\$ 615.78	\$ -	\$ 205.00		120	\$ 122,847.60	\$ -	\$ 122,847.60
Install/Terminate 6 strands of fiber	\$ 990.00	\$ -	\$ 541.41	\$ -	\$ 135.64		7	\$ 11,669.29	\$ -	\$ 11,669.29
Install/Terminate Voice Drops	\$ 207.90	\$ -	\$ 425.40	\$ -	\$ 205.00		15	\$ 13,024.50	\$ -	\$ 13,024.50
T-1 Extension	\$ 4,455.00	\$ -	\$ 5,445.00	\$ -	\$ 3,500.00		1	\$ 13,400.00	\$ -	\$ 13,400.00
Coring	\$ 64.35	\$ -	\$ 349.12	\$ -	\$ 54.25		1	\$ 467.72	\$ -	\$ 467.72
Misc Electrical Work - Library	\$ -	\$ 198.00	\$ -	\$ 198.00	\$ -	\$ 150.00	0	\$ -	\$ -	\$ -
Misc Electrical Work - Lab	\$ -	\$ 198.00	\$ -	\$ 198.00	\$ -	\$ 150.00	0	\$ -	\$ -	\$ -
Misc Electrical Work - Classroom	\$ -	\$ 495.00	\$ -	\$ 495.00	\$ -	\$ 150.00	0	\$ -	\$ -	\$ -
MDFA/DF upgrade/Power Distribution Panel	\$ -	\$ 1,744.88	\$ -	\$ 1,744.88	\$ -	\$ 925.00	2	\$ -	\$ 8,829.50	\$ 8,829.50
Other -Trenching between schools	\$ 990.00	\$ -	\$ 990.00	\$ -	\$ 550.00		0	\$ -	\$ -	\$ -
Install/Terminate 1 Cat 5e Location	\$ 207.90	\$ -	\$ 230.95	\$ -	\$ 54.25		12	\$ 5,917.29	\$ -	\$ 5,917.29
Patch/Paint to cover old access point	\$ 49.50	\$ -	\$ 227.73	\$ -	\$ 169.27		0	\$ -	\$ -	\$ -
Total for 25 Schools								\$ 5,812,678.92	\$ 220,732.50	\$ 6,033,411.42

Full Scope Eligible and Ineligible Costs	
Eligible Project SLD Cost	\$ 8,234,829.62
Eligible Project CPS Cost	\$ 973,068.65
Ineligible CPS Cost	\$ 1,720,881.23
CPS Total	\$ 2,702,890.08
Total Full Scope School Costs	\$ 8,937,719.70

Exhibit B - Pricing Schedule

Per School Sample Equipment and Cable List

Note: Assuming all parts are E-Rate eligible. Actual eligibility will be determined during E-Rate filing process.

Note: The list below is an approximation of what will be required in each school. Actual parts will be determined in the E-Rate filing and actual quantities will vary per school.

Item	Description	Quantity	Unit Price	Total Price	Manufacturer	Part Number	Notes
WS-C3600-8PC-S	8 Ethernet 10/100 ports and 1 dual-purpose 10/100/1000 and SFP port	1	\$ 3,995.00	\$ 3,995.00	Cisco	WS-C3600-8PC-S	
WS-C3600-8PC-S	8 Ethernet 10/100/1000 ports and 1 dual-purpose 10/100/1000 and SFP port	1	\$ 1,795.00	\$ 1,795.00	Cisco	WS-C3600-8PC-S	
WS-C3600-12PC-S	12 Ethernet 10/100 ports and 1 dual-purpose 10/100/1000 and SFP port	1	\$ 1,995.00	\$ 1,995.00	Cisco	WS-C3600-12PC-S	
WS-C3600-24PS-S	24 Ethernet 10/100/1000 ports and 4 SFP-based Gigabit Ethernet ports	1	\$ 5,995.00	\$ 5,995.00	Cisco	WS-C3600-24PS-S	
WS-C3600-48PS-S	48 Ethernet 10/100/1000 ports and 4 SFP-based Gigabit Ethernet ports	1	\$ 9,495.00	\$ 9,495.00	Cisco	WS-C3600-48PS-S	
WS-C3600-24PDL	24 Ethernet 10/100/1000 ports and 2 SFP-based 10 Gig Ethernet ports	1	\$ 5,495.00	\$ 5,495.00	Cisco	WS-C3600-24PDL	
WS-C2960S-48PDL	48 Ethernet 10/100/1000 ports and 2 SFP-based 10 Gig Ethernet ports	1	\$ 8,495.00	\$ 8,495.00	Cisco	WS-C2960S-48PDL	
WS-C2960S-48PDL	48 Ethernet 10/100/1000 ports and 4 SFP-based Gigabit Ethernet ports	1	\$ 6,495.00	\$ 6,495.00	Cisco	WS-C2960S-48PDL	
WS-C2960S-24PS-L	24 Ethernet 10/100/1000 ports and 4 SFP-based Gigabit Ethernet ports	1	\$ 3,995.00	\$ 3,995.00	Cisco	WS-C2960S-24PS-L	
WS-C2960-24PS-L	24 Ethernet 10/100 ports and 2 SFP-based Gigabit Ethernet ports	1	\$ 2,495.00	\$ 2,495.00	Cisco	WS-C2960-24PS-L	
WS-C2960-48PST-L	48 Ethernet 10/100 ports and 4 SFP-based Gigabit Ethernet ports	1	\$ 4,495.00	\$ 4,495.00	Cisco	WS-C2960-48PST-L	
GLC-SX-MM+	1000BASE-SX SFP transceiver module for MMF, 850-nm wavelength	1	\$ 500.00	\$ 500.00	Cisco	GLC-SX-MM+	
CAB-SFP-50CM+	Cisco Catalyst 3560 SFP Interconnect Cable (50 dcm)	1	\$ 250.00	\$ 250.00	Cisco	CAB-SFP-50CM+	
WS-G5404+	1000BASE-SX Short Wavelength GBIC (Multimode only)	1	\$ 500.00	\$ 500.00	Cisco	WS-G5404+	
WS-C3750G-12S-S	Catalyst 3750G-12S-S 12 Port Fiber Switch	1	\$ 2,995.00	\$ 2,995.00	Cisco	WS-C3750G-12S-S	
AIR-CT5508-12-K9	802.11a/g/n-draft 2.0 2.4/5-GHz Modular Autonomous AP; 6 RP-TNC	1	\$ 2,299.00	\$ 2,299.00	Cisco	AIR-CT5508-12-K9	
AIR-AP1142N-A-K9	Dual-band Standalone 802.11a/g/n	1	\$ 995.00	\$ 995.00	Cisco	AIR-AP1142N-A-K9	
AIR-LAP1142N-A-K9	Lightweight Dual-band Standalone 802.11a/g/n	1	\$ 995.00	\$ 995.00	Cisco	AIR-LAP1142N-A-K9	
AIR-BR1410A-A-K9-N	Cisco Aironet 1400 Series Wireless Bridge System	1	\$ 4,999.00	\$ 4,999.00	Cisco	AIR-BR1410A-A-K9-N	
AIR-AKT4441	Single black dipole antenna with an RP-TNC connector	1	\$ 19.00	\$ 19.00	Cisco	AIR-AKT4441	
AIR-ANT5869V0A-N	Outdoor short-range point-to-multipoint applications	1	\$ 359.00	\$ 359.00	Cisco	AIR-ANT5869V0A-N	
AIR-CAB010CL-N	30-ft low loss cable, one straight N connector, one 90-degree N connector	1	\$ 19.00	\$ 19.00	Cisco	AIR-CAB010CL-N	
AIR-ACCRWM1400	Roof/Wall mount kit	1	\$ 69.00	\$ 69.00	Cisco	AIR-ACCRWM1400	
AIR-ACCMFM1400+	Multifunction mount	1	\$ 69.00	\$ 69.00	Cisco	AIR-ACCMFM1400+	
AIR-CT5508-12-K9	Cisco 5508 Series Wireless Controller for up to 12 APs	1	\$ 10,995.00	\$ 10,995.00	Cisco	AIR-CT5508-12-K9	
AIR-CT5508-25-K9	Cisco 5508 Series Wireless Controller for up to 25 APs	1	\$ 15,995.00	\$ 15,995.00	Cisco	AIR-CT5508-25-K9	
AIR-CT5508-50-K9	5508 Series Controller for up to 50 APs	1	\$ 22,495.00	\$ 22,495.00	Cisco	AIR-CT5508-50-K9	
AIR-CT5508-100-K9	Cisco 5508 Series Wireless Controller for up to 100 APs	1	\$ 39,995.00	\$ 39,995.00	Cisco	AIR-CT5508-100-K9	
AIR-CT5508-250-K9	Cisco 5508 Series Wireless Controller for up to 250 APs	1	\$ 64,995.00	\$ 64,995.00	Cisco	AIR-CT5508-250-K9	
AIR-CT5508-500-K9	Cisco 5508 Series Wireless Controller for up to 500 APs	1	\$ 104,995.00	\$ 104,995.00	Cisco	AIR-CT5508-500-K9	
AIR-CT7510-300-K9	Cisco 7500 Series Wireless Controller Supporting 300 APs	1	\$ 47,995.00	\$ 47,995.00	Cisco	AIR-CT7510-300-K9	
AIR-CT7510-500-K9	Cisco 7500 Series Wireless Controller Supporting 500 APs	1	\$ 64,995.00	\$ 64,995.00	Cisco	AIR-CT7510-500-K9	
AIR-CT7510-1K-K9	Cisco 7500 Series Wireless Controller Supporting 1000 APs	1	\$ 119,995.00	\$ 119,995.00	Cisco	AIR-CT7510-1K-K9	
AIR-CT7510-2K-K9	Cisco 7500 Series Wireless Controller Supporting 2000 APs	1	\$ 224,995.00	\$ 224,995.00	Cisco	AIR-CT7510-2K-K9	
AIR-CT7510-3K-K9	Cisco 7500 Series Wireless Controller Supporting 3000 APs	1	\$ 325,000.00	\$ 325,000.00	Cisco	AIR-CT7510-3K-K9	
SFP-10G-SR+M4	10GBASE-SR SFP Module	1	\$ 1,495.00	\$ 1,495.00	Cisco	SFP-10G-SR+M4	
XENPAK-10GB-SR+M4	10GBASE-SR XENPAK Module	1	\$ 3,000.00	\$ 3,000.00	Cisco	XENPAK-10GB-SR+M4	
GLC-T+	1000BASE-T SFP	1	\$ 395.00	\$ 395.00	Cisco	GLC-T+	
N/A	1 METER MULTIMODE FIBER SC TO SC CABLE (ORANGE)	1	\$ 16.65	\$ 16.65	Cisco	N/A	
N/A	1 METER MULTIMODE FIBER LC TO SC CABLE (ORANGE)	1	\$ 17.21	\$ 17.21	Cisco	N/A	
N/A	1 METER MULTIMODE FIBER LC TO LC CABLE (ORANGE)	1	\$ 17.76	\$ 17.76	Cisco	N/A	
N/A	1 METER MULTIMODE FIBER SC TO ST CABLE (ORANGE)	1	\$ 17.21	\$ 17.21	Cisco	N/A	
N/A	1 METER MULTIMODE FIBER SC TO SC CABLE (ORANGE)	1	\$ 16.65	\$ 16.65	Cisco	N/A	
N/A	1 METER MULTIMODE FIBER ST TO ST CABLE (ORANGE)	1	\$ 16.14	\$ 16.14	Cisco	N/A	
N/A	2 METER MULTIMODE FIBER SC TO SC CABLE (ORANGE)	1	\$ 17.21	\$ 17.21	Cisco	N/A	
N/A	2 METER MULTIMODE FIBER LC TO SC CABLE (ORANGE)	1	\$ 17.48	\$ 17.48	Cisco	N/A	
N/A	2 METER MULTIMODE FIBER LC TO LC CABLE (ORANGE)	1	\$ 18.32	\$ 18.32	Cisco	N/A	
N/A	2 METER MULTIMODE FIBER LC TO ST CABLE (ORANGE)	1	\$ 17.21	\$ 17.21	Cisco	N/A	
N/A	2 METER MULTIMODE FIBER SC TO ST CABLE (ORANGE)	1	\$ 16.65	\$ 16.65	Cisco	N/A	
N/A	2 METER MULTIMODE FIBER ST TO ST CABLE (ORANGE)	1	\$ 16.65	\$ 16.65	Cisco	N/A	
N/A	3 METER MULTIMODE FIBER SC TO SC CABLE (ORANGE)	1	\$ 17.48	\$ 17.48	Cisco	N/A	
N/A	3 METER MULTIMODE FIBER LC TO SC CABLE (ORANGE)	1	\$ 17.76	\$ 17.76	Cisco	N/A	
N/A	3 METER MULTIMODE FIBER LC TO LC CABLE (ORANGE)	1	\$ 18.04	\$ 18.04	Cisco	N/A	
N/A	3 METER MULTIMODE FIBER ST TO ST CABLE (ORANGE)	1	\$ 17.48	\$ 17.48	Cisco	N/A	
N/A	3 METER MULTIMODE FIBER SC TO ST CABLE (ORANGE)	1	\$ 16.93	\$ 16.93	Cisco	N/A	
N/A	3 METER MULTIMODE FIBER ST TO ST CABLE (ORANGE)	1	\$ 16.93	\$ 16.93	Cisco	N/A	
N/A	4 METER MULTIMODE FIBER SC TO SC CABLE (ORANGE)	1	\$ 12.15	\$ 12.15	Cisco	N/A	
N/A	4 METER MULTIMODE FIBER LC TO SC CABLE (ORANGE)	1	\$ 19.42	\$ 19.42	Cisco	N/A	
N/A	4 METER MULTIMODE FIBER LC TO LC CABLE (ORANGE)	1	\$ 19.98	\$ 19.98	Cisco	N/A	
N/A	4 METER MULTIMODE FIBER ST TO ST CABLE (ORANGE)	1	\$ 19.15	\$ 19.15	Cisco	N/A	
N/A	4 METER MULTIMODE FIBER SC TO ST CABLE (ORANGE)	1	\$ 18.04	\$ 18.04	Cisco	N/A	
N/A	5 METER MULTIMODE FIBER ST TO ST CABLE (ORANGE)	1	\$ 18.59	\$ 18.59	Cisco	N/A	
N/A	10 METER MULTIMODE FIBER SC TO SC CABLE (ORANGE)	1	\$ 21.09	\$ 21.09	Cisco	N/A	
N/A	10 METER MULTIMODE FIBER LC TO SC CABLE (ORANGE)	1	\$ 21.92	\$ 21.92	Cisco	N/A	
N/A	10 METER MULTIMODE FIBER LC TO LC CABLE (ORANGE)	1	\$ 22.20	\$ 22.20	Cisco	N/A	
N/A	10 METER MULTIMODE FIBER ST TO ST CABLE (ORANGE)	1	\$ 20.54	\$ 20.54	Cisco	N/A	
N/A	10 METER MULTIMODE FIBER SC TO ST CABLE (ORANGE)	1	\$ 19.43	\$ 19.43	Cisco	N/A	
N/A	10 METER MULTIMODE FIBER ST TO ST CABLE (ORANGE)	1	\$ 18.87	\$ 18.87	Cisco	N/A	
N/A	1 FOOT CAT 6 UTP RJ45 STRAIGHT THROUGH CABLE (BLUE)	1	\$ 1.94	\$ 1.94	Cisco	N/A	
N/A	2 FOOT CAT 6 UTP RJ45 STRAIGHT THROUGH CABLE (BLUE)	1	\$ 2.22	\$ 2.22	Cisco	N/A	
N/A	3 FOOT CAT 6 UTP RJ45 STRAIGHT THROUGH CABLE (BLUE)	1	\$ 2.50	\$ 2.50	Cisco	N/A	
N/A	5 FOOT CAT 6 UTP RJ45 STRAIGHT THROUGH CABLE (BLUE)	1	\$ 2.78	\$ 2.78	Cisco	N/A	
N/A	10 FOOT CAT 6 UTP RJ45 STRAIGHT THROUGH CABLE (BLUE)	1	\$ 3.33	\$ 3.33	Cisco	N/A	
N/A	15 FOOT CAT 6 UTP RJ45 STRAIGHT THROUGH CABLE (BLUE)	1	\$ 5.55	\$ 5.55	Cisco	N/A	
N/A	20 FOOT CAT 6 UTP RJ45 STRAIGHT THROUGH CABLE (BLUE)	1	\$ 6.66	\$ 6.66	Cisco	N/A	
N/A	30 FOOT CAT 6 UTP RJ45 STRAIGHT THROUGH CABLE (BLUE)	1	\$ 10.55	\$ 10.55	Cisco	N/A	
N/A	50 FOOT CAT 6 UTP RJ45 STRAIGHT THROUGH CABLE (BLUE)	1	\$ 12.77	\$ 12.77	Cisco	N/A	
N/A	1 FOOT CAT 6 UTP RJ45 CROSOVER CABLE (VIOLET)	1	\$ 3.05	\$ 3.05	Cisco	N/A	
N/A	2 FOOT CAT 6 UTP RJ45 CROSOVER CABLE (VIOLET)	1	\$ 4.00	\$ 4.00	Cisco	N/A	
N/A	3 FOOT CAT 6 UTP RJ45 CROSOVER CABLE (VIOLET)	1	\$ 4.16	\$ 4.16	Cisco	N/A	
N/A	5 FOOT CAT 6 UTP RJ45 CROSOVER CABLE (VIOLET)	1	\$ 4.44	\$ 4.44	Cisco	N/A	
N/A	10 FOOT CAT 6 UTP RJ45 CROSOVER CABLE (VIOLET)	1	\$ 5.00	\$ 5.00	Cisco	N/A	
N/A	15 FOOT CAT 6 UTP RJ45 CROSOVER CABLE (VIOLET)	1	\$ 7.22	\$ 7.22	Cisco	N/A	
N/A	20 FOOT CAT 6 UTP RJ45 CROSOVER CABLE (VIOLET)	1	\$ 7.77	\$ 7.77	Cisco	N/A	
N/A	30 FOOT CAT 6 UTP RJ45 CROSOVER CABLE (VIOLET)	1	\$ 10.55	\$ 10.55	Cisco	N/A	
N/A	50 FOOT CAT 6 UTP RJ45 CROSOVER CABLE (VIOLET)	1	\$ 12.77	\$ 12.77	Cisco	N/A	
SmartNet Maintenance							
CON-SNT-WS-C360	SMARTNET WS-C3600 Catalyst 3600 10/1	1	\$ -	\$ -	Cisco	CON-SNT-WS-C360	
CON-SNT-WS-12PC	SMARTNET WS-C3600 12 10/100 PoE ports Compact Switch	1	\$ -	\$ -	Cisco	CON-SNT-WS-12PC	
CON-SNT-WS-60PS	SMARTNET WS-C3600 Cat 3600 24 10/100/1000 PoE + 4 SF	1	\$ -	\$ -	Cisco	CON-SNT-WS-60PS	
CON-SNT-WS-60PS	SMARTNET WS-C3600 Cat 3600 48 10/100/1000 PoE + 4 SF	1	\$ -	\$ -	Cisco	CON-SNT-WS-60PS	
CON-SNT-3750G12S	SMARTNET WS-C3750G 12 3750 12 SFP Sd MultiLayer Image	1	\$ -	\$ -	Cisco	CON-SNT-3750G12S	
CON-SNT-AP1142N	SMARTNET WS-C3750G 12 11a/g/n-draft 2.0 2.4/5-GHz Mod Auto AP	1	\$ -	\$ -	Cisco	CON-SNT-AP1142N	
CON-SNT-BR14110	SMARTNET WS-C3750G 12 1410 Wireless	1	\$ -	\$ -	Cisco	CON-SNT-BR14110	
APC UPS Parts							
SWA2200RM2U	APC Smart-UPS 2200VA USB & Serial RM 2U 120V with 2 year warranty	1	\$ 1,075.00	\$ 1,075.00	APC	SWA2200RM2U	
SWA2200RM2U	APC Smart-UPS 2200VA USB & Serial RM 2U 120V	1	\$ 479.00	\$ 479.00	APC	SWA2200RM2U	
AP6625	APC 2 Post Mounting Kit for Smart-UPS	1	\$ 109.99	\$ 109.99	APC	AP6625	
AP6617	APC Network Management Card	1	\$ 259.99	\$ 259.99	APC	AP6617	
Wireless NIC							

Exhibit B - Pricing Schedule

DWA-652 (D-LINK)	DWA-652 Xtreme N Notebook Adapter	\$ 99.99	40%	\$ 59.99	20	\$ 1,199.88	\$ -	\$ 1,199.88
DWA-552 (D-LINK)	Quick DWA-552 Xtreme N Desktop Adapter PCI	\$ 99.99	40%	\$ 59.99	20	\$ 1,199.88	\$ -	\$ 1,199.88
WPC600N (LINKSYS)	Linksys Wireless Adapter Model: WPC600N	\$ 79.99	17%	\$ 66.39	20	\$ 1,327.83	\$ -	\$ 1,327.83
WMP600N (LINKSYS)	Linksys Wireless-N PCI Card WMP600N	\$ 79.99	17%	\$ 66.39	20	\$ 1,327.83	\$ -	\$ 1,327.83
Total						\$ 64,252.79		\$ 64,252.79

Electronics Eligible and Ineligible Costs	
Eligible Project S.D Cost	\$ 4,337,063.39
Eligible Project CPS Cost	\$ 481,896.93
Ineligible CPS Cost	\$ 1,608,319.77
CPS Total	\$ 2,088,215.70
Total Electronics	\$ 6,425,279.09

Exhibit B - Pricing Schedule

LAN Improvement Project Cost Breakdown

Labor Total - Original	SLD	CPS	Total Labor
Eligible 75 Schools	\$ 2,510,779.96	\$ 457,488.06	\$ 2,968,268.00
Ineligible 25 Schools		\$ 964,138.48	\$ 964,138.48
		Total Labor	\$ 3,932,406.48

Labor Total - Original	SLD	CPS	Total Labor
Eligible 75 Schools	\$ 5,686,201.98	\$ 961,787.72	\$ 6,637,989.70
Ineligible 25 Schools		\$ 1,677,142.08	\$ 1,677,142.08
		Total Labor	\$ 8,315,131.78

Electronics Section

With 55% discount	SLD	CPS	Total Project
Eligible - 75 School	\$ 4,337,063.36	\$ 461,896.33	\$ 4,818,959.32
Ineligible - 25 School		\$ 1,608,319.77	\$ 1,608,319.77
		Total Electronics	\$ 6,425,279.09

Projected Pricing Levels for additional moves & changes	Per Device	
Large project (100-149 school)	\$ 60.00	*See scope document for all services and PM fees included in this charge
Smaller project (50-99 school)	\$ 70.00	*See scope document for all services and PM fees included in this charge

Installation Pricing	Per Device	
Switches	\$ 380.25	
APs	\$ 308.74	**Includes time to mount new bracket (need to pay prevailing wages) ***Does

Part Number	QTY	UNIT PRICE	CON SW	QTY	UNIT PRICE	CON SW	Quantity	Ext. Price
WS-C3560C-8PC-S	\$	110.00	\$ 61.00	\$	71.50	\$ 39.65	75	\$ 5,362.50
WS-C3560-12PC-S	\$	110.00	\$ 61.00	\$	71.50	\$ 39.65	75	\$ 5,362.50
WS-C2960S-48LPS-L	\$	325.00	\$ 179.00	\$	211.25	\$ 116.35	300	\$ 63,375.00
WS-C2960S-24PS-L	\$	325.00	\$ 179.00	\$	211.25	\$ 116.35	750	\$ 158,437.50
WS-C3750G-12S-S	\$	672.00	\$ 370.00	\$	436.80	\$ 240.50	75	\$ 32,760.00
AIR-LAP1142N-A-K9	\$	80.00	\$ 44.00	\$	52.00	\$ 28.60	1675	\$ 97,500.00
							Total	\$ 382,797.50

Exhibit B - Pricing Schedule

SQW Verbiage

Sentinel will procure and install tables in order to support computer lab enhancements conducted as part of the LIP scope. Tables are guaranteed to meet CPS specifications. Pricing below:

Description	Ext. Price	Price + Installation
INVINCIBLE TRAINING TABLES or BOARD APPROVED TABLES		
30" X 72" X 29" Computer Table with (2) grommets, modesty panel and no Wire Mold, Evening Tigris Laminate with black edge & Platinum frame	\$693.00	\$738.00
30" X 60" X 29" Computer Table with (2) grommets, modesty panel and no Wire Mold, Evening Tigris Laminate with black edge & Platinum frame	\$443.50	\$488.50
30" X 36" X 29" Computer Table with (2) grommets, modesty panel and no Wire Mold, Evening Tigris Laminate with black edge & Platinum frame	\$333.50	\$378.50
30" X 30" X 29" Computer Table with (2) grommets, modesty panel and no Wire Mold, Evening Tigris Laminate with black edge & Platinum frame	\$284.00	\$329.00

NOTE: Pricing above includes delivery to job site.

There is an additional charge of \$45.00 per table for inside delivery and ganging tables (Non Union).

WAN Upgrade Labor Schedule
Note: Do NOT include the costs for the network equipment and cables listed on the Equipment tab in this section

Cost								
Materials (Eligible)	Labor (Eligible)	Labor (Ineligible)	Project Mgmt. (Eligible)	Project Mgmt. (Ineligible)	Per School Qty	Eligible Cost Per School	Ineligible Cost per School	Total Per School Cost
Per Site Cost								
PM/TA Activities								
Carry Site Route Insat	\$ 3,000.00		\$ 750.00		1	\$ 3,750.00	\$	3,750.00
Medium Site Route Insat	\$ 2,375.00		\$ 750.00		1	\$ 3,125.00	\$	3,125.00
Small Site Route Insat	\$ 1,750.00		\$ 750.00		1	\$ 2,500.00	\$	2,500.00
Total for 26 Schools						\$ 7,625.00	\$ 2,250.00	\$ 9,875.00
Total for 26 Ineligible Schools							\$ 76,000.00	\$ 76,000.00
Total Project Cost							\$	\$ 999,375.00
Total CPS Cost							\$	\$ 98,437.60
Total SLD Cost							\$	\$ 210,937.50

WAM Upgrade Labor Costs

WAN Upgrade Labor Costs	
WAN Electronics SLD	\$2,077,488.00
WAN Electronics CPS	\$1,112,982.75
WAN Labor SLD	\$210,937.50
WAN Labor CPS	\$98,437.50
Total for WAN Upgrade	\$3,499,846.75

WAN Electronics

Total Estimate for 75 Ineligible Schools	\$	763,836.75
Total Estimate for 75 Eligible Schools - SLD	\$	2,077,448.00
Total Estimate for 75 Eligible Schools - CPS	\$	346,146.00
CPS Total	\$	1,132,982.75
SLD Total	\$	2,077,448.00
Total Project Cost	\$	3,210,430.75

LAN Improvement Project 1st Roundtable Exhibit 8 - Page 18 of 55

Sentinel Technologies - Board of Education of City of Chicago

Exhibit B - Pricing Schedule

Labor Section			
Labor Total - Original	SLD	CPS	Total Labor
Eligible 75 Schools	\$ 2,510,779.95	\$ 457,488.05	\$ 2,968,268.00
Inel 25 Schools		\$ 964,138.48	\$ 964,138.48
		Total Labor	\$ 3,932,406.48

Construction Section			
Labor Total - Original	SLD	CPS	Total Labor
Eligible 75 Schools	\$ 5,686,201.98	\$ 951,787.72	\$ 6,637,989.70
Inel 25 Schools		\$ 1,677,142.06	\$ 1,677,142.06
		Total Labor	\$ 8,315,131.76

Electronics Section			
With 55% discount	SLD	CPS	Total Project
Eligible - 75 School	\$ 4,337,063.39	\$ 481,895.93	\$ 4,818,959.32
Ineligible - 25 School		\$ 1,606,319.77	\$ 1,606,319.77
		Total Electronics	\$ 6,425,279.09

Total School Improvement Projects	
CPS Eligible 75 Schools	\$ 1,891,171.70
SLD Eligible 75 Schools	\$ 12,534,045.32
CPS Ineligible 25 Schools	\$ 4,247,600.31
CPS Total	\$ 6,138,772.02
Total for 100 schools	\$ 18,672,817.33

Projected additional costs for other moves & changes	
Total CPS Cost	\$ 576,225.38

WAN Upgrade Costs	
WAN Electronics SLD	\$ 2,077,488.00
WAN Electronics CPS	\$ 1,112,982.75
WAN Labor SLD	\$ 210,937.50
WAN Labor CPS	\$ 98,437.50
Total for WAN Upgrade	\$ 3,499,845.75

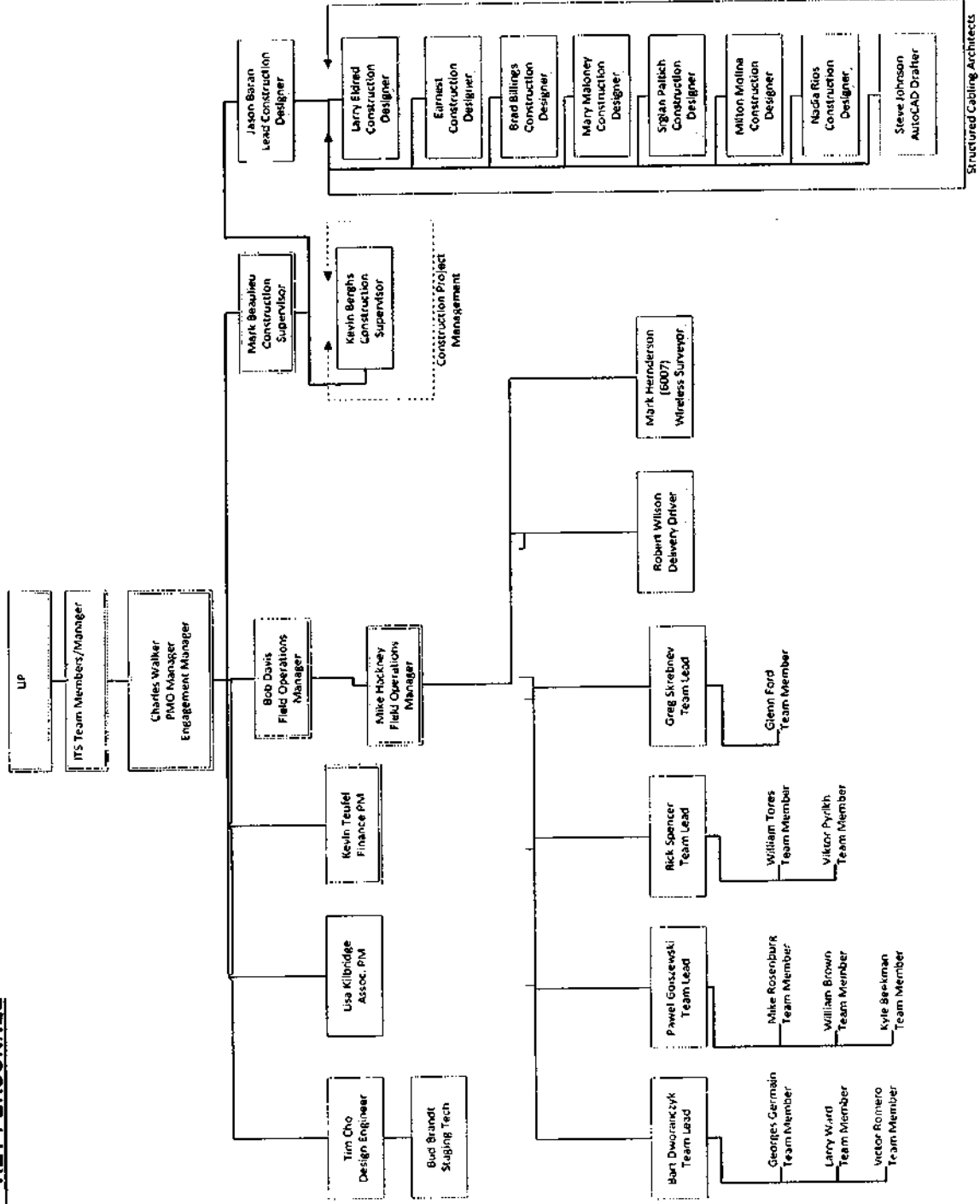
Computer Table Costs	
Competitive Pricing	\$ 627,750.00

Non-School Improvement (Capital & Camera) Installation Projects	
Anticipated 2015 Capital Labor	\$ 100,000.00
Anticipated 2015 Capital Electronics	\$ 146,360.00
Total Capital Projects	\$ 246,360.00

School Improvement Database Maintenance	
Database/Front End Customization	\$ 37,500.00
SI Database Mgmt and Maintenance	\$ 13,200.00
SI DB Total	\$ 50,700.00

Summary	
LAN School Improvement	\$ 18,672,817.33
WAN Upgrade	\$ 3,499,845.75
Computer Table Pricing	\$ 627,750.00
Projected additional costs	\$ 576,225.38
Misc. Capital Work	\$ 246,360.00
School Improvement Database Maintenance	\$ 50,700.00
Total Anticipated CPS Contract Costs	\$ 8,851,227.64
Total Anticipated SLD Contract Costs	\$ 14,822,470.82
Total Anticipated Contract	\$ 23,673,698.46

EXHIBIT C -- KEY PERSONNEL



Sentinel Technologies and The Board of Education of the City of Chicago

EXHIBIT D

COMPLIANCE TERMS OF E-RATE PROGRAM

Sentinel will contract with or employ an E-rate resource who is familiar with the E-rate program and invoice processes.

I. General Requirements for Compliance of E-rate Program

As part of Sentinel's participation in the E-Rate program, Sentinel must comply with the following requirements:

1. Consult with the Board's internal E-rate resources on FCC regulation changes that are directly associated with the scope of work described within each SOW in Exhibit A.
2. Coordinate with the Board's internal E-rate resources with respect to appeals, service substitution requests and other related matters directly associated with the SOW herein.
3. Review the eligibility services list and recommend eligible service to the Board with services directly associated with an applicable SOW.
4. Assist the Board in the preparation of written correspondence to the SLD (i.e. service substitution request and other related matters) directly associated with an applicable SOW.
5. Assist the Board in appealing any adverse ruling of the SLD/USAC that are directly associated with an applicable SOW.
6. Secure from the SLD/USAC and provide to the Board written opinions or rulings relating to eligibility and compliance with E-rate guidelines as deemed appropriate by the Board in support of the eligible service.
7. Assist in the preparation and provide staff as requested by the Board for beneficiary audits conducted by the FCC and/or their agents throughout the year. Coordinate with the Board's internal E-rate resources in connection with beneficiary audits conducted by the FCC throughout the year. Sentinel's costs associated with a beneficiary audit will not be invoiced to the Board.
8. Secure the services of a Board-approved third-party vendor to provide onsite annual audits of E-rate activities in conjunction with the SLD/USAC.
9. File a Service Provider Annual Certification form (SPAC – FCC Form 473) with SLD/USAC.

Sentinel's audit requirements will be required for every program year of E-Rate funded services under the Agreement.

II. INVOICING PROCEDURES

In addition to the terms set forth above, Sentinel will ensure that the E-Rate eligible product and/or services provided to the Board are in compliance with the E-Rate program.

For E-rate purposes, Sentinel must include the following information for E-rate services/products on each invoice:

1. Date of Invoice.
2. Dates of Service.
3. Funding Request Number ("FRN").
4. Sentinel's signature on invoice attesting to accuracy and completeness of billings.

Sentinel Technologies and The Board of Education of the City of Chicago

5. Detailed description of services performed or materials supplied matches contract specifications, Form 470, and Form 471.
6. Breakdown of amount to be billed to SLD/USAC (discounted charges) and amount to be billed to the Board (ineligible and other non-discounted charges), indicating the full pre-discount cost with the discount.
7. Invoice on Sentinel letterhead or on a Sentinel-generated form.
8. The Board's Billed Entity Number ("BEN") number is 135749 and the Charter School Consortium's Billed Entity Number ("BEN") number is 16038498.
9. E-rate Funding Year.
10. Proper discount percentages are charged based on the approved Funding Commitment Decision Letter.
11. Submit a Service Certification Form and a copy of the Service Provider Invoice Form (Form 474) for written approval.
12. Sufficient detail to identify the specific services provided, when the services were provided, and the cost of the services. A bill to the Board that indicates an amount with a description such as "eligible E-rate services" is not sufficient. Indicate on the Board's bill and or supporting documentation the make, model, and serial number for any equipment provided.

In addition, Sentinel must:

1. Maintain an analysis the SLD/USAC invoice (using the Invoice Number on Form 474) to the invoice numbers of the Board's bill
2. Maintain copies of the Board's bills and invoices submitted to SLD/USAC to facilitate any requested reconciliation.
3. Proof of delivery, including installation and functionality testing on all equipment purchases.
4. Include only services and/or products provided or installed within the funding year on invoices submitted to SLD/USAC.
5. Refund to SLD/USAC the appropriate portion of disbursements made by SLD/USAC for equipment that is returned, and any repayment to the Board for its non-discounted portion.
6. Net all SLA violation liquidated damages should be netted against the pre-discount amounts.
7. Maintain records are broken down by eligible servers and any other ineligible components, including all eligible and ineligible repaired HW used.
 - i. Reports shall include description of maintenance resolution, date, identifying E-rate period and service; and other information to be identified by the Infrastructure Team.
 - ii. Breakdown of eligible Sites as part of maintenance records.
8. Maintain an active list of current inventory under maintenance so that the Board is being invoiced accurately.
9. Notify the Board's E-rate resources if products or Scope of Services change or if equipment becomes obsolete and requires replacement (beyond what has been anticipated in the applicable SOW).
10. Provide soft copy versions of the billing materials

Sentinel and The Board of Education of the City of Chicago

EXHIBIT E

AUDIT REQUIREMENTS FOR E-RATE YEAR 16 (July 1, 2013 through June 30, 2014)

EXHIBIT E-1

AUDIT REQUIREMENTS FOR E-RATE YEAR 16 (July 1, 2013 through June 30, 2014)

I. OVERVIEW

A. Objective and Scope

The objective of the engagement of an Independent Auditor(s) ("**Auditor**") retained by Sentinel is to review amounts billed to the SLD and the Board by Sentinel for Funding Year 2013 to determine if adequate documentation is available to support all expenditures and also to determine if all expenditures are considered eligible for discount according to the E-rate program guidelines. The scope of the review will include a review of all transactions from all expenditures. A review will be conducted for the time period concurrent with each funding year: Funding Year 2013 (commencing July 1, 2013 and ending June 30, 2014. Dates are subject to change based on the actual start date of Sentinel's services

B. Approach

The Board's planned approach for achieving this objective is detailed in Exhibit E-2. The Auditor will proceed through the tasks in a sequential manner to ensure completion of the project on a timely basis. The services performed by the Auditor's project team will also include project management including attendance at status meetings with the Board's key stakeholders, and work paper preparation review by the Auditor's senior level management. During status meetings, the Auditor will be required to brief the E-rate Program Director and others as appropriate on the progress of Board work and to advise on matters that may affect the project timeframe or deliverables.

C. Team

The team assigned to work on this project will consist of individuals knowledgeable of the E-rate program and/or a certified public accounting firm subject to final approval by the Board's E-rate Director and the Chief Information Officer. The Auditor will be required to present a list of credentials for each of the team to the Board's E-rate Director. If the services of the Auditor or a team member are unsatisfactory, the Board retains the right to require Sentinel to retain another Auditor.

D. Deliverables

The deliverables will include a final audit report containing the Auditor findings and identifying deficiencies in the reporting of expenditures found during each term of the Agreement and recommendations for improvement in operations. The Auditor will be required to deliver the final draft report to the Board within forty-five (45) days after the project concludes. As the draft reports are completed, the Auditor will present them to the Board's Office of Technology Services ("ITS") management for review and comment, revise the report as necessary, and finalize for distribution. The Auditor can expect that, within two (2) weeks of submitting a draft report, the Auditor will receive comments from the Board and will revise the report if appropriate.

All deliverables associated with this engagement are intended solely for the use of the Board, and are not intended for use by any third party. Sentinel will require the Auditor to comply with Section 9 of the Agreement regarding confidentiality, ownership and nondisclosure.

E. Timeframe

The proposed timeframes for this engagement are outlined in detail by task in the planned approach, Exhibit E-2 and are subject to final funding commitment approval by the SLD.

Sentinel and The Board of Education of the City of Chicago

F. Reason for Audit of Sentinel Supporting Documentation

To ensure that the Board continues to comply with federal regulations, Sentinel will implement a year-end audit of all spending and documentation that falls under the auspices of the E-rate program for each year of the Agreement. These audits will allow ITS and Sentinel to determine if expenditures are eligible in accordance with E-rate Program guidelines as well as to identify process weaknesses or other deficiencies during an Agreement year and rectify any inconsistencies in a timely manner. As a result, the Board will have a better managed E-rate program and will be well positioned for any future USAC audits.

G. Status Updates

Sentinel and Auditor will hold periodic status update meetings with ITS to brief the Board's key stakeholders (and others as appropriate) on the progress of their work. Status meetings will be held at the inception of the Agreement and year-end thereafter.

H. Audit Reports

Audit reports will contain Auditor's findings, identifying deficiencies in the reporting of expenditures and recommendations for improvement in operations. Sentinel will provide a copy of the audit reports to the Board within forty five (45) days after the end of the applicable funding year. All audit reports will be produced on the Auditors letterhead.

II. ADDITIONAL SENTINEL REQUIREMENTS

In addition to the terms set forth above, Sentinel's Auditor will include, in its audit program, steps to determine that Sentinel is in compliance with the following:

1. Where labor is involved, detailed, signed individual timesheets are maintained.
2. Ineligible charges are not submitted to SLD/USAC.
3. Substituted services or products are prominently noted.
4. Where applicable, recurring services are provided prior to June 30th of the funding year in question and non-recurring services are provided prior to the September 30th after the close of the funding year.
5. Supporting documentation is sufficient to evidence that what was approved per the Funding Commitment Decision Letter was actually provided.
6. Supporting documentation provides sufficient support from initial funding approval, through service provision, and concludes with final installation prior to the required date.
7. If E-rate eligible services or equipment provided by a single vendor are allocated to multiple Schools, support for the allocation reconciled to the amounts and locations identified in Form 471.
8. Proof that E-rate-funded services were provided within the approved funding year
9. Proper FRN was charged.
10. SLD/USAC forms are filled out completely.
11. Forms 474 are signed and dated by Sentinel's representative.
12. Fixed asset lists are maintained with detailed information for each item (make, serial number, product description, physical location (including room numbers and the history if equipment was moved), date installed, FRN, pre-discount cost, non-discount portion.
13. Testing of equipment to confirm that it is functioning and maintain documentation of the results.
14. Document the delivery and installation of equipment using a completion certificate signed by Sentinel. Maintain completion certificates in a permanent file.
15. Breakdown of Sites if installation of equipment is configured.

Sentinel and The Board of Education of the City of Chicago

EXHIBIT E-2

The Board of Education of the City of Chicago ("the Board")

Annual E-rate Review PLANNED APPROACH

Review of Year 16		Action Steps		Deliverables		Timeframe	
Tasks							
Conduct kick-off meeting		<ul style="list-style-type: none"> Conduct an entrance conference with ITS executive management to gain an understanding of the project scope and objectives. 		<ul style="list-style-type: none"> Scope letter 		September – October 2013	
1.2 Conduct planning		<ul style="list-style-type: none"> Interview key ITS management members as well as service provider personnel and document our understanding of any changes in the E-rate program specific to Year 16 including the following. <ul style="list-style-type: none"> Billing processes. Period of eligibility for program expenditures. Items eligible for discount. Amount of discount. Obtain and review any pertinent documentation related to eligibility of items, discount percentages, billing process, and project management structure, including E-rate eligibility guidelines, written manuals, sample invoices, instructions to contractors, etc. Review 471's, FRN funding commitments, E-rate program budgets, and project plans to gain an understanding of the scope of the Year 16 project as well as to identify any potential risk areas. Develop an effective procedure for communicating project status, agree on a timetable for delivery of requested documentation and completion of the project, and discuss format of report. 					

Sentinel and The Board of Education of the City of Chicago

EXHIBIT E2

The Board of Education of the City of Chicago ("the Board") Chicago Public Schools Annual E-rate Review PLANNED APPROACH

Sentinel auditor should be sure to obtain and review the following E-rate-related documents:

Review of Year 16		
Tasks	Action Steps	Deliverables
1.3 Documentation request	<ul style="list-style-type: none"> Request documentation necessary to conduct review, including the following. <ul style="list-style-type: none"> 471 forms, FRN funding commitments. Maintenance report broken down by device type and School. 474 forms, all service provider basic maintenance internal connection invoices, summary spreadsheets, and supporting documentation, including individual contractor and subcontractor invoices (if applicable). Guidelines for program Year 16 E-rate eligibility requirements. Service Provider listing of credit memos and other adjustments. Close out packages for each School project, as appropriate. Sentinel and supplier contract awards. Listing of field and change orders. Proofs of disbursement for amounts paid by the Board to service providers – either cancelled checks or accounts payable reports. Proofs of disbursement for amounts paid by SLD/USAC to service providers – SPIF details reports. Materials and inventory budget and usage reports, including shipment and distributor records. Supporting documentation can include: list of equipment covered under maintenance contracts, work orders, meeting minutes, maintenance logs, etc. Block 4 listing for each service. 	<ul style="list-style-type: none"> Documentation request list
		September – October 2013

Sentinel and The Board of Education of the City of Chicago

EXHIBIT E2

The Board of Education of the City of Chicago ("the Board") Chicago Public Schools Annual E-rate Review PLANNED APPROACH

Tasks	Action Steps	Deliverables	Timeframe
1.4 Review available E-rate program documentation to determine compliance with E-rate eligibility requirements, and accuracy, existence, and completeness of reporting	<p><u>Review available E-rate program documentation to determine compliance with E-rate eligibility requirements and accuracy, existence, and completeness of reporting. Key items to consider when reviewing expenditures for eligibility include the following.</u></p> <ul style="list-style-type: none"> • <u>Eligibility of items</u> <ul style="list-style-type: none"> ◦ Was the item purchased eligible under E-rate program guidelines? ◦ Was an invoice or other documentation available to support the expenditure? ◦ Was the description on the invoice sufficient to support the expenditure? ◦ Is there a process in place to identify and remove ineligible items from invoices? • <u>Period of eligibility</u> <ul style="list-style-type: none"> ◦ Was the item purchased or was the actual fieldwork conducted during the period of eligibility? ◦ Were field orders and change orders approved during the period of eligibility? ◦ Were contractor invoices submitted during the period of eligibility? • <u>E-rate discount percentage</u> <ul style="list-style-type: none"> ◦ Was the proper discount percentage applied to transactions? • <u>Funding Request Commitment.</u> <ul style="list-style-type: none"> ◦ Was the appropriate FRN charged for the expenditure? • <u>Proof of Payment</u> <ul style="list-style-type: none"> ◦ Were the contractors and suppliers paid for their services by the SLD and the Board? 	<ul style="list-style-type: none"> • Potential Findings • Work Papers • The specific procedures to be performed to test for eligibility and accuracy, existence, and completeness of reporting are described in Tasks 1.4.1 and 1.4.2 	September 2013 – June 2014

Sentinel and The Board of Education of the City of Chicago

EXHIBIT E2

The Board of Education of the City of Chicago ("the Board") Chicago Public Schools Quarterly E-rate Review PLANNED APPROACH

Review of Year 16		Timeframe	
Tasks	Action Steps	Deliverables	Timeframe
1.4.1 Internal Connections	<ul style="list-style-type: none"> ♦ For all invoices: <ul style="list-style-type: none"> ○ Obtain Individual Information related to School/Project - <ul style="list-style-type: none"> ▪ Select all transactions and compare to supporting documentation, including 474 Form, individual Contractor Invoice Summary Spreadsheets, contractor invoices, contract award letters, field orders, change orders, percentage of completion, contractor invoices, equipment reports, material orders, shipment and distributor records. ▪ Select all transactions on the School/project documentation and compare the "Proposer Invoice" amount, which is calculated based on the unit cost per type of device, active devices and the total quantity under maintenance in order to determine eligibility of expenditures ▪ Recalculate total amounts on the Summary by School spreadsheet. ○ Select all 474 Forms - <ul style="list-style-type: none"> ▪ Reconcile the amount on the 474 to the individual Contractor Invoice Summary Spreadsheets and any supporting documentation to validate work completed. ▪ Review to ensure amounts were billed to proper FRN #. ▪ Review SPIF details reports and the Board cancelled checks to determine proof of payment. ○ Select all 474 Form Contractor Invoice Summary Spreadsheets <ul style="list-style-type: none"> ▪ Compare to supporting documentation, such as contractor invoices. ○ Evaluate credit memos to ensure the credits issued by Service Provider and contractors were appropriately allocated to the SLD and the Board in the appropriate year. 	<ul style="list-style-type: none"> ♦ Work papers ♦ Potential Findings 	September 2013 - June 2014

Sentinel and The Board of Education of the City of Chicago

EXHIBIT E2

The Board of Education of the City of Chicago ("the Board") Chicago Public Schools Annual E-rate Review PLANNED APPROACH

Review of Year 16			Action Steps		Deliverables		Timeframe
Tasks							
1.5 Develop findings and recommendations			<ul style="list-style-type: none"> Based on the results of the auditors review, the auditor should develop findings and recommendations related to the processes and controls in place as well as for the overall administration of the program. The findings will highlight questionable expenditures and other concerns identified in the review of the documentation. The auditor will also provide updates/developments related to the status of findings and recommendations from previous quarterly reports. 		2. Findings and Recommendations		September 2013 – June 2014
2.0 Conduct gap analysis of the project management techniques and business processes used by Service Provider to manage the E-rate program			<ul style="list-style-type: none"> Conduct interviews with ITS and Service Provider E-rate program management to gain an understanding of the processes in place to manage the E-rate program. Obtain and review existing documentation supporting the program's organizational structure, project management techniques, processes, policies, and procedures. Analyze results of interviews and documentations and compare to industry practices for managing large construction programs. 		<ul style="list-style-type: none"> Findings and Recommendations to be included in Draft Reports 		September 2013 – June 2014
2.1 Develop findings and recommendations			<ul style="list-style-type: none"> Based on the results of our review, we will develop findings and recommendations related to the processes and controls in place as well as for the overall administration of the program. 		<ul style="list-style-type: none"> Findings and Recommendations to be included in Draft Reports 		September 2013 – June 2014 Deadlines detailed in audit memorandum

Sentinel and The Board of Education of the City of Chicago

Tasks	Action Steps	Deliverables	Timeframe
2.2 Draft reports; Conduct exit conference	<ul style="list-style-type: none"> ♦ Prepare and submit draft reports based upon the work completed. The format of the final reports will be discussed with ITS management prior to delivery to ensure that we provide you with the information you need. ♦ Conduct exit conferences with ITS management and other personnel as appropriate to discuss the findings and recommendations. ♦ As necessary, we will make revisions and conduct additional follow-up to flush out any questions or concerns. ♦ Present ITS management with final draft reports. 	<ul style="list-style-type: none"> ♦ Draft Report 	As mutually agreed by the parties in writing

Sentinel and The Board of Education of the City of Chicago

EXHIBIT F

PRE-QUALIFIED CONTRACTORS

All construction related activity must be bid out to a pool of pre-qualified wiring contractors. A list of these contractors can be found at:

<http://www.csc.cps.k12.il.us/servlet/purchasing.bids.BidOpenings?CONTRACTORS=WIRING>

-----The remainder of this page is left intentionally blank. -----

Sentinel Technologies and The Board of Education of the City of Chicago

EXHIBIT G -- SERVICE LEVEL AGREEMENT

LAN Improvement Service Level Agreement (SLA)

Per School	Project	Work Package	Time Required To Complete Project Task	Liquidated Damages for Non-Conformance	Maximum Liquidated Damages Allowable (Per School and Per Liquidated Damages)
Timeline (Calendar Days)	Task				
	PMO Office-Scheduling of Project Tasks	WBS 1.1			
Day 1	Assessment-Audit of School	WBS 1.2	16 Calendar Days	\$100 per Calendar Day	\$1,000
Day 17	Design-Development of Bill of Materials(BOM) & Scope of Work (SOW)	WBS 1.3	14 Calendar Days	\$100 per Calendar Day	\$1,000
Day 31	Design Approval-Board Team approval of BOM	WBS 1.3	4 Calendar Days		
Day 35	Bid and Award Team-Cabling Sentinel Bid and Selection	WBS 1.4	15 Calendar Days	\$100 per Calendar Day	\$1,000
Day 50	Construction Work/Supervision-Completion of Construction Work ;IF this is a Full Scope School than the time period will be extended for completion	WBS 1.5	30 Calendar Days- Normal Scope 90 calendar days Full Scope	\$100 per Calendar Day	\$1,000
Day 80	Installation, Testing and Network Integration-Implementation and Configuration of New Equipment	WBS 1.6	20 Calendar Days after receipt of equipment	\$100 per Calendar Day	\$1,000
Day 100	Reporting and QA-Review of Completed solution and Independent Testing of Solution	WBS 1.7	15 Calendar Days	\$100 per Calendar Day	\$1,000
Day 110	Closeout Process-Present Board Project Closeout Checklist-Board accept or Amend	WBS 1.8	7 Calendar Days	\$100 per Calendar Day	\$1,000
Day 117	Board Acceptance or Amendment of Closeout Documents-Deadline	WBS 1.8	7 Calendar Days		
Day 124	Closeout Re-Submittal-Resubmittal of Closeout Checklist (if necessary)	WBS 1.8	7 Calendar Days	\$100 per Calendar Day	\$1,000
Day 131	Board Acceptance-Board Team formally accepts Closeout Documents- Board agrees to process E-Rate Funding	WBS 1.8	5 Calendar Days		
Day 136	Board E-Rate Document Processing- Board processing of E-Rate Documents for Sentinel Payment	WBS 1.8			

The above SLA is contingent upon the Terms, Conditions and Assumptions as supplied within Sentinel's RFP Response

Sentinel's Quality Control SLA

If more than 5% of all installed electronic equipment at a given school fails the Board's testing, Sentinel agrees to credit the Board a

Sentinel Technologies and The Board of Education of the City of Chicago

combined total of SLA credit 15% of the installation costs for the failed equipment as part of this service level agreement. Additionally, Sentinel will take corrective actions to remediate any devices that fail the Board's test report and provide an updated inventory report for the Board to re-test. If any devices fail the subsequent test and also failed the initial test, the installation costs for those devices will be credited back to the Board at 100%.

Services and Products Table:

The systems implemented within the scope of this project will include all hardware specified as necessary for meeting the wired and wireless access requirements on an individual, per school basis. The requirements will be determined and addressed within the design for each individual school, and approved by CPS.

The Sentinel Project team will provide a 90 day warranty period following signoff and acceptance on the integration of all hardware at each individual school. Within this 90 warranty period, Sentinel will troubleshoot and rectify any issues that were the result of the hardware integration within the scope of this project. The following is a table of integration failures along with response times proposed by Sentinel. All issues will be handled within the Ticketing System contained within the CPS – SharePoint

-----The remainder of this page is left intentionally blank. -----

Sentinel Technologies and The Board of Education of the City of Chicago

Terms & Conditions

1. E-rate eligibility percentages reflected in Exhibit B were determined with the assumption that all services and activities required within the Project's SOW are 100% related to the installation of the equipment listed on Exhibit B. All devices in Exhibit B, tab "Electronics" are E-rate eligible, except as specifically noted.
2. The Board agrees to make every effort to supply floor plan diagrams in an acceptable electronic format to Sentinel whenever possible. In the event the Board cannot supply the diagrams, Sentinel agrees to create floor plan diagrams, for the applicable areas within SOW, in an acceptable electronic format for those schools without diagrams. Sentinel agrees to provide these floor plan design services for up to five percent of the total number of schools up to a maximum of ten (10) schools at no charge. If additional floor plans are required, the Board agrees to a Project Change Request (PCR) reflecting the additional costs and change in scope of work within the affected schools.
3. All labor assumes that neither Sentinel nor its subcontractors will encounter asbestos or hazardous materials in the installation. Regarding asbestos that may be encountered, Sentinel will write the bid packages so any responding vendor will be required to be capable of recognizing asbestos and be required to include the rerouting of work whenever possible by individuals certified to work in environments with asbestos. If a major asbestos issue is encountered that requires abatement, Sentinel will immediately notify the Board of the problem and cease work at that location until the site is cleared for occupancy by the appropriate government health agency. Any remediation or abatement of hazardous materials will be an extra cost.
4. Materials and labor have been priced based on information supplied by the Board. Additional conduit, power, cooling, or other infrastructure changes may be treated as extra cost based on the severity.

Sentinel will evaluate each IDF (Intermediate Distribution Frame) and MDF (Main Distribution Frame) within each school in the Project to ensure these technology areas are compatible to support the necessary network equipment to be installed within that area based on the assessment. If any IDF or MDF is not appropriately supplied with power and cooling or other supporting technology infrastructure, or if Sentinel discovers any code, safety, or Board technology standards violations, Sentinel will document these and forward them to the Board for evaluation. It shall not, however, be the responsibility of Sentinel or any of its contractors to address, remediate, correct, reinstall, or remove any such violations unless specifically related to the installation of any new network components. Further, Sentinel and/or its subcontractors will be responsible for re-closing any raceways or pathways that are opened as a result of new or augmented cabling work that result from this Project.

At the Board's discretion, Sentinel will provide the Board a Project change request (PCR) in the event any network components or technology infrastructure needs to be remediated, corrected, reinstalled or removed. The Board and Sentinel will mutually agree on these changes in writing prior to implementation.

5. Labor for assessment and installation assumes immediate and ready access to all school locations as required by the schedule.
6. Due to the dynamic and customized nature of this Project there are many variables and workflows that will be identified, modified and implemented during the initial stages of this Project. Therefore, the Board and Sentinel agree that after 10% of the schools are completed the following parameters will be followed:
 - Assessments and wireless surveys are based upon one (1) school visit
 - One (1) version of associated documents will be supplied
 - One (1) minor revision of associated documents
 - One (1) design document will be developed.

Additional school visits and document revisions required after the initial 10% of the schools completed will be charged for via the Project change order process. The forgoing parameters will not apply to errors or omissions committed by Sentinel personnel within the scope of this Project.

Sentinel Technologies and The Board of Education of the City of Chicago

7. All labor pricing assumes that neither Sentinel nor its subcontractors will encounter delays in excess of two (2) hours to gain access into the Schools, Classrooms, Utility Closets, or other areas requiring access. If the ability to gain access to a particular area, as identified above, pursuant to the specific task (WBS) being performed, then it is agreed that the SLA for the particular task (WBS) will not apply. If a 2nd delay of two (2) hours or greater occurs within the same school deployment, then the SLAs for all remaining tasks (WBS) within the same school deployment will not apply with the exception of the quality control SLA.
8. Sentinel's labor costs are based upon Sentinel's Program Manager having complete control of the deployment teams including scheduling based on mutual approval of the Board Schools.
9. Sentinel requires E-Rate document processing to the SLD/USAC will occur within an expeditious fashion. Therefore both parties agree if the Board-ITS review team receives two (2) Project Completion Documents or less within a five (5) business day period, the Board-ITS review team will render acceptance or documented rejection within a ten (10) business day period. If the Board-ITS review team receives three (3) or more Project Completion Documents within a five (5) business day period, then the Board-ITS review team agrees to render acceptance or documented rejection within a fifteen (15) business day period. If the Board's review team fails to provide acceptance or documented rejection of the Project Completion Documents within the required period, the Board agrees to waive all liquidated damages related for SLA violations accrued other than the Quality Control SLA within the affected school.
10. Sentinel requires written approval of Scope of Work (SOW) and Bill of Materials (BOM) by the Board in an expeditious fashion. Therefore both parties agree if the Board-ITS review team receives two (2) SOWs and/or BOMs or less within a five (5) business day period, the Board-ITS review team will render acceptance or documented rejection within a two (2) business day period. If the Board-ITS review team receives three (3) or more SOWs and/or BOMs within a five (5) business day period, then the Board-ITS review team agrees to render acceptance or documented rejection within a five (5) business day period. If the Board's review team fails to provide written acceptance or documented rejection of the SOW and/or BOM within the required period, the Board agrees to waive all liquidated damages for SLA penalties accrued other than the Quality Control SLA within the affected school.
11. A school will be deemed completed and will be subject to approval by the Board if all elements of the Scope of Work and Bill of Materials for that school are 100% functional by the E-rate implementation deadline and Sentinel has submitted any necessary close-out documentation required by the Board. The Board will have ten (10) business days to either approve or disapprove of a request by Sentinel to close out a school. The decision must be in writing and if the Board does not approve the request, the Board will provide specific details as to the nature of each non-conforming issue with their written disapproval. Sentinel will then take corrective action and re-submit the school for closure. This process will repeat until the school is accepted as complete by the Board. The Board further agrees that acceptance of a school as complete will not be unreasonably withheld. In the event that the Board does not reply in writing within five days, the school submitted will be considered to be approved as complete and Sentinel will notify the Board of the status change. The Board and Sentinel mutually agree that the solution will not be entered into productive use until final acceptance is received by the Board. Usage of Sentinel systems or equipment by the Board personnel at that school will constitute acceptance.
12. The Board will be solely responsible for the systems and their support after the expiration of the Warranty Period.
13. The Sentinel understands that it will be tasked with providing an Internet ready infrastructure to 100 schools over a period ranging from 7-12 months. It is the Board's intent to file and receive funding for this Project in order to allow Sentinel a minimum of 7 months to complete the 100 schools. If for any reason the timeline is compressed shorter than seven months Sentinel and the Board will work together determine if anything can be done to complete the Project within the remaining timeline without incurring additional Project costs. If it is determined that the Project cannot be completed within the compressed timeline Sentinel and the Board will work together determine the maximum amount of schools they can complete under a reduced scope. If the parties desire to reduce the scope, the parties agree to negotiate in good faith a written amendment to this Contract. The execution of the written amendment is subject to any necessary prior approval by the Chicago Board of Education via a Board report.

Sentinel Technologies and The Board of Education of the City of Chicago

EXHIBIT H – Wiring Contractor's Special Terms and Conditions

These terms and conditions contained in Exhibit H shall apply to the individual Projects, which are awarded to Wiring Contractors and overseen by Sentinel. These terms and conditions shall be part of the contract between Sentinel and the Wiring Contractor.

1. Definitions.

As used in the contract between Sentinel and Wiring Contractor, these terms shall have the meanings as described below:

- 1.1. **"Award Criteria Figure"** means, in connection with bidding, the amount entered or to be entered on Line 15 of the Canvassing Formula regarding special conditions for MBE/WBE Economic Participation, corrected for any arithmetic errors.
- 1.2. **"Base Contract Price"** means the amount of compensation, based upon Wiring Contractor's Bid Price (as adjusted pursuant to 720 ILCS 5/33 E-12, if applicable) for a Project to be paid for the Work to be performed by Wiring Contractor as adjusted in accordance with authorized Change Orders from time to time.
- 1.3. **"Bid Documents"** means Sentinel's solicitation for bids issued in connection with a Project, including, but not limited to, the Drawings and Specifications for the Project and any addenda.
- 1.4. **"Bid Price"** means the price Wiring Contractor has bid to perform the Work for a Project, as accepted by Sentinel, subjected to the provisions of 720 ILCS 5/33 E-12.
- 1.5. **"Board"** means the Board of Education of the City of Chicago, which is the beneficiary of the Work being performed hereunder.
- 1.6. **"Change Order"** means a written order issued by Sentinel to Wiring Contractor directing changes in the Work and/or the time for completion of a Project.
- 1.7. **"Chicago Public Schools"** refers to the various schools within the Board.
- 1.8. **"Contract Documents"** mean all of the following component parts for a Project, including exhibits attached to them and incorporated in them by reference, and all amendments, modifications and revisions made from time to time in accordance with their provisions:
 - 1.8.1. The Contract between Sentinel and Wiring Contractor (the .Contract.);
 - 1.8.2. Bid Documents, including the Construction Operations Phasing Plan and Schedule, if any;
 - 1.8.3. Instructions to Bidders;
 - 1.8.4. Notice of Award;
 - 1.8.5. Notice to Proceed;
 - 1.8.6. Specifications;
 - 1.8.7. Change Orders (if any); and
 - 1.8.8. Performance and Payment Bond.
- 1.9. **"Day"** means calendar day unless otherwise specified.
- 1.10. **"Drawings"** are those enumerated in the Schedule of Drawings of the Specifications, and additional drawings and sketches, if any that may be incorporated into the Contract Documents as Work progresses.
- 1.11. **"Engineer of Record"** means the licensed person or firm employed by Sentinel for the purpose of designing and observing the Work for a Project.
- 1.12. **"Environmental Consultant"** means a consultant engaged by the Board to provide environmental assessments of schools and to coordinate the identification and remediation of environmental conditions.
- 1.13. **"Final Acceptance"** means the date on which Sentinel, (upon consultation and approval of the Board) have determined that all of the requirements of the Contract Documents for a Project have been completed.
- 1.14. **"ITS"** means the Board's Information Technology Services department.
- 1.15. **"Notice of Award"** refers to the written notice issued by Sentinel directed to Wiring Contractor for the award of a Project, and it determines the Base Contract Price for the

Sentinel Technologies and The Board of Education of the City of Chicago

Project and it establishes the date from which the time for performance begins to run. Sentinel shall write a recommendation letter and submit to ITS.

1.16. **"Notice to Proceed"** refers to the written notice issued by Sentinel directed to Wiring Contractor for a specific Project, which directs the Wiring Contractor to proceed with the Work, and is issued only after Wiring Contractor has complied with all conditions of award stated in the Notice of Award. . The Sentinel shall write a recommendation letter and submit to ITS.

1.17. **"Preliminary Acceptance"** means the date on which Sentinel has determined that the Work required under the Contract Documents has been essentially completed for a Project (except for Punch List Work), such that the Board may fully use the Work.

1.18. **"Project"** means the specific construction Project which is awarded to Wiring Contractor by way of a Notice of Award.

1.19. **"Project Schedule"** means the schedule established for commencement and completion of the Work for a Project and for achieving milestones during the Work.

1.20. **"Punch List" or "Punch List Work"** means adjustments, repairs or deficiencies in the Work of a Project as determined by Sentinel, ITS and Board.

1.21. **"Record Documents"** are all documents required under the terms of the Agreement to be provided to Sentinel by Wiring Contractor, including, but not limited to, shop drawings, Mylar as-built drawings, parts manuals, operation and maintenance manuals, Wiring Contractors' field drawings, project manuals, specifications, and any other submittal items for a specific Project; all of which shall be turned over to Sentinel, and subsequently to the Board, upon Final Acceptance.

1.22. **"Schedule of Values"** means the detailed list of the estimated value of each construction activity included in the Base Contract Price (including insurance credits and other credit items required to be listed) that is submitted by Wiring Contractor for a Project and approved by Sentinel.

1.23. **"Site"** means the location shown on the Drawings within which the Work for a Project is performed under the Contract Documents.

1.24. **"Subcontractor"** means any partnership, firm, corporation or entity other than an employee of Sentinel, who contracts with Wiring Contractor to furnish labor, materials, or labor and materials, at a Site. This term also includes Subcontractors of any tier, suppliers, fabricators or manufacturers, whether or not in privity with Wiring Contractor. Nothing in the Agreement or the Contract Documents is considered to impose upon the Board, ITS, or any other Board consultant, any obligation, liability, or duty to a Subcontractor, or to create any contractual relation between the Board, ITS, and any Subcontractor, or to prejudice remedies granted by applicable laws.

1.25 **"Sentinel"** means Sentinel Technologies, the prime contractor who is responsible for seeing that the Work is performed in accordance with its agreement with the Board and this Exhibit H.

1.26 **"Wiring Contractor"** means the contractor that enters into a contract with Sentinel to perform the work for a specific Project.

1.27. **"Work"** means the construction and services required by the Contract Documents for a Project, whether completed or partially completed, and includes all other labor, materials, equipment and supplies, plant, tools, scaffolding, transportation, superintendence, insurance, taxes and all other services, facilities and expenses necessary for Wiring Contractor to fulfill Wiring Contractor's obligations. The Work may constitute the whole or a part of a Project.

2. MBE/WBE Plan.

Wiring Contractor acknowledges its familiarity with the requirements of the Board's Revised Remedial Plan for Minority and Women Business Enterprise Economic Participation and "Special Conditions for Affirmative Action Requirements. Wiring Contractor shall adhere to the minimum goals of participation for MBE/WBE requirements established for Projects awarded under the Agreement. Regardless of any provisions elsewhere in the Agreement to the contrary, Wiring Contractor shall disclose at least 100% of its proposed MBE/WBE economic participation in the Work at the time of bid. Wiring Contractor shall comply with its MBE/WBE commitments set forth

Sentinel Technologies and The Board of Education of the City of Chicago

in its bid and cooperate with Sentinel's compliance officers. Wiring Contractor shall fulfill all of its reporting obligations in a timely manner.

3. Project Labor Agreement.

The Board has entered into a Project Labor Agreement attached hereto as Exhibit J with various trades regarding Projects at its schools, together with a list of signatory unions. Wiring Contractor acknowledges familiarity with the requirements of the Board's Project Labor Agreement; its applicability to any Work Wiring Contractor may be awarded under the Agreement, and shall comply with in all respects.

4. Discrimination.

During the term of the Contract and any extension or renewal thereof, Wiring Contractor shall not commit an unlawful employment practice as set forth in subparagraph A below and Wiring Contractor shall be in compliance with the laws and regulations set forth in subparagraph B below.

a. Unlawful Employment Practices.

It is an unlawful employment practice for Wiring Contractor or any of its members to fail or refuse to hire or to discharge any individual, or otherwise to discriminate against any individual with respect to compensation, or other terms, conditions, or privileges of employment, because of such individual's race, color, ancestry, religion, sex, sexual orientation, age, disability, marital status, parental status, military discharge status, or national origin; or to limit, segregate, or classify employees or applicants for employment from equal employment opportunities or otherwise adversely affect an individual's status as an employee because of such individual's race, color, ancestry, religion, sex, sexual orientation, age, disability, marital status, parental status, military discharge status, or national origin. It is also an unlawful employment practice for Wiring Contractor or any of its members to subject any Board employee, applicant participant, student or volunteer to unwelcome sexual advances, requests for sexual favors or conduct of a sexual nature when submission to or rejection of such conduct is: (i) made either explicitly or implicitly a term or condition of such person's employment, participation or receipt of services; (ii) is used as a basis for a decision affecting the individual's employment, participation or receipt of services; or (iii) has the purpose of creating an intimidating, hostile, or offensive working or learning environment.

b. Compliance.

Wiring Contractor shall comply with the Civil Rights Act of 1964 as amended, 42 U.S.C.A., Section 2000, *et seq.*; the Age Discrimination in Employment Act, 29 U.S.C.A. '621, *et seq.*; Section 504 of the Rehabilitation Act, 20 U.S.C.A. '701, *et seq.*, as amended; the Americans With Disabilities Act, 42 U.S.C.A. '12101, *et seq.*; the Illinois Human Rights Act, 775 ILCS 5/1-10, as amended; the Chicago Human Rights Ordinances, MCC Ch 2-160; the Illinois Human Rights Act, 775 ILCS 5/1-101 *et seq.*; the Public Works Employment Discrimination Act 775 ILCS 10/0.01 through 10/20, inclusive; and the Board's residency requirements for contracts awarded by the Board. Wiring Contractor shall furnish the reports and information as requested by the Board and the Illinois Department of Human Relations.

5. Wages and Salaries.

Salaries of employees of Wiring Contractor performing work under the Contract Documents shall be paid unconditionally and not less often than once a month without deduction or rebate on any account except only the payroll deductions that are mandatory or permitted by applicable laws or regulations. Attention is called to Illinois Compiled Statutes relating to Wages and Hours, including without limitation 820 ILCS 130/0.01 through 130/12 (Prevailing Wage Act), 30 ILCS 570/1 through 570/7 (Employment of Illinois Workers on Public Works Act) and 30 ILCS 560/0.01 through 560/7 (Public Works Preference Act). Wiring Contractor shall comply with all applicable Anti-Kickback laws and regulations, including the Anti-Kickback Act (18 U.S.C. Sec. 874) and the Illinois Criminal Code (720 ILCS 5/33-1 *et seq.*). Sentinel must require that the general prevailing rate of wages and other applicable benefits, if any, in the locality for each craft or type of worker

Sentinel Technologies and The Board of Education of the City of Chicago

or mechanic needed to execute the Contract or perform any such work awarded pursuant to this Agreement, as ascertained by the Illinois Department of Labor, shall be paid to such workers by their employer. If, in the performance of the Contract or the Contract Documents, there is any direct or indirect kickback, such as, but not limited to, underpayment of wages or salaries by Wiring Contractor, Sentinel has the right to withhold from Wiring Contractor out of payments due to it an amount sufficient to pay the employees underpaid the difference between the salaries required to be paid under the Contract Documents and the salaries actually paid the employees for the total number of hours worked. The amounts withheld shall be disbursed by Sentinel for and on account of Wiring Contractor to the respective employees to whom they are due.

6. Background Checks.

Under the provisions of the Illinois School Code, 105 ILCS 5/10-21.9, Wiring Contractor shall conduct a criminal background investigation of all employees on each Project or the Work who may have direct, daily contact with the pupils in any school. Wiring Contractor shall not assign to the Work at any school any employee convicted of the offenses listed in the Illinois School Code or those for whom a criminal background investigation has not been initiated. Upon receipt of the record of conviction, Wiring Contractor shall immediately remove any person so assigned from the Work at the school. In addition, Wiring Contractor shall require all persons assigned to the Work at any school to show evidence that they are free from communicable disease, including tuberculosis. Acceptable evidence is described in the Illinois School Code, 105 ILCS 5/24-5. From time to time, Sentinel may require Wiring Contractor to demonstrate its compliance with the provisions of this Section. Also, Wiring Contractor shall comply with the requirements of the Illinois Drug-Free Workplace Act, 30 ILCS 580/3.

7. Warranty

a. Wiring Contractor warrants to Sentinel and the Board that (i) all materials and equipment furnished under the Contract Documents shall be of good quality and new unless otherwise required or permitted by the Contract Documents, (ii) the Work shall be free from defects not inherent in the quality required or permitted, and (iii) the Work shall conform with the requirements of the Contract Documents. The ITS and Sentinel are entitled to consider Work not conforming to these requirements, including substitutions not properly approved and authorized, as defective. Wiring Contractor's warranty excludes remedy for damage or defect caused by abuse, modifications not executed by Wiring Contractor, improper or insufficient maintenance, improper operation, or normal wear and tear under normal usage. If required by Sentinel, Wiring Contractor shall furnish satisfactory evidence as to the kind and quality of materials and equipment.

b. Wiring Contractor warrants all of the Work for a Project and each and every part of it, including, by way of illustration and not in limitation, all workmanship, materials, equipment, supplies, services and facilities that are furnished, produced, fabricated, installed, constructed or built pursuant to the Contract Documents for the respective periods of time called for by the respective requirements of the Contract Documents, and, if no period is specified, then for a period of one (1) year, against defects that, in the opinion of Sentinel, result from the use of defective or inferior materials, equipment, supplies, services, facilities or workmanship or from Work not in compliance with or not performed in accordance with the Drawings or Specifications. The warranty period shall run from and after the date of Preliminary Acceptance of all Work required by the Contract Documents, unless the Contract Documents specify a different date for the warranty period to begin running. No part of the Work shall be held to be accepted until Final Acceptance of all of the Work. Wiring Contractor shall, as part of this warranty: (i) repair, remove and replace as directed by Sentinel, and at no cost to Sentinel, ITS or the Board, all the Work, materials, equipment, supplies, services and facilities that prove defective during the applicable warranty period or that fail to conform to the Contract Documents and (ii) repair, remove and replace, or pay for as directed by Sentinel and at no cost to Sentinel, ITS or the Board, all damaged portions of the Project and the contents and equipment of it, resulting from or that are incidental to the defects or failure to conform to the Drawings or Specifications. Wiring Contractor shall begin all repairs, removals, and replacements within ten (10) business days after Sentinel gives written notice and shall furnish workers and materials sufficient, in the opinion of Sentinel,

Sentinel Technologies and The Board of Education of the City of Chicago

to ensure their prompt completion. The written notice from Sentinel shall have attached to it the opinion of Sentinel stating that the defective Work was not performed in accordance with the Contract Documents. Should Wiring Contractor fail to proceed in accordance with these requirements, Sentinel without further notice to Wiring Contractor (and without any obligation whatsoever and without limiting Sentinel's rights and remedies under the Contract or at law or equity) may furnish all labor and material necessary for repairs, or removals and replacements, and Wiring Contractor shall pay Sentinel all costs and expenses incurred as a result of Wiring Contractor's failure to do so. Notification by Sentinel of non-conforming or defective Work tolls the running of Wiring Contractor's warranty with respect to the nonconforming or defective Work and of other Work affected by the nonconforming or defective Work.

c. The warranty period for the corrected Work begins anew from the date the replaced or restored Work is accepted by Sentinel (and approved by the Board and the ITS in writing) and runs for the full length of time as required under the Contract Documents for the portion of the Work corrected and for that Work affected by it.

8. Insurance.

Wiring Contractor shall, at its sole cost and expense, procure and maintain insurance covering all operations under the Contract and under the Contract Documents, whether performed by Wiring Contractor or by its Subcontractors. All insurers shall be licensed by the State of Illinois and rated A-7 or better by A.M. Best or a comparable rating service. Wiring Contractor shall submit to Sentinel satisfactory evidence of insurance coverage and, upon request, shall promptly provide a certified copy of any applicable policy of insurance. Minimum insurance requirements are:

Workers. Compensation and Employers. Liability Insurance. Workers. Compensation Insurance affording workers. compensation benefits for all employees as required by law and Employers. Liability Insurance covering all Wiring Contractor's employees who work on a Project, with limits of not less than Five-Hundred Thousand and 00/100 Dollars (\$500,000.00) per occurrence. Commercial General Liability Insurance.

Commercial General Liability Insurance or equivalent with limits of not less than One Million and 00/100Dollars (\$1,000,000.00) per occurrence, combined single limit for bodily injury, personal injury and property damage liability coverage, which shall include the following: all premises and operations; products/completed operations (for a minimum of two (2) years following completion); explosion; collapse; independent Wiring Contractors; separation of insured's. defense; and contractual liability. Sentinel, ITS and the Board shall be named as an additional insured, on a primary non-contributory basis, for any liability arising directly or indirectly from the Work.

Automobile Liability Insurance. Automobile Liability Insurance when any motor vehicle (whether owned, non-owned or hired) is used in connection with a Project, with limits of not less than One Million and 00/1000 Dollars (\$1,000,000.00) per occurrence for bodily injury and property damage.

Umbrella/Excess Liability Insurance. Umbrella or Excess Liability Insurance with limits of not less than Two Million and 00/100 Dollars (\$2,000,000.00) per occurrence, which will provide additional limits for Commercial General Liability Insurance and Automobile Liability Insurance and shall cover Sentinel, ITS and the Board and its board members, agents, officers, officials, Wiring Contractors, and employees, subject to that of the primary coverage.

Wiring Contractors Pollution Liability. Contractors Pollution Liability Insurance with limits of not less than Five Hundred Thousand and 00/100 Dollars (\$500,000.00) per occurrence.

Professional Liability. When any professional performs work in connection with any Project, such professional shall maintain Professional Liability Insurance covering any

Sentinel Technologies and The Board of Education of the City of Chicago

acts, errors or omissions with limits of not less than One Million and 00/100 Dollars (\$1,000,000.00). Coverage Extensions shall include contractual liability. When policies are renewed or replaced, the policy retroactive date must coincide with, or precede the commencement of any Work on a Project. A claims policy which is not renewed or replaced must have an extended reporting period of two (2) years.

Additional Insured. Wiring Contractor shall have its Commercial General Liability Insurance and Automobile Liability Insurance policies endorsed to provide to Sentinel, ITS and the Board, its members, agents, officers, officials, Wiring Contractors, and employees and any other entity as may be designated by Sentinel or the Board are named as additional insured's on a primary basis without recourse or right of contribution from Sentinel or the Board.

Insurance Certificate. The insurance company, or its representative, shall submit an insurance certificate to Sentinel indicating that Sentinel, ITS, and the Board, and its members, agents, officers, officials, Wiring Contractors, and employees are additional insured's on the Commercial General Liability Insurance and Automobile Liability Insurance policies and providing that sixty (60) days prior written notice of material change, cancellation, or non-renewal be given to Sentinel.

General. Sentinel reserves the right to obtain copies of insurance policies and records from the Wiring Contractor at any time upon written request. In addition, Wiring Contractor shall provide a certificate of insurance for Workers. Compensation and Employer Liability insurance. Wiring Contractor's failure to carry or document required insurance shall constitute a breach of the Contract and any failure of Sentinel to demand or receive proof of insurance coverage shall not constitute a waiver of Wiring Contractor's obligation to obtain the required insurance. Wiring Contractor shall require all Subcontractors, if any, to carry the insurance herein required and to comply with the foregoing requirements.

9. General Safety Guidelines

9.1. Wiring Contractor shall be solely responsible for safety on a Site. Contractor shall adhere to any and all safety related requests by Sentinel, including submission, upon the request of Sentinel, of Contractor's Safety Manual and/or a Site specific safety plan.

9.2. Wiring Contractor, both directly and indirectly through its Subcontractors, shall continuously protect the Work and the Board's property from damage, injury or loss arising in connection with operations under the Contract Documents. Wiring Contractor shall make good any such damage, injury or loss. Wiring Contractor is responsible for Site security. Dogs or other animals are not allowed.

9.3. Wiring Contractor, both directly and indirectly through its Subcontractors, shall take all necessary precautions to ensure the safety of the public and workers on the Site, and to prevent accidents or injury to any persons on, about, or adjacent to the Site where the Work is being performed.

9.4. Wiring Contractor shall comply with all laws, ordinances, codes, rules and regulations relative to safety and the prevention of accidents. Wiring Contractor, and its Subcontractors, shall cooperate with any other Contractor that may be performing work on the Site, including, but not limited to, OSHA compliance and safety efforts. Upon the request of Sentinel, Wiring Contractor and its Subcontractors, shall provide Sentinel with their Exposure Control Plan, Hazard (HazMat) Communications Plan and other safety related documents and programs.

9.5. Wiring Contractor shall erect and properly maintain, at all times, as required by laws and regulations and the conditions and progress of the Work, proper safeguards for the protection of workers, staff, students, and the public. Proper safeguard include, but are not limited to, eight (8) foot tall temporary chain link fencing around all areas of construction activity, warning signage, protective scaffolding, or whatever means are required to protect workers, students, staff, and the public. If such proper safeguards are

Sentinel Technologies and The Board of Education of the City of Chicago

not taken by the Wiring Contractor, Sentinel reserves the right (without incurring any obligation whatsoever and without limiting any other right or remedy which Sentinel may have under the Contract or at law or equity) to take such action as necessary to so protect workers, students, staff, and the public and to back charge the Contractor for the cost thereof. Appropriate precautions must be taken when Work is performed when school is in session and/or students are on a Site and extra hazardous work shall not be performed when school is in session and/or students are on a Site.

9.6. In an emergency affecting the safety of life, the Work or adjoining property, Wiring Contractor, without special instructions or authorization from Sentinel or ITS, is permitted to act, at its discretion, to prevent the threatened loss or injury.

9.7. Wiring Contractor shall protect private and public property adjacent to the Work, including all streets, sidewalks, light poles, hydrants and concealed or exposed utilities of every description affected by or adjacent to the Work. If the items are damaged by Wiring Contractor or its Subcontractors, Contractor shall make all necessary repairs to or replacements of them at no cost to Sentinel, ITS or the Board.

9.8. If, in the opinion of Sentinel or the Board, Wiring Contractor's Work endangers adjoining property or persons, upon written notice from Sentinel or the Board to the Wiring Contractor, the Work shall be stopped and the method of operation changed in a manner acceptable to Sentinel. Wiring Contractor acknowledges and agrees that it shall be responsible for any financial repercussions resulting there from and that contract schedules will not be postponed as a result thereof.

9.9. When performing the Work, Wiring Contractor shall comply with the Construction Operations Phasing Plan and Schedule included in the Construction Documents.

9.10. Wiring Contractor shall remove all snow and ice as may be required for the proper protection and/or prosecution of the Work. Wiring Contractor shall, at all times, provide and maintain adequate protection against weather (including, but not limited to rain, winds, storms, snow, sleet, frost or heat) so as to preserve and keep all Work, materials, equipment, apparatus and fixtures free from injury or damage.

9.11. Adequate precautions shall be taken against fire throughout all Wiring Contractor's and

Subcontractors' operations. Flammable material shall be kept at an absolute minimum and, if any, shall be properly handled and stored. Except as otherwise provided in the Contract Documents, Wiring Contractor shall not permit fires to be built or open salamanders to be used in any part of the Work.

9.12. Wiring Contractor shall provide and maintain adequate protection for all properties adjacent to the Site. When required by law or for the safety of the Work, Wiring Contractor shall shore up, brace, underpin and protect as necessary, adjacent pavements, foundations and other portions of existing structures that are in any way affected by the operations under the Contract Documents. Wiring Contractor, before beginning any part of the Work, shall give any notices required to be given to any adjoining landowner or other parties.

9.13. Wiring Contractor shall cooperate with any other Wiring Contractor that may be performing work on the Site in connection with the compliance with regulations of OSHA and all other federal, state, and municipal laws, rules and regulations relating to job site safety and practice including, as may be relevant, appealing decisions, correcting work within abatement periods, appealing or requesting extensions on abatement periods when work has been done by other Wiring Contractors and furnishing the supporting information or material as may be necessary to fully protect the rights of Sentinel, ITS, and the Board, and other Wiring Contractors on pending or prospective violation orders.

9.14. Wiring Contractor shall comply with the Construction Operations Phasing Plan and Schedule included in the Construction Documents when performing the Work.

10. Environmental Components of The Work.

10.1. If the Contract Documents require Wiring Contractor to manage or perform any environmental Work, or if in the course of the Work an environmental hazard is encountered requiring action, Wiring Contractor shall, through Sentinel, cooperate and coordinate its Work in all respects with that of the Board's environmental consultants,

Sentinel Technologies and The Board of Education of the City of Chicago

perform its Work according to safe and approved protocols and procedures, and utilize only fully qualified and licensed abaters and remediators, and sequence and perform Work to minimize environmental contamination of the Site. Wiring Contractor shall consult with Sentinel, the Board, the Board's environmental consultants and the site's building Engineer to determine whether previous abatement, remediation, stabilization, or containment work has been performed at the site. If so, Wiring Contractor shall perform its Work under the Contract Documents so as not to undo or disturb the prior work. Wiring Contractor shall be responsible for all costs the Board or Sentinel incurs for Wiring Contractor's failure to comply with such protocols and procedures, or for its failure to consult and protect the integrity of the prior work; such costs may include without limitation any costs associated with cleaning any area contaminated by Wiring Contractor's (or its Subcontractors') failure to comply with these requirements.

10.2. If Wiring Contractor encounters material on the Site reasonably believed to be hazardous that has not been identified in the Contract Documents or rendered harmless, Wiring Contractor shall immediately stop work in the area affected and report the condition to the ITS, Sentinel, and the Board's Environmental Consultant in writing and comply with a Board-approved plan for identifying and handling the material. If no plan is in place, Wiring Contractor shall await and follow directions of Sentinel, ITS, and the Board's Environmental Consultant. The Work in the affected area shall be resumed in the absence of hazardous materials, or when it has been rendered harmless. If reasonable precautions shall be inadequate to prevent foreseeable bodily injury or death to persons resulting from material or substance encountered on the Site by Contractor, Wiring Contractor shall, upon recognizing the condition, immediately stop work in the affected area and report the condition to Sentinel, ITS, and the Board's Environmental Consultant in writing. The Wiring Contractor shall then proceed in the same manner described in the Section immediately above. Sentinel, through one or more of the Board's environmental consultants, shall be responsible for obtaining the services of a licensed laboratory to verify the presence or absence of the materials or substance reported by Wiring Contractor and, if the material or substance is found to be present, to verify that it has been rendered harmless.

11. Contractor's Liability.

11.1. Assumption of Liability. Wiring Contractor assumes all liability for its own negligence and the negligence of its own employees and agents. Wiring Contractor shall require its Subcontractors to assume all liability for their own negligence and the negligence of their own employees and agents. Sentinel is responsible for the Wiring Contractor's compliance with the provisions of this Exhibit H.

11.2. Indemnification. Wiring Contractor or its Subcontractors, or both, as the case may be, shall compensate Sentinel, ITS, and the Board and any other local governmental body with an interest in any Work or Project, and their respective officers, directors, shareholders, officials, managers, members, trustees, commissioners, employees, or agents, including Sentinel (collectively, the "Indemnitees") for any claim, loss, liability, damage, or expense (including reasonable attorney fees and court costs), the Indemnities incur on account of any negligence, recklessness, or willful misconduct of Wiring Contractor or its employees, any Subcontractor or the Subcontractor's employees, in the performance of any Work in connection with the Contract. To the extent permitted by law, Sentinel and Wiring Contractor agree that any limit on such liability that would otherwise be available by virtue of the Worker's Compensation Act or any other law or judicial decision is expressly waived as to the Indemnities. Sentinel and Wiring Contractor acknowledge that any performance bond or insurance provided under the Contract in no way limits the Wiring contractor's responsibility compensate the Indemnities as provided in this Section. Wiring Contractor is not liable under this Section for the errors or omissions of Sentinel, its agents or employees arising out of Sentinel's (or its agents' or employees') preparation or approval of maps, drawings, opinions, reports, surveys, change orders, designs or Specifications or giving or failing to give directions or instructions, but only if the giving or failing to give directions or instructions is the primary cause of the injury or damage. Wiring Contractor, where separate Contractors or their

Sentinel Technologies and The Board of Education of the City of Chicago

Subcontractors are employed on the Site, shall not hold Sentinel, ITS or the Board responsible for loss or damage or injury caused by any fault or negligence of any other Wiring Contractor or Subcontractor. Wiring Contractor shall look to the Contractors or Subcontractors for recovery from them for any such damage or injury. If any separate Contractor or its Subcontractor suffers loss or damage through any acts or omissions on the part of Wiring Contractor, or any of its Subcontractors, Wiring Contractor shall reimburse the other Contractor or its Subcontractor by agreement or arbitration, if they shall so agree. If the Contractor or its Subcontractor asserts any claim against the Board, ITS or Sentinel on account of any damage or loss alleged to have been so sustained, the Board or Sentinel shall notify the Wiring Contractor, and Wiring Contractor shall indemnify, defend, and hold the Board, ITS and Sentinel harmless from and against those claims as provided herein.

11.3. Limitation of Liability.

IN NO EVENT SHALL THE BOARD OR THE VENDOR'S CUMULATIVE LIABILITY TO THE WIRING CONTRACTOR ARISING OUT OF THE CONTRACT DOCUMENTS, WHETHER ARISING IN CONTRACT, TORT, OR OTHERWISE AND WHETHER AT COMMON LAW OR STATUTE, EXCEED THE FAIR MARKET VALUE OF THE WORK PERFORMED BY THE WIRING CONTRACTOR OR THE BASE CONTRACT PRICE, WHICHEVER IS LESS. IN NO EVENT SHALL THE VENDOR OR THE BOARD BE LIABLE TO THE WIRING CONTRACTOR FOR LOSS OF PROFITS, LOSS OF REVENUES, LOSS OF BUSINESS OR OTHER CONSEQUENTIAL, SPECIAL, INDIRECT OR PUNITIVE DAMAGES, ARISING OUT OF THIS AGREEMENT FOR ANY CLAIM EVEN IF THE BOARD OR THE VENDOR HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES BY THE WIRING CONTRACTOR.

11.3. Non-Liability of Individuals. No member, officer, director, shareholder, manager, employee, agent, or officer acting on the Board's, ITS' or Sentinel's behalf, shall be personally liable to Wiring Contractor or others claiming by, under, or through Wiring Contractor in connection with the Contract or any Contract Documents.

12. Right of Entry.

12.1. Wiring Contractor and its Subcontractors and their respective officers, employees, and agents performing the Work are permitted to enter the Site in connection with the performance of the Work, subject to the terms and conditions contained in the Contract Documents and those rules established by the Board. Wiring Contractor shall provide advance notice of its intended entry to the principal and building engineer whenever Work is to be performed at a school Site, and also to Sentinel. Consent to enter a Site given by the principal, building Engineer, the CIP Manager, the Board or Sentinel does not create, and shall not be construed to imply the creation of, any additional responsibilities on the part of any of them.

12.2. Sentinel and Wiring Contractor shall use, and shall cause its Subcontractors and their respective officers, employees, and agents to use, the highest degree of care when entering a Site in connection with the Work. Sentinel and Wiring Contractor and its Subcontractors and their respective officers, employees and agents shall comply with all instructions and requirements for the use of the Site, and any leases or licenses for the use of the Site, whether the Site is owned, licensed, or leased by the Board or licensed or leased from the Board.

12.3. All claims, suits, judgments, costs, or expenses, including attorney's fees, arising from or in connection with any such entries shall be treated in accordance with the terms and conditions of the Contract Documents.

13. Ownership of Drawings, Specifications and Models. The drawings, specifications, models, and other documents ("Wiring Contractor's Work Product") generated and prepared by the Wiring Contractor in the course of providing services to the Board shall be owned by the Board. Sentinel may retain a copy of the drawings, specification, and other documents furnished by the Wiring Contractor for its records and use the Wiring Contractor's Work Product as needed to provide services to the Board. The copies of the Work Product are not to be used on any other Work or Project whatsoever without the written permission of the Board and are to be returned to Sentinel and the Board on request at the completion of the Work.

Sentinel Technologies and The Board of Education of the City of Chicago

14. Construction Schedules.

14.1. Time Is of the Essence in Prosecuting and Completing the Work.

Wiring Contractor, within fifteen (15) working days after being awarded a Project pursuant to a Notice of Award, shall prepare and submit to Sentinel, Sentinel and Wiring Contractor's construction schedule for the Work, prepared in form and substance acceptable to or as specifically prescribed by Sentinel. The construction schedule shall not exceed time limits for the Work in the project schedule under the Contract Documents. The construction schedule shall accommodate all Board activities that are identified in the Contract Documents and shall be updated by Wiring Contractor and submitted to Sentinel at least monthly or more frequently as directed by Sentinel or the ITS. To the extent required by the Contract Documents, the construction schedule shall be related to the entire Project and shall provide for expeditious and practicable execution of the Work. Wiring Contractor shall submit the construction schedule to Sentinel in duplicate, and, if requested by Sentinel, also on floppy disk in format acceptable to Sentinel. Wiring Contractor shall submit a revised construction schedule when Wiring Contractor's planned sequence is changed or when Project changes are made that affects the construction schedule or when directed by Sentinel. All construction schedules are subject to review and approval by Sentinel.

14.2. Board's Right to Do Work.

If Wiring Contractor neglects to prosecute the Work properly or fails to perform in accordance with the Contract Documents, the Board, after the Board gives proper written notice and an opportunity for Sentinel to cure as described in the agreement between Sentinel and the Board, may without obligation therefore and without prejudice to any other remedy under the Contract or at law or equity, make good the deficiencies and deduct the cost of doing so from the payment then or later due to Sentinel. If the cost of all Work undertaken by the Board exceeds the unpaid balance of the Base Contract Price, the Wiring Contractor and Sentinel (and the surety or sureties on the performance bond given by each of them) are liable for payment to the Board of the amount of the excess.

14.3. Sentinel's Right to Stop Work.

If Wiring Contractor fails to correct Work that is not in accordance with the requirements of the Contract Documents or persistently fails to carry out Work in accordance with the Contract Documents or does not correct the Work to the satisfaction of the Board, Sentinel, by written order signed personally or by an agent specifically so empowered by Sentinel in writing, may order Wiring Contractor to stop the Work, or any portion of it,

14.4. The Board's Right to Stop Work. If the Wiring Contractor fails to correct Work that is not in accordance with the requirements of Exhibit H or the Contract Documents or persistently fails to carry out Work in accordance with the Contract Documents or does not correct the Work to the satisfaction of the Board, in its sole opinion, the Board may order Sentinel in writing to direct the Wiring Contractor to stop Work, or any portion of it.

15. Hours of Work

15.1. Wiring Contractor shall furnish sufficient forces and work those shifts that may be required to ensure completion of the Work under the conditions and within the time stated in the Contract Documents. If the nature of the Work requires that parts of it be performed outside of regular working hours, the cost of the Work is considered to be included in the Base Contract Price. If the Project falls behind schedule, Wiring Contractor shall be required to perform the Work by extra shifts or on an overtime basis as may be necessary to complete the Work on time and the cost of that shall be considered to be included in the Base Contract Price.

15.2. Wiring Contractor shall not be entitled to additional compensation for extra shifts or overtime work for any reason whatsoever, except as otherwise expressly stated in writing by Sentinel; and then only to the extent of the direct cost of the premium portion of the time involved and without any charge for mark up, insurance or taxes, except as might otherwise be required by law.

15.3. The Site may be occupied during construction. Wiring Contractor shall cooperate fully with Sentinel, ITS, and the Board during construction operations to minimize

Sentinel Technologies and The Board of Education of the City of Chicago

conflicts, interference and to facilitate occupant usage and operations. If Wiring Contractor fails to so facilitate occupant usage and operations, Sentinel may, after written notification to the Wiring Contractor, take reasonable measure to allow such usage and operations and back charge the Wiring Contractor for the cost thereof.

15.4. During occupied hours, Wiring Contractor shall limit construction operations to methods and procedures that shall not adversely and unduly affect the environment of occupied spaces, including but not limited to creating noise, dust, odors, air pollution, ambient discomfort, or poor lighting.

16. **Employees:** Any employee of Wiring Contractor or a Subcontractor whose work is unsatisfactory or who is considered by the Board, ITS or Sentinel to be unskilled or otherwise objectionable, shall be dismissed from the Work upon written notice to Wiring Contractor.

17. **Building Materials and Equipment.**

17.1. Unless otherwise specified, all materials and equipment shall be new, and of the quality required to satisfy the standards of the Contract Documents. Wiring Contractor shall, if required, furnish satisfactory evidence as to kind and quality of all materials and equipment. Wiring Contractor shall cause all labor to be performed by workers skilled in their respective trades, and workmanship shall be of good quality so that first class work in accordance with the standards of construction set forth in the Contract Documents shall result.

17.2. Any work, materials or equipment that do not conform to these requirements or the standards set forth in the Contract Documents may be disapproved and rejected by Sentinel, in which case Wiring Contractor shall, at the Wiring Contractor's sole cost and expense, remove and replace them before final payment.

17.3. Wiring Contractor shall keep proper inventories, provide adequate protection against the weather and maintain security measures against theft and vandalism with respect to all stored materials, fixtures and equipment for items stored on-site and not yet incorporated into the Work.

17.4. The Site shall not be utilized for the storage of vehicles, materials, equipment, or fixtures not intended for the Project.

17.5. Wiring Contractor shall review any specified construction or installation procedures (including those recommended by any product manufacturer). Wiring Contractor shall advise Sentinel, in writing, seven (7) days before beginning the Work, on items affected: (i) if any specified procedure deviates from good construction practice; (ii) if following any specified procedure shall affect any warranties; or, (iii) if any objections that Wiring Contractor may have to any specified procedure.

18. **Salvage Rights.** The Board reserves all salvage rights in existing art works, structures, materials, and artifacts of intrinsic, artistic, or historical value.

19. **Taxes.**

19.1. Wiring Contractor shall pay all applicable federal, state and local taxes on all materials, labor or services furnished, and all taxes arising out of the operations under the Contract Documents. The taxes include, by way of illustration and not in limitation, Retailers' Occupation, Old Age Benefit, Unemployment, customs, duties, all deductions for income taxes now in force or later enacted before Final Acceptance. Wiring Contractor assumes all liability for the payment of any unemployment benefits payable under any federal or state law to individuals employed by it during the progress of the Work covered by the Contract Documents. This requirement excludes taxes and assessments on real property comprising the Site and Illinois, County and Municipal Retailers' Occupation and Service Occupation Taxes and Illinois Use, Sales and Service Use Taxes on building materials and fixtures to be incorporated into the Work, but does include the taxes on building materials and equipment consumed or used in performing the construction, but not incorporated in it.

19.2. The Chicago Board of Education is exempt from federal Excise Taxes by virtue of Exemption Certificate No. 36-600584 and it is exempt from State of Illinois Sales Taxes by virtue of Exemption No. E9997-7109. Illinois Retailers' Occupation Tax, Use Tax, and Municipal Retailers' Occupation Taxes do not apply to materials or services purchased by the Board by statute. The price or prices quoted in bids and proposals shall exclude all

Sentinel Technologies and The Board of Education of the City of Chicago

taxes, direct or indirect, that do not apply; shall include those that do apply; and shall comply with all relevant federal laws and regulations.

20. Royalties and Patents.

20.1. The Base Contract Price shall include all fees for any patent, invention, article or arrangement or other appurtenances (collectively .Patent Rights.) or other intellectual property rights that may be used upon or in any manner connected with the construction, erection or maintenance of the Work, or any part of it embraced in the Contract Documents. Wiring Contractor and its Subcontractor(s) shall indemnify and hold harmless the Board, ITS, and Sentinel and their respective officers, directors, shareholders, members, managers, other officials, agents, and employees from and against all claims, losses and demands for such infringements of Patent Rights or other intellectual property rights..

20.2. The approval of any method of construction, invention, appliance, process, article, device or material of any kind by Sentinel, the ITS or the Board is only an approval of its adequacy for the Work, and is not an approval of its use by Wiring Contractor in violation of any Patent Right or other rights of any third person.

21. Trade Regulations.

21.1. Wherever any provision of any section of the Specifications conflicts with any agreements or regulations of any kind at any time in force among members of any trade associations, unions or councils that regulate or distinguish what work is or is not included in the Work of any particular trade, Wiring Contractor shall make all necessary arrangements to reconcile any such conflict without delay, damage or cost to Sentinel and without recourse to Sentinel. If the progress of the Work is affected by any delay in furnishing or installing any items of material or equipment required under the Contract Documents because of a conflict involving any such agreement or regulation, Sentinel may require that other material or equipment of equal kind and quality be provided at no additional cost to Sentinel.

22. Permits, Laws and Regulations.

22.1. In a timely manner in order to not delay the progress of the Work, Wiring Contractor shall obtain and pay for all permits, licenses and certificates of inspection necessary for the prosecution and completion of the Work. Should any fees for permits, licenses and certificates of inspection be waived by the appropriate governmental agencies, then Wiring Contractor shall give full credit for them to Sentinel, and Sentinel may deduct the amount or amounts waived from payments due Wiring Contractor. The credit shall be in the amount stated by the governmental agency waiving the fee.

22.2. Wiring Contractor shall give all notices and comply with all laws, ordinances, codes, rules and regulations bearing on the conduct of the Work. If Wiring Contractor observes or should have observed that the Drawings and Specifications are at variance with them, Wiring Contractor shall, in writing, promptly notify Sentinel, and any necessary changes shall be made in the Work. Wiring Contractor shall bear all costs and expenses arising from any Work performed that is contrary to those laws, ordinances, codes, rules and regulations.

22.3. Wiring Contractor shall comply with the current regulations of the National Board of Fire Underwriters where applicable to the Project, and all other codes named in the Specifications for the various divisions of the Work.

23. Delays and Extension of Time

23.1. If any delay on the part of Wiring Contractor results in any claim against the Board, Sentinel, or ITS, or the agents or employees of any of them (for purposes of this Section, individually and collectively, the "Indemnities") by another Wiring Contractor or Subcontractor arising out of the delay, Wiring Contractor shall defend, indemnify, and hold the Indemnities harmless from and against any and all such claims. Sentinel may, without prejudice to its right to any other remedy under the Contract or at law or equity, deduct the amount of any recovery against Indemnities from any monies due or that may become due Wiring Contractor.

23.2. If Wiring Contractor or its Subcontractors are delayed at any time in the progress of the Work, Wiring Contractor's (and its Subcontractors') sole remedy shall be an extension

Sentinel Technologies and The Board of Education of the City of Chicago

of the time for completing the Work for that reasonable period of time that Sentinel and the ITS may decide, but only if the delay is caused by: (i) any act or omission whatsoever (including without limitation suspensions of the Work for any reason and delays pending a decision) of the ITS, Sentinel, or the agents or employees of any of them, (ii) any other Wiring Contractor employed by the Board, (iii) changes ordered in the Work, (iv) strikes, lockouts, fire, unusual delay in transportation, unavoidable casualties, or any other causes beyond Contractor's control that would not reasonably be expected to occur in connection with or during performance of the Work, (except for weather delays caused by typical Chicago weather extremes that Wiring Contractor should have anticipated in Wiring Contractor's schedule for the Work), or (v) delay in obtaining required permits where the delay was not caused in whole or in part by Wiring Contractor.

23.3. No claim for an extension of time shall be considered unless Wiring Contractor makes it in writing, specifying the reason for the delay, and submits it to Sentinel within seven (7) days after the delay begins. In case of a continuing cause of delay, only one claim is necessary.

23.4. Wiring Contractor and its Subcontractors are not entitled to any damages or compensation, or to be reimbursed, by Sentinel for any losses on account of any delay or delays resulting from any cause whatsoever.

23.5. If Wiring Contractor fails to complete a Project within the time provided by the Contract Documents and such failure is not a result of any of the matters delineated above, then, at the option of Sentinel, and in addition to all other rights and remedies under the Agreement or at law or equity, Wiring Contractor agrees to pay the Board through Sentinel the sum of Five Hundred and 00/100 Dollars (\$500.00) per day as liquidated damages (and not as a penalty) for each day of such delay in order to compensate the Board for its administrative costs relating to such delay (the Wiring Contractor recognizes and agrees that the amount of such administrative costs are difficult, if not impossible, to prove). Sentinel may, without prejudice to its rights or remedies under the Contract or at law or equity, deduct said sum from any monies due or that may become due Wiring Contractor.

24. Acceptance of the Work.

24.1. Preliminary Acceptance. Preliminary Acceptance of the Work shall be made in writing after preliminary inspection by Sentinel when, in the opinion of Sentinel and ITS, the requirements of the Contract Documents have been essentially completed, including a Certificate of Occupancy, if occupancy, except for Punch List Work (including any cleaning or trash or debris disposal required under the Contract Documents).

24.2. The Punch List. Time is of the essence in closing out the Work of each Project. Wiring Contractor shall begin Punch List Work immediately after receipt of the Punch List. Failure of Wiring Contractor or its Subcontractors to begin the Punch List Work within three (3) business days after receipt of the Punch List shall be considered a failure to prosecute the Work of the Contract Documents. Wiring Contractor shall continuously prosecute Punch List Work once begun and complete it within thirty (30) days from the receipt of the Punch List from Sentinel.

24.3. Final Acceptance. Wiring Contractor shall notify Sentinel that the Work is ready for final inspection on a definite date by which time all requirements of the Contract Documents shall have been completed. The notice shall be given at least five (5) days before the date stated for final inspection. If Sentinel and ITS determine that the status of the Work is as represented, they shall make the arrangements necessary to have final inspection begun by Sentinel on the date stated in the notice, or as nearly after it as is practicable. If all requirements of the Contract Documents have been completed at the time of final inspection by ITS and acceptable to the Board and Sentinel, the Work shall be finally accepted.

24.4. Non-Conforming Work. No action of the Board, ITS or Sentinel, or their respective board members, officers, employees, officials, or agents shall be considered as accepting Work done or material furnished in the performance of the Contract Documents that are not in accordance with those specified and required by the Contract Documents. The

Sentinel Technologies and The Board of Education of the City of Chicago

payment of the final certificate in no way affects the rights of Sentinel against Wiring Contractor to enforce the complete performance of the Contract Documents or to sue for the recovery of damages for failure to do so, nor does it affect the terms of Wiring Contractor's warranty in connection with the Contract Documents.

25. Inspection of Work.

25.1. The Board, Sentinel, and ITS are entitled at all times to have access to the Work, wherever it is in process. Wiring Contractor shall provide proper and safe facilities for access and inspection.

25.2. Any Work covered up without approval or consent of Sentinel shall be uncovered for examination, if required by Sentinel, and shall be replaced and/or re-covered, all at Wiring Contractor's sole cost and expense. Examination of Work previously covered up with the approval or consent of Sentinel may be ordered by Sentinel to be uncovered, and if so ordered, the Work shall be uncovered by Wiring Contractor. If the Work is found to be in accordance with the Contract Documents, Sentinel shall reimburse Wiring Contractor for the reasonable cost and expenses of uncovering and recovering. The reimbursement shall be for actual costs incurred plus the percentages allowed by the Contract Documents. If the Work is not found to be in accordance with the Contract Documents, Wiring Contractor shall pay all costs and expenses of uncovering, replacement and recovering.

25.3. Wiring Contractor shall place its field personnel at Sentinel's disposal for field checking during any inspection period.

25.4. The presence or absence of Sentinel at the Site does not relieve Wiring Contractor's responsibility for compliance with the provisions of the Contract Documents, or from responsibility for the removal and replacement of Work not in accordance with the Contract Documents.

25.5. Sentinel is not authorized to make any changes or modifications in the Contract Documents, to direct additional work not required by the Contract Documents, or to waive the performance by Wiring Contractor of any requirements of the Contract Documents except as provided herein.

26. Trash and Debris.

26.1. Wiring Contractor shall conduct and complete the Work in a neat, clean, and workmanlike manner. Wiring Contractor shall, at its own cost and expense, furnish dumpsters for regular and frequent collection of construction debris, trash, and other refuse that accumulates at the Site and cause its frequent removal and lawful disposal. Sentinel and Wiring Contractor shall police the work site and adjacent areas (including, but not limited to, public streets) regularly and frequently, removing and disposing of construction debris, trash, and refuse promptly.

26.2. Where the Site is occupied, or partially occupied, during any part of its Work, or where a portion of the Work, on completion, is given over to the Board, Wiring Contractor shall, at its own cost and expense, at least daily, but as often as necessary to avoid creating hazards to the Board or attracting vermin, remove and lawfully dispose of its debris, trash, and other refuse, sweep all Board-occupied areas free of construction materials and dirt or dust, and wipe down all equipment and furnishings in the area where the Work is or was taking place so that they are left in a neat, clean and workmanlike condition for the Board. At the completion of the Work, Wiring Contractor shall again leave the Site in a neat, clean and workmanlike condition.

26.3. If, after written notification from Sentinel of the failure to so keep the Site in a neat, clean and workmanlike condition, Sentinel may, without further notice to the Wiring Contractor, clean and maintain the Site and back charge the Wiring Contractor for all costs and expenses in connection therewith.

27. Correction of Work Before Final Payment.

27.1. Wiring Contractor shall promptly remove all materials and equipment from the Site, whether incorporated in the Work or not, rejected by Sentinel or ITS as failing to conform to the Contract Documents (collectively referred to as *Rejected Work*). Wiring Contractor shall promptly replace and re-execute the rejected Work in accordance with the Contract Documents and without expense to Sentinel and shall bear the cost and

Sentinel Technologies and The Board of Education of the City of Chicago

expense of making good all work of other Contractors destroyed or damaged by the removal or replacement.

27.2. If Wiring Contractor does not remove the rejected Work within a reasonable time, determined by written notice of Sentinel, Sentinel may, at the sole cost and expense of Wiring Contractor, remove and dispose of the rejected Work as Sentinel sees fit. If Wiring Contractor does not pay the cost and expenses of the removal within ten (10) days after removal of the rejected Work by Sentinel, Sentinel may deduct all such costs and expenses from any monies due Wiring Contractor.

27.3. If the Work deviates from the requirements of the Contract Documents, Wiring Contractor shall be liable for all resulting damages. Wiring Contractor waives any claim (as a defense or a claim to reduce Wiring Contractor's liability) that performing the Work without deviation from what is required by the Contract Documents would also have caused or resulted in damages. This provision does not limit any other rights of the ITS or Sentinel or other obligations of Wiring Contractor.

27.4. When Engineer of Record's additional services are required because of defective Work, neglect, failure, deficiencies, or default by Wiring Contractor, Engineer of Record's compensation for the services may, at the option of Sentinel, be payable by Wiring Contractor based on Engineer's invoice sent to Sentinel. Deficiencies are defined to include, but not be limited to, more than two (2) reviews of the same submittal of shop drawings and associated data due to incomplete, uncoordinated or otherwise defective submissions. The invoice, when approved by Sentinel, along with other costs, damages, and liabilities incurred by the ITS and Sentinel, at the option of Sentinel, may be the basis for decreasing the Base Contract Price by a Change Order to compensate Sentinel for Engineer of Record's additional services.

28. Correction of Work after Final Payment.

28.1. The final certificate, final payment, or any provision in the Contract Documents does not relieve Wiring Contractor of responsibility for faulty materials, equipment or workmanship. Unless otherwise specified, Wiring Contractor shall remedy any defects due to faulty materials, equipment or workmanship and pay for any damage to other Work resulting therefrom that appear within the warranty period. Sentinel shall give written notice of the defects with reasonable promptness after they are discovered. All questions arising under this Article shall be decided by Sentinel.

29. Liquidated Damages; Offsets.

29.1. All liquidated damages that accrue under the Contract Documents, including those that may apply for late completion of Work, for failing to meet the MBE/WBE bid goals, and for failing to meet Chicago Residency requirements of the Contract Documents, shall be deducted before final payment is made for the Work.

29.2. All back charges to Wiring Contractor, refunds from vendors, and other offsets against any amounts due Wiring Contractor permitted or required under the Contract Documents may be taken at any time from amounts due to Wiring Contractor under the Contract Documents once Sentinel has determined the amount of the back charge, refund, or offset to be made.

30. Assignment.

30.1. Wiring Contractor shall not assign the Contract or the Contract Documents or sublet it, in whole or in part, without the written consent of Sentinel, nor shall Wiring Contractor assign any moneys due or to become due to it under the Contract Documents without the previous written consent of Sentinel.

30.2. Any assignment of monies due under the Contract or the Contract Documents made without the written consent of Sentinel is void, and the assignee in that case acquires no rights against Sentinel.

31. Miscellaneous Provisions.

31.1. Governing Law. Illinois law governs the Contract and the Contract Documents, its interpretation, and the Work performed pursuant to the Contract Documents. Wiring Contractor submits itself irrevocably to the jurisdiction of the courts located in Cook County, Illinois and, if Wiring Contractor chooses to bring any action regarding the Contract, it shall do so only in those courts.

Sentinel Technologies and The Board of Education of the City of Chicago

31.2. Inspector General. Under the provisions of 105 ILCS 5/34-13.1, the Inspector General of the Chicago Board of Education has the authority to conduct certain investigations. Wiring Contractor shall give the Inspector General access to all information and personnel necessary to conduct its investigations.

31.3. Audit, Inspection, and Retention of Documents. Wiring Contractor and its Subcontractors shall furnish Sentinel with such information as Sentinel requests regarding the progress, execution, and costs of Work. For five (5) years after Wiring Contractor receives its final payment in connection with the Project, Wiring Contractor and its Subcontractors shall maintain records on a Project-by-Project basis, showing payroll details, actual time spent on each Project, utilization of Subcontractors, costs incurred and Work performed. Wiring Contractor and its Subcontractors shall permit authorized representatives of Sentinel to inspect, copy, and audit all data and records for the Work. All agreements with Subcontractors of Wiring Contractor shall provide for a similar right of audit, copying, and inspection by Sentinel's authorized representatives. No provision in the Contract granting Sentinel a right of access to records and documents is intended to impair, limit, or affect any right of access to such records and documents that Sentinel would have had in the absence of such provisions.

Sentinel Technologies and The Board of Education of the City of Chicago

EXHIBIT I – Project Closeout and Checklist

The following check-list is used by Sentinel to ensure that the Wiring Contractor submits the required closeout documentation to the Board.

	Yes	No
1. <u>General Project Information (1 binder)</u>		
A. Contractor Proof of insurance/bonds	<input type="checkbox"/>	<input type="checkbox"/>
B. Project plan documentation	<input type="checkbox"/>	<input type="checkbox"/>
C. Project task plan	<input type="checkbox"/>	<input type="checkbox"/>
2. <u>School Project Information (1 binder per school)</u>		
A. Project Operations		
I. School Design Document	<input type="checkbox"/>	<input type="checkbox"/>
a. Wireless Site Survey	<input type="checkbox"/>	<input type="checkbox"/>
II. Change order documents	<input type="checkbox"/>	<input type="checkbox"/>
III. As-Built Drawings	<input type="checkbox"/>	<input type="checkbox"/>
a. AutoCAD format	<input type="checkbox"/>	<input type="checkbox"/>
b. Hardcopy format	<input type="checkbox"/>	<input type="checkbox"/>
IV. Bid Contract Documents		
a. Addenda		
b. Bid responses	<input type="checkbox"/>	<input type="checkbox"/>
c. Bid award letter	<input type="checkbox"/>	<input type="checkbox"/>
d. Sub-contractor performance bond/insurance	<input type="checkbox"/>	<input type="checkbox"/>
V. Electronic Equipment Locator	<input type="checkbox"/>	<input type="checkbox"/>
VI. Switch/Hub RMA form	<input type="checkbox"/>	<input type="checkbox"/>
VII. NIC documentation	<input type="checkbox"/>	<input type="checkbox"/>
a. NIC equipment locator	<input type="checkbox"/>	<input type="checkbox"/>
b. NIC proof of connectivity screen shots	<input type="checkbox"/>	<input type="checkbox"/>
VIII. Insurance	<input type="checkbox"/>	<input type="checkbox"/>
IX. Permits	<input type="checkbox"/>	<input type="checkbox"/>
B. Warranties		
I. Contractor warranty	<input type="checkbox"/>	<input type="checkbox"/>
II. Manufacturer warranty	<input type="checkbox"/>	<input type="checkbox"/>
III. Installer qualifications/certifications	<input type="checkbox"/>	<input type="checkbox"/>
IV. Electronics warranty (Smartnet) contract information	<input type="checkbox"/>	<input type="checkbox"/>
V. Equipment warranties	<input type="checkbox"/>	<input type="checkbox"/>
VI. Procedures for obtaining warranty services	<input type="checkbox"/>	<input type="checkbox"/>
C. Testing		
I. Cable Testing results	<input type="checkbox"/>	<input type="checkbox"/>
II. Testing Personnel Qualifications/Certifications	<input type="checkbox"/>	<input type="checkbox"/>
III. Cable Identification Definition (labeling)	<input type="checkbox"/>	<input type="checkbox"/>

Please sign if all documents have been received and are in compliance.

Reviewer: _____ Date: _____

Sentinel Technologies and The Board of Education of the City of Chicago

EXHIBIT J – AMENDMENT TO BOARD INFRASTRUCTURE STANDARDS

1. All new conduits shall be concealed within the existing construction where possible: no exposed conduits will be permitted in “finished” areas without prior permission from ITS Project Manager. Provide surface metal raceways of sizes and types required as permitted by code.
2. Conduit shall be installed in concealed areas (e.g. attic, crawl space, locker chases, chases, drop ceiling and/or basement). Variances shall be provided only by the ITS Project Manager prior to installation.. Installation of conduit in unfinished areas without notifying ITS will result in removal of conduit, patching and painting at the Board contractor’s expense.
3. Routing of raceway.
 - To provide a more astatically, cost effective installation, routing in hallways will be the last alternative for raceway installations.
 - Use a vertical installation with raceway through classrooms where possible.
 - Utilize coat closets, janitor closets, pipe chases, locker chases, attic, crawl space and basement for routing of conduits.
4. Provide a surface metal (steel) divided raceway system to be used for branch circuit and data network voice, video and other low-voltage wiring. The surface metal raceway system shall consist of steel divided or dividable raceway base, dividers (separators, where necessary), blank cover, appropriate fittings with 2” radius fiber optic bends and device mounting plates necessary to complete the installation.
5. A complete line of full capacity corner elbows and tee fittings must be available to maintain a controlled 2” [51mm] cable bend radius which meets the specifications for Fiber Optic and Category 5E cabling and exceeds the ANSI/TIA/EIA-568-B, ANSI/TIA/EIA-568-B.1, and ANSI/TIA/EIA-569-A requirements for communications pathways. Fittings available shall include, but not limited to flat, internal and external elbows, couplings for joining raceway sections, wire clips, blank end fitting and a full complement of device mounting brackets and plates.
6. A series of inserts shall also be available for retrofit applications that provide a controlled 2” [51mm] cable bend radius which meets the specification for fiber optic and category 5E cabling and exceeds the ANSI/TIA/EIA –568-A, ANSI/TIA/EIA-568-B.1, and ANSI/TIA/EIA-569-A requirements for communications pathways. Fittings shall be colored to match the raceway.
7. Metal device brackets and trim plates shall be available to install single or two gang devices either horizontally or vertically within the raceway. Trim plates shall overlap cover eliminating seam. Devices for both power and data/communication shall have the capability of mounting flush or in conjunction with faceplates. Device brackets and plates shall be colored to match the raceway or plastic device mounting bracket and trim plate shall be available to install devices horizontally. Trim plate shall overlap cover-eliminating seam. Faceplates shall be available to accept a variety of power and data/communications devices. Plastic shall be compatible with UL 94 for plastic materials.
8. Raceway installed for the purpose of either electrical and/or data cabling (as indicated in CPS Infrastructure Standards CAD drawings) is considered a dual channel raceway system. Each channel is the responsibility of the trade (Communications/Electrical) installing the proper cabling/wire per channel regardless of which trade installed the base raceway.
9. The base shall be dividable by means of a barrier section into two equal compartments. If the base is not separated, and has been installed under a separate contract, it is the responsibility of the contractor to verify existing conditions of raceway prior to bid. Contractor will install dividers without disruption or damage to data cables or electrical wire (depending on the existing condition).

Sentinel Technologies and The Board of Education of the City of Chicago

10. Raceway wire clips shall be placed minimum of every 2' 6" (two clips minimum per raceway sections with lengths 4' and longer) to support data cable and electrical wire.
11. Raceway shall be mounted flush on all surfaces, except on floors where uni-strut is installed. If the raceway needs to saddle over obstructions then the proper raceway fitting must be obtained from the raceway manufacture. Field modification of raceway shall not be accepted due to voiding UL testing and certification.
12. Installation of V2400BD (or approved equal) can only be used in administrative and wireless applications. No classroom, labs, or library will be allowed to use V2400BD (or approved equal) without a written variance from ITS Project Manager.
13. The number of 90° bends shall be limited to three or a total of 270 degrees including all off sets, sweeps, kicks, etc. This shall be between any pull points. The maximum run without pull boxes shall be 300 feet.
14. Raceways in computer classrooms, computer labs and administration offices shall be installed 1' 6" above the floor along perimeter walls. If the raceway cannot be installed at 1'6" due to existing conditions, the raceway may be plus or minus 6" from the 1'6" center.
15. When placing raceway on a floor, a piece of uni-strut (approximately 4") shall be placed (across the width of the raceway) 1'6" apart with uni-strut metal end caps. The raceway shall not be placed in any manner to present a tripping hazard.
16. Uni-strut shall not be placed parallel under the full length or portion of the raceway, but shall be placed across the width of the raceway.
17. Raceways shall be installed flat against wall or ceiling. Raceways requiring "bridge" or "spanning" fittings (G4000VO, V4000VO or approved equal) within a continuous length of up to fifty feet (50'), two (2) fittings (bridge or spanning) shall only be allowed.
18. Unistrut pieces shall be installed (perpendicular to raceway with metal end caps) against the wall or ceiling to support the raceway.
19. When the Unistrut pieces are used instead of the "bridge" or "spanning" fittings to the support of the raceway, the continuous length of the raceway shall be supported by Unistrut.
20. "Bridge" or "Spanning" fittings shall not be allowed in conjunction within raceway supported by Unistrut.
21. For raceway lengths exceeding fifty feet (50'):
 - The maximum allowable number of "bridge" or "spanning" fittings for each fifty feet (50') continuous length of raceway shall be no more than two (2).
 - Contractor shall not install more than two (2) "bridge" or "spanning" fittings in any incremental fifty feet of raceway.
 - Where Unistrut is required to support raceways, the raceways shall be supported for the entire continuous length of raceway.
22. Metal end cover pieces (end caps) shall be installed on all surface mounted Unistrut.
23. The following types of data/signal cables shall be used on this Project:
 - 6-strand fiber cable for distribution of data.
 - 4-pair Category 6 cable for distribution of voice.
 - 4 pair Category 6 cable for distribution of video data control signals.
 - Fiber-Optic Cable:
 - 1) The fiber-optic cable shall be factory-fabricated, jacketed, low-loss, glass-type, fiber optic multi-mode, graded index, operating at 850 nanometers (nm) and 1300 nm.
 - a) Strands per cable: 6.
 - b) The light guide building cable shall meet the following technical specifications:
 - Fiber Dimensions: 62.5 micron core 250 micron coating 125 micron cladding 900 micron buffering.
 - Fiber Identification: Individually color-coded PVC buffer.
 - Buffer Material: PVC Jacket material: PVC
 - Strength Material: Aramid yarn
 - Operating Temperature: -4 to 158 deg. F (-20 to 70 deg. C)

Sentinel Technologies and The Board of Education of the City of Chicago

- Storage Temperature: -40 to 158 deg. F (-40 to 70 deg. C)
24. Enclosures shall be securely mounted.
- a) Ceiling heights of eight (8) feet to nine (9) feet six (6) inches shall have the enclosure installed with a one (1) inch clearance between the ceiling and enclosure door.
 - b) Ceiling heights of nine (9) feet seven (7) inches and above, the enclosure will be installed at nine (9) feet five (5) inches to the top of the enclosure door.

-----The remainder of this page is left intentionally blank. -----