

1. **Objectives:**

Fire Alarm System Preventative Maintenance, **Repair**, Monitoring and New Installations -Services Services include but are not limited to the performance inspection, annual certified testing, inspections, preventive maintenance repair and new or installations. of variety a notification systems, of fire alarm and equipment and components such as manual alarm devices, smoke and heat detectors. tamper switches, pressure switches, waterflow switches, remote and graphic annunciators. main fire alarm panel and components, voice alarm system, speakers and horns and other audible and visual devices, wiring circuits and junctions, all other alarm, detection and control and ancillary devices, and emergency power operations. Services will also include central station service fire alarm monitoring, programming and installation services or other ancillary or related devices as may be necessary to assure a fully functional fire system. Services provided per this Agreement are anticipated existing for facilities, additions or modifications to existing facilities, or new facilities.

- 2. **Duration:** The initial term of this Agreement is one (1) year from the Effective Date.
- 3. <u>Definitions:</u> To avoid undue repetition, the following terms, a used in this

Agreement, shall be construed as follows:

- a) Addressable Fire Alarm System shall mean a system that is made up of a series of fire detectors and devices that are connected back to a central control panel.
- b) Alarm shall mean a signal or message from a person or device indicating the existence of an emergency or other situation that requires action by an emergency response agency.
- c) Acceptance Tests shall mean tests performed on behalf of the District by the Contractor to determine compliance with the specifications for the fire apparatus.
- d) Annunciator shall mean a unit containing one or more indicator lamps, alphanumeric displays, or other equivalent means in which each indication provides status information about a circuit, condition, or location.
- e) Central Station Service shall mean the use of a system or a group of systems including the protected premises fire system(s) in which alarm the operations of circuits and devices are signaled recorded to. in. and supervised from a listed central station that has competent and experienced operators who, upon receipt of a signal, take such action as required by NFPA Code. Related



activities at the protected premises, equipment installation, such as inspection, testing, maintenance, and runner service, are the responsibility of the central station or a listed alarm service local company. Central station service is controlled and operated by a person, firm, or corporation whose business is the furnishing of such contracted services whose or properties are the protected premises.

- f) Certified shall mean a formally stated recognition and approval of an acceptable level of competency.
- g) Compliance shall mean adherence or conformance to laws, regulations, and standards.
- h) Contractor shall mean the person or company responsible for fulfilling an agreed upon contract.
- i) Conventional Fire Alarm System shall mean a panel that covers only one zone for detection; exact location of fire is not detected.
- j) Emergency shall mean a condition that is endangering or is believed to be endangering life or property; an event that requires the urgent response of an emergency response agency.
- k) Facility shall mean any of the schools, offices, buildings identified as property belonging to Horry County Schools.

- Fire Alarm System shall mean a system or portion of a combination system that consists of components and circuits arranged to monitor and annunciate the status of fire alarm or supervisory signal initiating devices and to initiate the appropriate response to those signals.
- m) Fire Detection and Protection Systems shall mean fire detection or protection system and all associated materials and appurtenances of any nature whatsoever furnished and installed in connection with such fire detection and protection system.
- n) Inspection shall mean a visible inspection of a system or portion thereof to verify that it appears to be in operating condition and is free of physical damage.
- o) Inspector shall mean any representative of the Project Manager designated by him/her as Inspector and acting within the scope of the particular authority vested in him.
- p) Maintenance shall mean work, including, but not limited to, repair, replacement, and service, performed to ensure that equipment operates properly.
- q) Manual Fire Alarm shall mean a manually operated device used to initiate a fire alarm signal.

- r) Overtime Hours shall be the hours other than "Regular Working Hours."
- s) Point of Contact (POC) shall mean the individual designated to be the Contractor's contact with the District in regards to this Agreement.
- t) Project Manager shall mean the Manager or designee, acting purposefully for this Agreement, as the overseer.
- u) Regular Working Hours shall be the hours between 7:00 a.m. and 4:00 p.m., Monday through Friday, exclusive of holidays, as listed in the paragraph of this contract entitled "Holidays."
- v) Single Point of Contact (SPOC) shall mean the individual designated to be the Contractor's <u>only</u> contact with the District in regards to this Agreement
- w) Technician or Mechanic shall mean an individual who has through formal training, extensive hands-on experience, holds the appropriate and current South Carolina certification(s), and has also achieved in the Field of Fire Detection and protection Systems inspection, maintenance and repair as specified in this Agreement entitled "Personnel Requirements".
- x) Worker shall mean any employee of the Contractor or of a subcontractor

who performs personal labor or personal services at the work site.

 y) Design professional shall mean a subcontracted, licensed Architect or Professional Engineer, with the State of SC. Retained by the contractor to perform needed design, construction administration or permitting services integral to the needs of this agreement.

4.

Work Required by the Specifications: These Specifications relate generally to the performance necessary of all the supervision, equipment, personnel, materials and other things necessary to provide inspection, maintenance, new installations and repair services for the Fire Detection and Protection Systems and provide Central Station Monitoring at the Facility as required under this Agreement (such inspection, maintenance, repair, new installations, Central Station Monitoring and all work incidental thereto being hereinafter called "the Work" or "the Services") and the Contractor further agrees to assume and perform all other duties and obligations imposed upon him by this Agreement.

5.

Project Managers: The District appoints Terry Hucks, Coordinator of Maintenance, thucks@horrycountyschools.net, 843.488.6963 as District Project Manager to communicate with





Contractor regarding specific work order/assignments. The Project Manager may assign specific duties to HCS Regional Assistant Managers as necessary. Said manager(s) is not authorized by the District to make any commitments or make any changes which will affect the price, terms or conditions of this Agreement without a formal Agreement Modification.

The Contractor shall assign a Project Manager to manage the District's account.

Said Manager is not authorized by the District to make any commitments or make any changes which will affect the price, terms or conditions of this agreement without a formal Agreement Modification.

Inspection, Maintenance and Central 6. Station Monitoring: The Contractor shall perform routine and periodic inspection and maintenance services, and provide Central Station Monitoring as provided in the clause of the Agreement entitled "Inspection and Maintenance of the Fire Detection and Protection Systems," of this Agreement. All inspection and maintenance work shall be performed during regular working hours 7:00 A.M. to 4:00 P.M., Monday through Friday, excluding holidays. Central Station Monitoring shall be provided twenty four (24) hours per day, 365 days per year including holidays.

The Contractor shall notify the HCS Project Manager, or his designee, at least

forty-eight (48) hours in advance of starting inspection and/or any maintenance work. Additionally, the Contractor shall notify the Project or his designee the Manager of completion of all work and advise the Project Manager of any items that need correction or repairs. The Contractor shall be compensated for these inspection and maintenance services as specified in the Schedule of Payments (attached).

Repair Services: The Contractor shall 7. perform repair services in accordance with the clause of the Agreement entitled "Repair of Fire Detection and Protection Systems". Such repair service shall be available 24 hours per day, 7 days per week, including all holidays. The Contractor shall provide repair service and have service personnel at the Facility after being contacted by the HCS Project Manager or his designee. In providing repair services, the Contractor has the obligation to respond to calls with a qualified technician onsite within two (2) hours following the service call.

<u>Replacement Parts</u>: The Contractor shall render prompt parts and service by maintaining a parts inventory on their service vehicle(s). Said parts inventory shall be of sufficient size and variety to offer a level of parts availability of 95% as required for repairs. Necessary repairs that require

parts not available from said inventory must be available within 48 hours from repair



assessment. Parts that fail to meet specified delivery time will be billed at a 15% discount to the District.

Personnel Requirements: The Contractor 8. (and any subcontractor) shall furnish competent and adequately trained personnel to perform the Work required hereunder. Inspection, maintenance, repair services and new installations shall be performed by and/or Mechanics. Technicians. competently supervised, who shall be qualified to keep the Fire Detection and Protection Systems in proper operating condition. If, in the opinion of the HCS Project Manager, any Technician Mechanic so assigned is performing his functions unsatisfactorily, the Contractor shall take all steps necessary to assure that defective performance is remedied and that required Services hereunder all are satisfactorily provided.

Technicians and Mechanics providing inspection, maintenance, repairs and new installations of the Fire Detection and Protection Systems under this Agreement shall have successfully completed an industry accredited course covering inspection, maintenance, repairs and new installation of fire detection and protection systems. **Technicians must be NICET II Level certified (minimum level accepted).**

Design professionals providing Design, Construction Administration and / or permitting services shall be duly licensed by the State of SC and have successfully completed and be experienced in, similar projects within the last 5 years.

Should the need arise for additional Design services for 'general construction modifications' to the facility, due to code requirements or OSF requirements triggered by the proposed fire alarm work; the contractor shall be able to engage and retain the needed design professional and subcontractor within the reasonable limits of the project scope being undertaken.

The Contractor shall provide service work vehicles for the transportation of his men, materials, tools, and equipment to the job site.

The Contractor shall provide a contact list to the HCS Project Manager of all personnel, regardless of responsibility, with assignments in reference to this Agreement. This list shall be provided within thirty (30) days of Agreement's effective date.

The Contractor shall provide the cost of all parts, pertinent to this Agreement, to the HCS Project Manager within thirty (30) days of Agreement's effective date.

The Contractor shall comply with the Facility rules, regulations and such procedures as are now in force and such reasonable future rules, regulations, and procedures as may hereafter be adopted by the District for safe operation of motor vehicles at the Facility.



Working Drawings, Software, etc.: All working drawings, install or upgrade software, etc. on alterations and/or new equipment/systems installed by Contractor, including upgrades, software wiring diagrams and connection diagrams, present and future, shall be accessible to the District at no additional charge. Before using any working drawings, the Contractor shall submit prints thereof, including the required number of revised prints, until the drawings are approved by the Project Manager. After approval thereof, no change shall be made thereon unless approved in writing by the HCS Project Manager.

TECHNICAL SPECIFICATIONS FORTHE FIRE DETECTION ANDPROTECTION SYSTEMS

General Description: This Section specifies all fire alarm standards required to be maintained under this Agreement. The systems specified herein are to be provided with routine inspection and maintenance and repair services as provided in the clauses of the Agreement entitled "Inspection and Maintenance of Fire Detection and Protection Systems" and "Repair of the Fire Detection and Protection Systems."

Codes and Standards

• The electrical and fire alarm installation shall conform to all provisions of the latest applicable: National Electric Code (NEC), the National Electric Safety Code (NESC), The National Fire Protection Association (NFPA), the Insurance Service Organization (ISO), HCS Inspection, Testing and Maintenance Requirements for Fire Protection and South Carolina state and local codes.

- Installations shall comply with the latest applicable: requirements of the South Carolina Building and Fire Codes, and the HCS Inspection, Testing and Maintenance Requirements.
- In case of conflict between provisions of codes, laws, ordinances, etc., the more stringent requirements shall apply.
- UL Labels All electrical materials and equipment for which there are established Underwriters Laboratories (UL) standards shall bear the (UL) label.
- Standards Publications Standards publications of technical organizations and regulatory agencies are referenced herein, and unless stricter requirements are indicated, materials and equipment so specified shall be manufactured, tested and installed to conform, as a minimum, to the requirements of such reference standards and publications. The following list of organizations (with their identifying initials) involved in electrical standards is not intended to be all- inclusive:
 - American National Standards Institute – ANSI
 - American Society for Testing and Materials –ASTM



- Institute of Electrical and Electronics Engineers – IEEE
- Insulated Power Cable Engineers Association – IPCEA
- International Municipal Signal Association – IMSA
- Joint Industrial Council JIC
- National Electrical Manufacturers Association – NEMA
- National Fire Protection Association – NFPA
- Underwriters' Laboratories UL

<u>**Test Log:**</u> Maintain on-site test logs indicating equipment tested and action taken to correct deficiencies shall be maintained atthe facility by the Contractor before leaving the premises.

Acceptance Tests: The Contractor shall perform acceptance tests for existing fire detection and protection equipment to demonstrate to the HCS Project Manager the reliability of the existing fire detection and protection equipment within thirty days of Agreement award. Similar tests shall be performed for future units. Tests shall demonstrate that all signals are transmitted by the various systems and devices to the local annunciator panel and any other remote signal reception locations including central station monitoring.

The acceptance tests shall include all the tests required under "Periodic Tests and Inspections" except that all existing and future units of fire detection and protection equipment shall be tested and the frequency of testing specified is inapplicable.

All labor and materials required for the above tests shall be furnished by the Contractor at his own expense, except for water and electrical power that will be furnished by District. Should the foregoing tests reveal defects in existing equipment or materials owned by the District, the Contractor shall report this condition in writing to HCS Project Manager within 24 hours.

Upon completion of each acceptance test, the Contractor's obligation to perform maintenance and supervision will commence upon direction from the HCS

Project Manager. The Contractor shall list each devise tested during the acceptance tests in the Test Log as to type and location and shall use this list as a log of equipment which must be tested and maintained.

INSPECTION AND MAINTENANCE OF THE FIRE DETECTION AND PROTECTION SYSTEMS

General Requirements: The Contractor shall perform routine and periodic inspection and maintenance services and Central Station Monitoring for the Fire Detection and Protection Systems at the Facility as specified hereunder, and as required to keep such equipment in reliable operating condition at all times, 24 hours per day, seven days per week, including holidays.



Compensation for inspection and maintenance defined in this Paragraph shall be in accordance with Schedule of Payment (attached).

The Contractor's Technicians and Mechanics shall report to the HCS Project

Manager at the start and completion of each inspection and/or maintenance routine including Repair Services. This shall include necessary arrangements for sounding of gongs, horns, bells, strobes, etc. Said technicians shall keep the Project Manager informed of the work performed by maintaining and updating the test log and HCS SchoolDude work order system indicating equipment tested and actions taken to correct any deficiencies. The test log shall be maintained on premises. Said Technicians and Mechanics shall also verbally inform the Project Manager of operational status of all systems, before leaving premises.

Generally, scheduled inspections and maintenance shall consist of inspection, testing, cleaning, lubrications, adjustment, the replacement of parts and wiring that are approaching unserviceable status, and all actions necessary to prevent failures and to extend the system's useful life. The Contractor shall schedule his work in such a manner that the interruption of the fire detection and protection systems shall be minimal.

The Contractor shall perform the complete Fire Detection and Protection Systems inspection and maintenance service routines subject to a schedule approved in advance by the Project Manager as defined below. During each complete inspection and

maintenance service routine, the Contractor shall perform the following activities and must also perform any other tests that are required by the National Fire Protection Association and Standards.

<u>ROUTINE INSPECTION</u> <u>MAINTENANCE PROCEDURES</u>

Central Station Monitoring shall comply with the "supervised monitoring station" requirements listed in the 2014 OSF Design Guide or current version. The monitoring service shall notify the HCS Project Manager if this requirement

changes based on a change in the Code or a change in OSF requirements.

A. <u>Smoke and Air Duct Detectors –</u> <u>Routine Inspection</u>

Work to be done every month except when Bi-Annual Inspections are performed:

- Operate several smoke and air duct detectors on each individual circuit or zone every month to ensure that all smoke and air duct detectors are tested and cleaned once every six (6) months and each circuit or zone is tested once per month. Submit a completed schedule, once complete cycle of testing is performed.
- Verify proper fan shut down.



- Check condition of conduit, wiring, devices, etc.
- Verify proper visual indication at annunciator panels and reset panel. Verify proper voltage and condition of power supplies and batteries.
- The Contractor shall repair any inoperative devices and clear up any circuit or zone faults and trouble alarms before leaving the premises.
- Advise HCS Project Manager of any items that need correction.

B. Fire Detection and Protection Control Systems, and Panels - Routine Inspection

Work to be done every month except when Bi-Annual Inspections are performed:

- Visually inspect all fire detection and protection panels.
- Ensure proper operation of fire detection and protection panels. Reset all panels.
- Replace lamp indicators as necessary.
- Check battery for proper voltage and condition.
- Check condition of conduit, wiring, outside lines, sounding devices, etc.
- Verify interface with HCS Facilities / Maintenance Department, and central station monitoring.

- Verify system operation upon open, grounding or shorts in wiring from main panel.
- Dust and clean equipment exteriors.
- Verify cool quiet operation of equipment.
- Exercise all command functions.
- Verify displays and printouts.
- Run alarm summary, control summary, trouble summary, and time summary.
- Repair any inoperative devices and clear up any circuit or zone faults before leaving the premises.
- Advise the HCS Project Manager of any items that need correction.

C. Central Station Monitoring – Routine Inspection

Monitoring is to be provided twenty-four (24) hours per day 365 days per year, including holidays. Upon receipt of notice of alarm the Contractor shall:

- Immediately notify the Horry County Fire Department (HCFD) that there is an alarm at the given location. Contact the HCS Project Manager immediately to determine if a response is required by the Contractor. If after hours (nights, weekends, holidays), the "On Call" person should be notified first.
- Retain hard copies of notice of alarm.
- Submit hard copies of notice of alarm to the Project Manager on a monthly basis.
- Repair any inoperative devices and clear up any circuit or zone faults and



trouble alarms before leaving the premises.

• Advise the HCS Project Manager of any items that need correction.

PERIODIC INSPECTION AND MAINTENANCE PROCDURES

A. Manual Fire Alarm Systems – Bi-Annual Inspection

Work to be done two (2) months out of the year (TBD by Project Manager):

- Operate all manual fire alarm stations on each individual fire alarm circuit or zone to ensure that all manual stations and circuit or zones are teste. Verify proper HVAC fan operation after initiation of alarm. Where gongs, horns, etc. are involved, operate at least one station to give a signal in the sounding devices.
- Check condition of conduit, wiring, sounding devise, etc.
- Check manual fire alarm stations for tight terminal connections, cleanliness, and freedom from corrosion or moisture.
- Repaint manual fire alarm stations as necessary.
- Test all alarm bells and their associated circuit or zones.
- Verify proper visual indication at panels. Reset panels. All records shall be in writing indicating that device was tripped in the field, not at the panel.

- Repair any inoperative devices and clear up any circuit or zone faults and trouble alarms before leaving the premises.
- Advise the HCS Project Manager of any items that need correction.
- A. Smoke, Air Duct Detectors, Dampers, etc. – Bi-Annual Inspection: Work to be done two (2) months out of the year (TBD by Project Manager):
 - Disconnect all smoke and air duct detectors in order to test integrity of each circuit or zone. Verify trouble indicator at control panel.
 - Check sensitivity of smoke and air duct detectors and adjust as necessary. Use sensitivity meter as recommended by detector manufacturer. All duct detectors to be tested with a minimum airflow of 500 fpm through the detector.
 - Check time to reach alarm condition and adjust as necessary. Reset system.
 - Test all Fire/Smoke dampers and purge fans for proper operation.
 - Check condition of conduit, wiring, devices, etc.
 - Verify proper visual indication at annunciator panels. Reset panel. Verify proper voltage and condition of power supplies and batteries.
 - Repair any operative device and clear up any circuit or zone faults and trouble alarms before leaving the premises.
 - Advise the HCS Project Manager of any items that need correction.



REPAIR OF FIRE DETECTION AND PROTECTION SYSTEMS

As directed by the HCS Project Manager, the Contractor shall furnish all labor and materials for repair services and shall replace worn or doubtful equipment, devices and/or components requiring replacement under this Agreement with new equipment, devices and/or components. All new equipment, devices and/or components shall be of the same manufacturer and of current District design. or approved equal. compatible with existing equipment, devices and/or components and shall be of equal quality and identical capabilities as the original equipment, devices and/or components unless otherwise agreed to or delineated by the Project Manager.

Compensation for labor and/or equipment, devices and/or components necessary to perform the repairs required herein shall be in accordance with the Schedule of Payment.

Repair Service shall be available outside of normal working hours twenty-four (24) hours a day, seven days a week including legal holidays. The Contractor has the obligation to respond to calls with a qualified technician within two (2) hours following notification by the Project Manager. All malfunctions or inefficient or improper operation of equipment, device and/or components shall be investigated by the Contractor and the cause thereof forthwith repaired, removed, adjusted or otherwise attended to, so that the equipment, device and/or component is restored to proper operation at the earliest possible time.

SERVICE FORM

The Contractor's employees shall report to the Project Manager or his designated representative at the start and completion of each inspection maintenance or repair visit and said employees shall keep the Project Manager informed of the work performed by them by furnishing the Project Manager or his representative with a completed "Service Form", the format of

which shall be approved by the Project Manager and shall include, in addition to any other pertinent data, such data as times of arrival and departure, materials replaced, the specific components which were inspected, serviced and/or repaired and the employee's names.

A completed copy of the Contractor's "Service Form" shall be attached to and submitted with each of the Contractor's invoices.

REPLACEMENTOFMAJOREQUIPMENT,DEVICES,AND/ORCOMPONENTS



When it becomes necessary for the Contractor to replace any major equipment (cost greater than \$5,000), devices and/or components, during the performance of repair services under this contract, the Contractor shall first submit to the District for its approval the name of the item, the identifying number thereof, if

any, the quantity needed, the name of the proposed supplier and the proposed purchase price or if supplied by the Contractor the price that the District is to be billed therefor. The District shall have the option of a) approving same; or b) supplying said material to the Contractor itself provided it is of equal or higher quality to that proposed by the Contractor.

SCHEDULING OF WORK

The Contractor shall follow the schedule of inspection and maintenance as indicated herein on the month and day stipulated by the Project Manager. This schedule<u>will be</u> submitted to the Contractor a minimum of thirty (30) days in advance of the scheduled maintenance dates.

EQUIPMENT LISTING

Fire detection and protection system components, equipment, devices, and components to be inspected, maintained, and repaired hereunder are listed in Exhibit B – Equipment Listing.

Contractor shall provide an updated spreadsheet that reflects District fire panel equipment. Spreadsheet shall show Facility,

Facility Address, FA Panel, Account #, and Evacuation Type. Said spreadsheet shall be updated every time a device is changed.

LOCATION LISTING

A list of Horry County Schools' sites to be maintained by this Agreement, including, schools, offices, buildings, etc. is detailed in the Schedule of Payment attachment.

NEW FACILITIES/FACILITY EXPANSION

New facilities, expansions, renovations, etc. shall be included in this Agreement as necessary. As of this date, there are additional schools being constructed and plans for the renovation of existing schools.

HOLIDAYS

The following holidays will be observed by the District:

New Year's DayJuly 4thLabor DayThanksgivingChristmas

DELIVERY



Prices as listed on the Schedule of Payment include all delivery costs for parts ordered for repair.

POINT OF CONTACT

For the purposes of this Agreement the Point of Contact (POC) for HCS will be Terry Hucks, Coordinator of Maintenance. The POC may appoint HCS Maintenance Assistant Managers or Construction Project Managers as necessary for individual projects.

The Contractor shall appoint a Single Point of Contact (SPOC) for all matters regarding the District's account including but not limited to the following:

- Serve as liaison between District and Contractor;
- Communicate directly with District POC;
- Account reporting requirements;
- Provide relevant account information and quickly address issues concerning billing, invoices, account questions, etc.

The Contractor shall appoint a SPOC for all matters regarding field issues including but not limited to the following:

- Communicate directly with District POC;
- Prepare proposals;
- Develop and maintain project schedules;
- Participate in pre-bid conferences on select projects to ensure projects

have success plan for execution and project management;

- Coordinate manpower requirements in order to meet schedules;
- Maintain records for project documentation;
- Provide oversight to District Project Manager(s) on assigned projects.

BILLING

All billing/invoice repairs shall be submitted in a timely manner to ensure proper approval by the Area Manager for each region in which repair is made. Therefore, any inconsistencies or discrepancies of invoicing can be revised and corrected. Invoices should be consolidated monthly and submitted for payment to HCS within two (2) weeks of the month end.