



**JEFFERSON COUNTY**  
**DEPARTMENT OF ADMINISTRATIVE SERVICES**  
729 MAPLE ST / PO BOX 100  
HILLSBORO MO 63050  
WWW.JEFFCOMO.ORG

**Invitation for Bid: FIRE ALARM SYSTEM**

**Date Issued: 5-13-2015**

BIDS SHALL BE ACCEPTED UNTIL: TUESDAY, JUNE 16, 2015, AT 2:00 P.M. LOCAL TIME.

**Specification  
Contact:**

**KRISTY MOSS**  
Department of Public Works  
636-797-5569

**Contract  
Contact:**

**VICKIE PRATT**  
Department of Administrative Services  
636-797-5380

**Mail (3) Three  
Complete Copies  
With Vendor And  
Bid Information As  
Shown In Sample:**

**SAMPLE ENVELOPE**

***VENDOR NAME***

***VENDOR ADDRESS***

***CONTACT NUMBER***

**DEPARTMENT OF THE COUNTY CLERK**

**JEFFERSON COUNTY MISSOURI**

**729 MAPLE ST / PO BOX 100**

**HILLSBORO MO 63050-0100**

***SEALED BID: (BID NAME)***

**Contract Term:**

**UPON APPROVAL OF THE  
COUNTY COUNCIL AND  
COUNTY EXECUTIVE**

**Vendor  
Information:**

The undersigned certifies that he/she has the authority to bind this company in an agreement/contract to supply the commodity or service in accordance with all terms, conditions, and pricing specified. This Bid, if accepted, will constitute an Agreement and Contract with Jefferson County, Missouri, upon approval of the County Council and County Executive. Prices are firm during this agreement term, unless agreed upon in writing by the County. The County has the option to renew this agreement at the same terms and conditions as the original agreement for one additional one-year term with the written consent of the successful Bidder. Price increases for renewals are not authorized unless approved in writing by the County.

**Company Name**

**Authorized Agent (Print)**

**Address**

**Signature**

**City/State/Zip Code**

**Title**

**Telephone #**

**Date**

**Tax ID #**

**E-mail**

**Fax #**

## TABLE OF CONTENTS:

<b>Legal Notice and Invitation for Bid</b>	<b>Page 1</b>
<b>Table of Contents</b>	<b>Page 2</b>
<b>Bid Requirements</b>	<b>Page 3</b>
<b>Bid Response and Contract</b>	<b>Page 5</b>
<b>Affidavit</b>	<b>Page 9</b>
<b>Specifications</b>	<b>Page 11</b>

### **\*REQUIRED DOCUMENTS\***

- 1. Current and valid Certificate of Insurance or binder showing required insurance coverage must be provided with each bid.**  
(County must be added as additional insured if awarded)
- 2a. Proof that Bidder does not owe delinquent real or personal property in Jefferson County (tax receipts for past 3 years)**  
Obtain receipts at <http://jeffersonmo.devnetwedge.com>  
**Or**
- 2b. A notarized affidavit stating that the applicant does not own any real estate or personal property in Jefferson County on company letterhead.**
- 3. A Notarized affidavit of work authorization and current business entity status with E-verification documentation. (pages 9 & 10)**
- 4. Agreement to be executed by the County upon approval by the County Council and County Executive. (Bidder is required to complete company information and execute signature)**
- 5. Cooperative Bid Form (last page)**
- 6. All pages of the Invitation for Bid/Request for Proposal must be used when submitting your bid/proposal response along with initialing each page with the bid/proposal. Additional information may be included separately.**
- 7. Bid deposits/bonds must be in the exact amount as stipulated in the bid. (if required)**

**\*BIDS WILL BE REJECTED IF REQUIRED DOCUMENTATION IS NOT INCLUDED OR COMPLETED**

## **1.0 BID REQUIREMENTS**

**Bidder shall initial all pages and return where the Bid Document denotes "BIDDER'S INITIALS: \_\_\_\_\_"**

### **1.1 BID SUBMISSION:**

Submit bid form in original (one original) and two (two copies) with all specification pages, if applicable. No facsimile or electronic bids shall be accepted and shall be rejected. The Vendor prior to the submission dead line as stated on page 1 must submit all bids. Late bids will not be accepted and returned to the vendor unopened. The County reserves the right to request additional written or oral information from Respondents in order to obtain clarification. A fully executed Affidavit is required by Section 285.530 RSMo and shall be submitted with the bid form. A copy of the Affidavit is attached hereto. Failure to execute the Affidavit shall result in the bid being rejected. Failure to comply with any provision, provide any required documentation, insurance forms or deposits or bonds in exact amounts or any other term or condition that is not in strict conformance shall result in the bid being rejected.

### **1.2 BASIS OF BID AWARD:**

Award may be made on an item-by-item basis to the lowest and best Bidder(s) or award may be made to the lowest and best bid total, whichever provides the greatest value to the County from the standpoint of suitability to purpose, quality, service, previous experience, price, ability to deliver, or any other reason deemed to be in the best interest of the County. Quantities stated herein represent an estimate for the period stated. Orders shall be placed for actual requirements as needed. The County may reject any or all bids for any reason and may waive any informality. Bids submitted from a Missouri State Contract shall include a copy of the State Contract with the bid. Bid award does not constitute an order or obligation to order by the County. The issuance of a Purchase Order Number shall be construed as acceptance of a Contract with all terms, conditions, and prices firm during the length of the agreement terms.

### **1.3 BID AWARD:**

It is further agreed that the Contract shall not be valid and binding upon the County until approved by the County Counselor, as to legal form and is subject to the Ordinances, Resolutions and Orders of Jefferson County, Missouri, and State and Federal Law. If no Bid or Bids have been awarded by the County Council within forty-five (45) days following the opening of the bids then all bids will be deemed Rejected.

### **1.4 BID PREPARATION:**

1. Bidders are responsible for examination of drawings, specifications, schedules and instructions. Failure to do so will be at the Bidder's risk.
2. Each Bidder shall furnish the information required by the invitation. The Bidder shall sign all required documents. All deletions and erasures shall be initialed
3. Alternate bids for supplies or services other than specified shall not be considered unless authorized by invitation.
4. Bidder shall state a definite time for delivery of goods or for performance of services unless otherwise specified in the invitation for bid.
5. When specified, samples must be timely submitted and at no expense to the County.
6. Failure to adhere to all requirements may result in the response being disqualified as non-responsive.

### **1.5 MODIFICATION OR WITHDRAWAL OF BIDS:**

Bids may be modified or withdrawn prior to the exact hour and date specified for receipt of bids, provided the modification or withdrawal is in writing and is delivered in the same manner as a bid submission.

### **1.6 LATE BIDS:**

It is the responsibility of the Bidder to deliver his bid or bid modification on or before the date and time of the bid closing to the Department of the County Clerk. Bids received late will be rejected and returned unopened to the Bidder.

### **1.7 BID DEPOSITS/BONDS:**

Bid Deposits/Bonds are not required unless specified in the specifications. Bid deposits/Bonds must be in the exact amount as stipulated in the bid.

### **1.8 MATERIAL AVAILABILITY:**

Bidders must accept responsibility for verification of material availability, product schedules and other pertinent data prior to submission of bid and delivery time. It is the responsibility of the Bidder to notify the County immediately if the materials specified are discontinued, replaced, or not available for an extended period of time. All materials ordered by the County, shall be as needed. A sample of materials may be requested.

### **1.9 ALTERNATE BIDS:**

Alternate Bids for items will be accepted except when stated "**NO SUBSTITUTIONS**". Bidders must submit complete specifications on all alternate bids with the bid form. Alternate bids without complete specifications may be rejected. Alternate bids and exceptions to bid clauses must be clearly noted on the bid form. The County may accept or reject alternate bids; whatever is most advantageous to the County.

#### **1.10 INCORPORATION OF DOCUMENTS:**

The terms of the Bid Invitation, Bid Specifications, Bid Form are and shall be incorporated into the contract as if fully setout therein. The Bid, if accepted and approved by the County Council and County Executive shall constitute the terms of a Contract or Agreement with Jefferson County, Missouri, subject to any further Amendments, Memoranda or other documents or specifications which must be set forth in writing and signed by all parties.

#### **1.11 ADDENDA:**

Addenda to bid specifications are incorporated by reference as if fully setout herein. It is the responsibility of the vendor to insure and verify that they are in receipt of and completed all attached addenda's prior to submission of bid forms. Verification is made by contacting the Office of Contracts and Grants at (636) 797-5382, or by reviewing the County Web Site. ([www.jeffcomo.org](http://www.jeffcomo.org)).

#### **1.12 INSURANCE:**

The Vendor/Contractor shall purchase and maintain insurance with an insurance company licensed to do business in the State of Missouri or in the state where the vendor is incorporated or otherwise licensed to do business and which shall remain, at all times during the term of any contract with the County, in full force and effect. Preference will be given to a Vendor/Contractor who provides insurance with an insurance company licensed to do business in the State of Missouri, but in any event said Vendor/Contractor shall provide said insurance at its own expense. Such insurance shall be provided as will protect the Vendor/Contractor from claims which may arise out of or result from the Vendor/Contractor's execution of the work, whether such execution be by himself, his employees, agents, or by anyone for whose acts any of them may be liable. If any such work covered by the Contract is to be performed on County owned or leased premises, the Vendor agrees to carry liability and workman's compensation insurance, satisfactory to the County, and to indemnify the County against all liability, loss, and damage arising out of any injuries to persons and property caused by the Vendor, his sub-contractors, employees or agents. The insurance coverage shall be such as to fully protect the County and the general public from any and all claims for injury and damage resulting by any actions on the part of the Vendor/Contractor or its' forces as enumerated above. All policies must name the County as an additional insured and provide for thirty (30) days written prior to any material changes or cancellation. Any disputes regarding a breach, insurance amounts, liability, coverage, lapse or otherwise shall be litigated in the Circuit Court of Jefferson County, Missouri and the same shall be incorporated into any Contract agreed to by the parties.

THE COUNTY REQUIRES A CURRENT AND VALID CERTIFICATE OF INSURANCE OR BINDER SHOWING REQUIRED INSURANCE COVERAGE MUST BE PROVIDED WITH EACH BID. JEFFERSON COUNTY MUST BE ADDED AS AN ADDITIONAL INSURED AFTER AWARD OF THE BID. ANY LAPSE IN INSURANCE COVERAGE OR CANCELLATION THEREOF BY THE CONTRACTOR OR SUB-CONTRACTORS DURING THE TERMS OF THE CONTRACT SHALL IMMEDIATELY BE DEEMED A MATERIAL BREACH UNDER THE TERMS OF ANY CONTRACT.

**A. (X)Required ( ) Not Required      Comprehensive General Liability Insurance**

The Vendor/Contractor shall maintain and keep in full force and effect during the terms of this Contract such comprehensive general liability insurance as shall protect them from claims which may arise from operations under this Contract, whether such operations be by themselves or by anyone directly or indirectly employed by them. The amounts of insurance shall be not less than \$1,000,000.00 combined single limit for any one occurrence covering both bodily injury and property damage, including accidental death.

**B. (X)Required ( ) Not Required      Professional Liability Insurance**

The Vendor/Contractor shall provide the County with proof of Professional Liability Insurance, which shall protect the County against any and all claims, which might arise as a result of the operation of the Vendor/Contractor in fulfilling the terms of this Contract during the life of the Contract. The minimum amounts of such insurance will be \$1,000,000.00. Should any work be subcontracted, these limits will also apply.

**C. (X)Required ( ) Not Required      Worker's Compensation Insurance:**  
per Missouri Revised Statutes Chapter 287

The Vendor/Contractor or his sub-contractor or contractors, shall maintain and keep in force of this Contract such worker's compensation insurance limits as required by the statutes of the State of Missouri and Employer's Liability with limits no less than \$500,000.00.

#### **1.13 BID SUBMISSIONS**

Bids submitted on separate forms are NOT acceptable unless specified in the Bid Document. Failure to complete bid forms to the satisfaction of the County may result in rejection of your bid. It is the responsibility of each Bidder before submitting a bid to examine ALL documents thoroughly, and request written or oral interpretation of clarifications soon after discovering any conflicts, ambiguities, errors, or omissions in the bidding documents. Request for clarification must be received prior to bid openings.

## **1.14 BID OPENINGS**

Bids will be publicly opened and read aloud at the time indicated on page 1. The Bidders and the public are invited but not required to attend the formal opening of the bids. No decisions relating to the award of a contract or agreement will be made at the opening.

## **1.15 BID TABULATIONS**

Bid Tabulations are not available for 5 to 7 business days following the Bid Opening. Bid submissions are open for public review at the time of the Bid Opening. Bid tabulations are posted on the County's web-site address, [www.jeffcomo.org](http://www.jeffcomo.org). **NO COPIES** of bid tabulations are sent to vendors.

## **2.0 BID RESPONSE AND CONTRACT**

### **2.1 BIDDER REPRESENTATIONS:**

The Bidder, by executing the Bid form certifies that:

- A. The bid complies with Invitation for Bid form and Bid Specifications.
- B. Bidder is not debarred or suspended from participation in Federal Assistance programs.

### **2.2 TAXES:**

No bid or proposal shall be awarded by Jefferson County unless the prospective Bidder provides proof that the Bidder does not owe delinquent real or personal property taxes to Jefferson County. The prospective Bidder is required to provide proof in the form of an original paid tax receipt issued by the Jefferson County Collector or a verified affidavit stating that the applicant does not own any real or personal property in Jefferson County. Tax receipts for the past 3 years are required and may be obtained at <http://jeffersonmo.devnetwedge.com/> or a notarized affidavit stating that the applicant does not own any real or personal property in Jefferson County on company letterhead.

**Section 135.040 of the Jefferson County Code of Ordinances (Ord. No. 10-0411) requires that no bid or proposal shall be awarded by Jefferson County unless the prospective Bidder provides proof that the Bidder does not owe delinquent real or personal property, or that the Bidder does not own any real or personal property in Jefferson County. All delinquent real or personal property taxes shall be paid, in-full, prior to the award of any bid, or proof shall be provided that the Bidder does not own any real or personal property in Jefferson County prior to the award of any bid. Jefferson County considers that the failure to pay any and all real or personal property taxes due Jefferson County, Missouri, the failure to report all real or personal property owned, held or used in Jefferson County, the failure to provide proof thereof, and/or the failure to keep said tax bills current shall be deemed a material breach of the contract and will subject the contract to immediate cancellation. All taxes, due and owing, must be paid in full at the time the bid is awarded by Jefferson County and remain paid during the entire term of the contract unless the prospective Bidder provides proof that the Bidder does not own real or personal property in Jefferson County. This requirement shall not apply to the award of bids for projects which are funded in whole or in part by Federal funds.**

### **2.3 CERTIFICATION OF INDEPENDENT PRICE DETERMINATION:**

- A. The prices in the bid shall be independently determined, without consultation, communication, or agreement for the purpose of restricting competition as to any matter relating to price with any Bidder or other person.
- B. Unless otherwise required by law, the prices shall not have been knowingly disclosed by the Bidder prior to opening.
- C. No attempt has been made or will be made by the Bidder to induce any other person or firm to submit or not to submit a bid.

### **2.4 PRICE:**

The price(s) specified in this bid shall be firm and not subject to contingency or reservation. If the Vendor fails to honor stated prices as submitted in the Bid Form or Contract, the County reserves the right to obtain the same items from the next lower vendor who submitted a bid price for the item. The original vendor shall be responsible for the difference in price and required to make restitution to the County for the difference in price. The Bidder represents prices specified in the bid do not exceed current selling price for the same or substantially similar good or service, and are the same as or lower than other prices charged to the Bidder's most favored customer. In the event the stated prices are determined to be higher than the prices for which Supplier has sold the items, or services, to others, this contract price shall be reduced accordingly. **Bid prices are ALL INCLUSIVE: (Shipping, Handling, Delivery, and Assembly to locations specified by the County). Prices shall be firm for ALL County departments and locations for term of the agreement.**

### **2.5 MISSOURI DOMESTIC PRODUCT PROCUREMENT:**

Bidder represents that the goods provided comply with Sections 34.350 to 34.359, RSMo, known as the Domestic Product Procurement Act. The Act encourages the purchase of products manufactured or produced in the United States, State of Missouri, and Jefferson County, Missouri. Bidder shall include proof of compliance with the Act with the bid when requested.

**2.6****NON-EXCLUSIVE AGREEMENT:**

The contractor shall understand and agree that the contract shall not be construed as an exclusive agreement and further agrees that the County may secure identical and/or similar services or products from other sources at anytime in conjunction with or in replacement of the contractor's services.

**2.7****DEFINITIONS:**

- A. The term "County" means the Jefferson County, Missouri and its designated representatives.
- B. The term "Vendor" means Supplier, Contractor, and Seller and includes designated representatives.
- C. The term "IFB" means Invitation for Bid.
- D. The term "Agreement/Contract" means Binding Agreement, Contract, Request for Purchase, Order.

**2.8****INSPECTION, ACCEPTANCE AND APPROVALS:**

Goods shall at all times and places, including the period of manufacture, are subject to inspection and test by County. County will accept or give notice of rejection of goods delivered within a reasonable time after receipt. Acceptance shall not waive any warranty. All goods supplied are subject to final inspection and acceptance by County notwithstanding payment, prior inspections or approvals. County may require prompt replacement or correction of rejected goods at Supplier's expense, including a reduction in price for rejected goods. Supplier shall not resubmit rejected goods to County without prior written approval and instructions from County. In addition, Supplier shall identify resubmitted goods as previously rejected. Supplier shall provide and maintain a quality assurance and control system acceptable to County.

**2.9****WARRANTY:**

Unless otherwise agreed to in writing by the parties, Supplier warrants that items ordered to specifications will conform thereto and to any drawings, samples or other descriptions furnished or adopted by County, or, if not ordered to specifications will be fit and sufficient for the purpose intended, and that all items will be new, merchantable, of good material and workmanship, and free from defect. Such warranties, together with Supplier's service warranties and guarantees, if any, shall survive inspection, test, acceptance of, and payment for the items and shall run to County and its assigns. Except for latent defects, the County shall give notice of any nonconformity to the Supplier within one (1) year after acceptance. County may return for credit or require prompt correction or replacement of the defective or non-conforming goods or have the defective good corrected or replaced at Supplier's expense. Return to Supplier of any defective or non-conforming goods and delivery to County of any corrected or replaced goods shall be at Supplier's expense. Defective or non-conforming items shall not be corrected or replaced without written authorization by County. Goods required to be corrected or replaced shall be subject to the provisions of this clause and the clause hereof entitled "Inspection, Acceptance and Approvals" in the same manner and to the same extent as goods originally delivered under this contract.

**2.10****PAYMENT:**

County will pay Supplier for goods upon delivery to, submission of certified invoices with attached tipping fee receipts and acceptance. The County will not be responsible for articles or services furnished without a purchase order. Price is tax-exempt.

**2.11****CHANGE ORDER:**

County may make changes within the general scope of this contract. If any such changes cause an increase or decrease in the cost of or the time required for the performance of any part of the work, whether changed or not changed by any such order, an equitable adjustment shall be made in the price or delivery schedule or both, and any change order shall be in writing. Any claim by a Supplier for adjustment under this clause shall be asserted within fifteen (15) days from the date of receipt of this written order directing the change, provided, however, County, if it decides that the facts justify such action, may receive and act upon such claim asserted at any time prior to final payment.

**2.12****DELIVERIES:**

Deliveries shall be made in strict accordance with any delivery schedule contained in the bid specification or contract and in the exact quantity ordered. Failure to adhere to delivery schedule is reason for termination in accordance with the "termination" clause. Deliveries are to be made at locations specified by the County at time of Order.

**2.13****RESPONSIBILITY FOR SUPPLIES:**

Pursuant to Section 290.560 RSMo, Supplier/Contractor shall employ only Missouri laborers and laborers from nonrestrictive states except that other laborers may be used when Missouri laborers or laborers from nonrestrictive states are not available, or are incapable of performing the particular type of work involved, if so certified by the contractor and approved by the County. Except as otherwise provided, Supplier shall be responsible and bear all risks for loss and damage to goods until delivery at County's facilities, regardless of F.O.B. point of inspection or acceptance; and if the goods are rejected.

**2.14****SUBCONTRACTS:**

Supplier shall not enter into any subcontract(s) in excess of \$25,000 or 20% of this contract price; whichever is less, for any goods without County's prior written approval.

**2.15 CHOICE OF LAW:**

This bid and contract shall be governed and interpreted according to the laws of the State of Missouri. Venue for any court action shall be in Jefferson County, Missouri.

**2.16 TERMINATION:**

- A. General: Performance of work may be terminated by the County in whole, or from time to time in part, whenever County shall determine that such termination is in the best interests of County with a thirty (30) day written notice. The Vendor may terminate the Agreement/Contract upon a sixty (60) day prior notice in writing. In the event of any termination of the Agreement/Contract by the Vendor, the County may purchase such supplies and/or services similar to those terminated and for the duration of the Agreement/Contract period the Vendor will be liable for all costs in excess of the established contract pricing.
- B. Bankruptcy or Insolvency: In the event bankruptcy proceedings are commenced by or against Supplier or under any provisions of the United States Bankruptcy Act or for the appointment of a receiver or trustee or a general assignment for the benefit of creditors of either party, County shall be entitled to terminate without further cost or liability. The County may cancel the Agreement/Contract or affirm the Contract and hold the Vendor responsible for damages.
- C. **Section 135.040 of the Jefferson County Code of Ordinances (Ord. No. 10-0411) requires that no bid or proposal shall be awarded by Jefferson County unless the prospective Bidder provides proof that the Bidder does not owe delinquent real or personal property, or that the Bidder does not own any real or personal property in Jefferson County.** All delinquent real or personal property taxes shall be paid, in-full, prior to the award of any bid, or proof shall be provided that the Bidder does not own any real or personal property in Jefferson County prior to the award of any bid. Jefferson County considers that the failure to pay any and all real or personal property taxes due Jefferson County, Missouri, the failure to report all real or personal property owned, held or used in Jefferson County, the failure to provide proof thereof, and/or the failure to keep said tax bills current shall be deemed a material breach of the contract and will subject the contract to immediate cancellation. All taxes, due and owing, must be paid in full at the time the bid is awarded by Jefferson County and remain paid during the entire term of the contract unless the prospective Bidder provides proof that the Bidder does not own real or personal property in Jefferson County. This requirement shall not apply to the award of bids for projects which are funded in whole or in part by Federal funds.
- D. Default: County may terminate the whole Contract or any part in either of the following circumstances:
  - D-1. If supplier fails to deliver the items required by the contract within the time specified; or
  - D-2. If supplier fails to perform any of the other provisions of the contract, or so fails to make progress as to endanger performance of the contract in accordance with its terms, and in either of these two circumstances does not cure such failure within a period of ten (10) days after notice from County specifying such failure. In the event of termination under subparagraph 1, County shall have the right to procure, on such terms and in such manner as it may deem appropriate, items similar to those terminated, and to recover from Supplier the excess cost for such similar items provided, however, Supplier shall not be liable for such excess costs where the failure upon which the termination is based has arisen out of causes beyond the control of Supplier and without the fault or negligence of Supplier. Such causes shall be deemed to include fires, floods, earthquakes, strikes, and acts of the public enemy. The rights of County provided in subparagraph 1 shall be in addition to any other rights provided by law or the contract.
  - D-3. In the event of the Supplier's non-compliance with the provisions as set forth, this Contract may be cancelled, terminated or suspended in whole or in part and the supplier may be declared ineligible for further County contracts. The rights and remedies of the County provided in this paragraph shall not be exclusive but are in addition to any remedies provided in this Contract or as provided for by law.

**2.17 NOTICE AND SERVICE THEREOF:**

Any notice from the County shall be in writing and considered delivered and the service thereof completed when said notice is posted, by certified or regular mail, to the Supplier, at the address stated on the bid form.

**2.18 CONTRACT TERM:**

Performance shall be governed solely by the terms and conditions as set forth in the Invitation for Bid, Bid Specifications, Bid Form and the Contract notwithstanding any language contained on any invoice, shipping order, bill of lading or other document furnished the Seller at any time and the acceptance by the County for any goods furnished.

**2.19 COMPLIANCE WITH APPLICABLE LAWS:**

Supplier warrants it has complied with all applicable laws, rules and ordinances of the United States, Missouri or any other Governmental authority or agency in the manufacture or sale of the goods, including but not limited to all provisions of the Fair Labor Standards Act of 1938, as amended, including provisions of the Home Rule Charter of Jefferson County, Missouri requiring all workers performing work under any contract with Jefferson County be paid a wage that is at least the prevailing hourly rate of wages for work of a similar character in Jefferson County.

**2.20 ACTS OF GOD:**

No party shall be liable for delays, nor defaults due to Acts of God or the public enemy, riots, strikes, fires, explosions, accidents, governmental actions of any kind or any other causes of a similar character beyond its control and without its fault or negligence.

**2.21 SELLER'S INVOICES:**

Invoices shall contain the following information. Contract number (if any), Purchase Order Number, Item number, contract description of goods or services, sizes, quantities, unit prices and extended totals. Invoices for and inquiries regarding payment should be addressed to the County Accounts Payable Clerk.

**2.22 APPROVAL:**

It is agreed the acceptance of a Bid shall not be valid and binding upon the County until approved by the County Purchasing Agent, County Council, and the County Counselor.

**2.23 RENEWAL OPTION:**

The County reserves the right to negotiate the contract for one (1) additional one-year term with the written consent of the awarded vendor. If the contractor/vendor requests an increase in compensation for any renewal period, the vendor shall notify the Office of Contracts and Grants no less than 60 days prior to the end of the contract period. The County shall notify the Vendor of the intent to exercise the renewal option. However, failure to notify the Vendor does not waive the County's right to exercise the renewal option.

Indicate: [ ] Individual: [ ] Partnership: [ ] Corporation.

**2.24 INDIVIDUAL, PARTNERSHIPS, CORPORATIONS:**

Incorporated in the State of \_\_\_\_\_.

**2.25 LITIGATION:**

This agreement shall be interpreted under the laws of the State of Missouri. Any disagreements, questions, controversies, litigation or other causes of action whatsoever arising from or under the terms of this agreement shall be resolved in the trial courts of 23rd Judicial Circuit Court of the State of Missouri-Hillsboro, Missouri.

**2.26 LANGUAGE:** Bids and all related documents will only be accepted in the English Language.

## **AFFIDAVIT OF WORK AUTHORIZATION**

The grantee, sub grantee, contractor or subcontractor who meets the section 285.525, RSMo definition of a business entity must complete and return the following Affidavit of Work Authorization.

Comes now \_\_\_\_\_ (Name of Business Entity Authorized Representative) as \_\_\_\_\_ (Position/Title) first being duly sworn on my oath, affirm \_\_\_\_\_ (Business Entity Name) is enrolled and will continue to participate in the E-Verify federal work authorization program with respect to employees hired after enrollment in the program who are proposed to work in connection with the services related to \_\_\_\_\_ (Bid/Grant/Subgrant/Contract/Subcontract) for the duration of the grant, subgrant, contractor, or subcontractor, if awarded in accordance with subsection 2 of section 285.530, RSMo. I also affirm that \_\_\_\_\_ (Business Entity Name) does not and will not knowingly employ a person who is an unauthorized alien in connection with the contracted services related to \_\_\_\_\_ (Bid/Grant/Subgrant/Contract/Subcontract) for the duration of the grant, subgrant, contract, or subcontract, if awarded.

*In Affirmation thereof, the facts stated above are true and correct. (The undersigned understands that false statements made in this filing are subject to the penalties provided under section 575.040, RSMo.)*

---

Authorized Representative's Signature

---

Printed Name

---

Title

---

Date

Subscribed and sworn to before me this \_\_\_\_\_ of \_\_\_\_\_. I am  
(DAY) (MONTH, YEAR)

commissioned as a notary public within the County of \_\_\_\_\_, State of  
(NAME OF COUNTY)

\_\_\_\_\_ and my commission expires on \_\_\_\_\_.  
(NAME OF STATE) (DATE)

---

Signature of Notary

---

Date

## **AFFIDAVIT OF WORK AUTHORIZATION**

(Continued)

### **CURRENT BUSINESS ENTITY STATUS**

I certify that \_\_\_\_\_ (Business Entity Name) **MEETS** the definition of a business entity as defined in section 285.525, RSMo pertaining to section 285.530, RSMo as stated above.

---

Authorized Business Entity  
Representative's Name  
(Please Print)

---

Authorized Business Entity  
Representative's Signature

---

Business Entity Name

---

Date

As a business entity, the grantee, sub grantee, contractor, or subcontractor must perform/provide the following. The grantee, sub grantee, contractor, or subcontractor shall check each to verify completion/submission:

- Enroll and participate in the E-Verify federal work authorization program (Website: <http://www.dhs.gov/e-verify>; Phone: 888-464-4218; Email: [e-verify@dhs.gov](mailto:e-verify@dhs.gov)) with respect to the employees hired after enrollment in the program who are proposed to work in connection with the services required herein;

AND

- Provide documentation affirming said company's/individual's enrollment and participation in the E-Verify federal work authorization program. Documentation shall include a page from the E-Verify Memorandum of Understanding (MOU) listing the grantee's, subgrantee's, contractor's, or subcontractor's name and the MOU signature page completed and signed, at minimum, by the grantee, subgrantee, contractor, or subcontractor and the Department of Homeland Security – Verification Division; (if the signature page of the MOU lists the grantee's, subgrantee's, contractor's, or subcontractor's name, then no additional pages of the MOU must be submitted).

## **SPECIFICATIONS**

### **DESCRIPTION**

A. THE FIRE ALARM SYSTEM SHALL COMPLY WITH REQUIREMENTS OF NFPA STANDARD 72 FOR PROTECTED PREMISES SIGNALING SYSTEMS EXCEPT AS MODIFIED AND SUPPLEMENTED BY THIS SPECIFICATION. THE SYSTEM SHALL BE ELECTRICALLY SUPERVISED AND MONITOR THE INTEGRITY OF ALL CONDUCTORS.

B. THE FIRE ALARM SYSTEM SHALL BE MANUFACTURED BY AN ISO 9001:2008 CERTIFIED COMPANY AND MEET THE REQUIREMENTS OF BS EN9001: ANSI/ASQC Q9001-1994

C. THE FACP AND PERIPHERAL DEVICES SHALL BE MANUFACTURED 100% BY A SINGLE U.S. MANUFACTURER (OR DIVISION THEREOF). IT'S ACCEPTABLE FOR PERIPHERAL DEVICES TO BE MANUFACTURED OUTSIDE OF THE U.S. BY A DIVISION OF THE U.S. BASED PARENT COMPANY.

D. THE SYSTEM AND ITS COMPONENTS SHALL BE UNDERWRITERS LABORATORIES, INC. LISTED UNDER THE APPROPRIATE UL TESTING STANDARD AS LISTED HEREIN FOR FIRE ALARM APPLICATIONS AND THE INSTALLATION SHALL BE IN COMPLIANCE WITH THE UL LISTING.

E. THE INSTALLING COMPANY SHALL EMPLOY NICET (MINIMUM LEVEL II FIRE ALARM TECHNOLOGY) TECHNICIANS ON SITE TO GUIDE THE FINAL CHECKOUT AND TO ENSURE THE SYSTEMS INTEGRITY.

### **APPLICABLE STANDARDS AND SPECIFICATIONS:**

A. THE SPECIFICATIONS AND STANDARDS LISTED BELOW FORM A PART OF THIS SPECIFICATION. THE SYSTEM SHALL FULLY COMPLY WITH THE LATEST ISSUE OF THESE STANDARDS, IF APPLICABLE.

B. \_\_\_\_\_ NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) - USA:

No. 12	EXTINGUISHING SYSTEMS (LOW AND HIGH)
No. 12A	HALON 1301 EXTINGUISHING SYSTEMS
No. 13	SPRINKLER SYSTEMS
No. 15	WATER SPRAY SYSTEMS
No. 16	FOAM / WATER DELUGE AND SPRAY SYSTEMS
No. 17	DRY CHEMICAL EXTINGUISHING SYSTEMS
No. 17A	WET CHEMICAL EXTINGUISHING SYSTEMS
No. 2001	CLEAN AGENT EXTINGUISHING SYSTEMS
No. 70	NATIONAL ELECTRIC CODE
No. 72	NATIONAL FIRE ALARM CODE
No. 90A	AIR CONDITIONING SYSTEMS
No. 92A	SMOKE CONTROL SYSTEMS
No. 92B	SMOKE MANAGEMENT SYSTEMS IN MALLS, ATRIA, LARGE AREAS
No. 101	LIFE SAFETY CODE

C. \_\_\_\_\_ UNDERWRITERS LABORATORIES INC. (UL) - USA:

No. 268	SMOKE DETECTORS FOR FIRE PROTECTIVE SIGNALING SYSTEMS
No. 864	CONTROL UNITS FOR FIRE PROTECTIVE SIGNALING SYSTEMS
No. 2572	MASS NOTIFICATION SYSTEMS
No. 217	SMOKE DETECTORS, SINGLE AND MULTIPLE STATION

No. 228	DOOR CLOSERS - HOLDERS FOR FIRE PROTECTIVE SIGNALING SYSTEMS
No. 268A	SMOKE DETECTORS FOR DUCT APPLICATIONS
No. 521	HEAT DETECTORS FOR FIRE PROTECTIVE SIGNALING SYSTEMS
No. 464	AUDIBLE SIGNALING APPLIANCES
No. 38	MANUALLY ACTUATED SIGNALING BOXES
No. 1481	POWER SUPPLIES FOR FIRE PROTECTIVE SIGNALING SYSTEMS
No. 346	WATERFLOW INDICATORS FOR FIRE PROTECTIVE SIGNALING SYSTEMS
No. 1076	CONTROL UNITS FOR BURGLAR ALARM PROPRIETARY PROTECTIVE SIGNALING SYSTEMS
No. 1971	VISUAL NOTIFICATION APPLIANCES
No. 2017	STANDARD FOR GENERAL-PURPOSE SIGNALING DEVICES AND SYSTEMS
No. 60950	SAFETY OF INFORMATION TECHNOLOGY EQUIPMENT

D. \_\_\_\_\_ LOCAL AND STATE BUILDING CODES.

E. \_\_\_\_\_ ALL REQUIREMENTS OF THE AUTHORITY HAVING JURISDICTION (AHJ).

#### APPROVALS:

A. THE SYSTEM SHALL HAVE PROPER LISTING AND/OR APPROVAL FROM THE FOLLOWING NATIONALLY RECOGNIZED AGENCIES:

UL	UNDERWRITERS LABORATORIES, INC
ULC	UNDERWRITERS LABORATORIES CANADA
FM	FACTORY MUTUAL
FM 6320	FACTORY MUTUAL GAS DETECTION SYSTEM

B. THE SYSTEM SHALL BE LISTED BY THE NATIONAL AGENCIES AS SUITABLE FOR EXTINGUISHING RELEASE APPLICATIONS. THE SYSTEM SHALL SUPPORT RELEASE OF LOW PRESSURE CO<sub>2</sub>.

C. THE SYSTEM SHALL BE FM 6320 (FACTORY MUTUAL) APPROVED AS A GAS DETECTION SYSTEM WHEN EMPLOYED WITH THE FMM-4-20 MONITOR MODULE AND INDUSTRY STANDARD 4-20 MA GAS DETECTORS

#### MAIN FIRE ALARM CONTROL PANEL OR NETWORK NODE:

A. MAIN FACP OR NETWORK NODE SHALL BE A NOTIFIER MODEL NFS2-3030 AND SHALL CONTAIN A MICROPROCESSOR BASED CENTRAL PROCESSING UNIT (CPU) AND POWER SUPPLY. THE CPU SHALL COMMUNICATE WITH AND CONTROL THE FOLLOWING TYPES OF EQUIPMENT USED TO MAKE UP THE SYSTEM: INTELLIGENT ADDRESSABLE SMOKE AND THERMAL (HEAT) DETECTORS, ADDRESSABLE MODULES, PRINTER, ANNUNCIATORS, AND OTHER SYSTEM CONTROLLED DEVICES.

B. IN CONJUNCTION WITH INTELLIGENT LOOP CONTROL MODULES AND LOOP EXPANDER MODULES, THE MAIN FACP SHALL PERFORM THE FOLLOWING FUNCTIONS:

*1. Supervise and monitor all intelligent addressable detectors and monitor modules connected to the system for normal, trouble and alarm conditions.*

*2. Supervise all initiating signaling and notification circuits throughout the facility by way of connection to addressable monitor and control modules.*

3. Detect the activation of any initiating device and the location of the alarm condition. Operate all notification appliances and auxiliary devices as programmed. In the event of CPU failure, all SLC loop modules shall fallback to degrade mode. Such degrade mode shall treat the corresponding SLC loop control modules and associated detection devices as conventional two-wire operation. Any activation of a detector in this mode shall automatically activate associated Notification Appliance Circuits.

## SYSTEM CAPACITY AND GENERAL OPERATION

A. THE FACP SHALL BE CAPABLE OF COMMUNICATING ON NOTI-FIRE-NET OVER A LOCAL AREA NETWORK (LAN) OR WIDE AREA NETWORK (WAN) UTILIZING A PEER-TO-PEER, INHERENTLY REGENERATIVE COMMUNICATION FORMAT AND PROTOCOL. THE NETWORK SHALL SUPPORT COMMUNICATION SPEED UP TO 100 MB AND SUPPORT UP TO 200 PANELS / NODES PER NETWORK.

B. THE CONTROL PANEL SHALL BE CAPABLE OF EXPANSION OF UP TO 10 SLC LOOPS. EACH MODULE SHALL SUPPORT UP TO 318 ANALOG/ADDRESSABLE DEVICES FOR A MAXIMUM SYSTEM CAPACITY OF 3180 POINTS.

C. THE FIRE ALARM CONTROL PANEL SHALL INCLUDE A FULL FEATURED OPERATOR INTERFACE CONTROL AND ANNUNCIATION PANEL THAT SHALL INCLUDE A BACKLIT 640-CHARACTER LIQUID CRYSTAL DISPLAY, INDIVIDUAL, COLOR CODED SYSTEM STATUS LEDs, AND A QWERTY STYLE ALPHANUMERIC KEYPAD FOR THE FIELD PROGRAMMING AND CONTROL OF THE FIRE ALARM SYSTEM. SAID LCD SHALL ALSO SUPPORT GRAPHIC BIT MAPS CAPABLE OF DISPLAYING THE COMPANY NAME AND LOGO OF EITHER THE OWNER OR INSTALLING COMPANY.

D. ALL PROGRAMMING OR EDITING OF THE EXISTING PROGRAM IN THE SYSTEM SHALL BE ACHIEVED WITHOUT SPECIAL EQUIPMENT AND WITHOUT INTERRUPTING THE ALARM MONITORING FUNCTIONS OF THE FIRE ALARM CONTROL PANEL.

E. THE FACP SHALL BE ABLE TO PROVIDE THE FOLLOWING SOFTWARE AND HARDWARE FEATURES:

1. *Pre-signal and Positive Alarm Sequence: The system shall provide means to cause alarm signals to only sound in specific areas with a delay of the alarm from 60 to up to 180 seconds after start of alarm processing. In addition, a Positive Alarm Sequence selection shall be available that allows a 15-second time period for acknowledging an alarm signal from a fire detection/initiating device. If the alarm is not acknowledged within 15 seconds, all local and remote outputs shall automatically activate immediately.*

2. *Smoke Detector Pre-alarm Indication at Control Panel: To obtain early warning of incipient or potential fire conditions, the system shall support a programmable option to determine system response to real-time detector sensing values above the programmed setting. Two levels of Pre-alarm indication shall be available at the control panel: alert and action.*

3. *Alert: It shall be possible to set individual smoke detectors for pre-programmed pre-alarm thresholds. If the individual threshold is reached, the pre-alarm condition shall be activated.*

4. *Action: If programmed for Action and the detector reaches a level exceeding the pre-programmed level, the control panel shall indicate an action condition. Sounder bases installed with either heat or smoke detectors shall automatically activate on action Pre-Alarm level, with general evacuation on Alarm level.*

5. *The system shall support a detector response time to meet world annunciation requirements of less than 3 seconds.*

6. *Device Blink Control: Means shall be provided to turn off detector/module LED strobes for special areas.*

7. *NFPA 72 Smoke Detector Sensitivity Test: The system shall provide an automatic smoke detector test function that meets the sensitivity testing requirements of NFPA 72.*

8. *Programmable Trouble Reminder: The system shall provide means to automatically initiate a reminder that troubles exist in the system. The reminder will appear on the system display and (if enabled) will sound a piezo alarm.*

9. *On-line or Off-line programming: The system shall provide means to allow panel programming either through an off-line software utility program away from the panel or while connected and on-line. The system shall also support upload and download of programmed database and panel executive system program to a Personal Computer/laptop. A single change to one CPU database shall not require a database download to other CPUs.*

10. *History Events: The panel shall maintain a history file of the last 4000 events, each with a time and date stamp. History events shall include all alarms, troubles, operator actions, and programming entries. The control panels shall also maintain a 1000 event Alarm History buffer, which consists of the 1000 most recent alarm events from the 4000 event history file.*

11. *Smoke Control Modes: The system shall provide means to perform FSCS mode Smoke Control to meet NFPA-92A and 90B and HVAC mode to meet NFPA 90A.*

12. *The system shall provide means for all SLC devices on any SLC loop to be auto programmed into the system by specific address. The system shall recognize specific device type ID's and associate that ID with the corresponding address of the device.*

13. *Passwords and Users: The system shall support two password levels, master and user. Up to 9 user passwords shall be available, each of which may be assigned access to the programming change menus, the alter status menus, or both. Only the master password shall allow access to password change screens.*

14. *Block Acknowledge: The system shall support a block Acknowledge for Trouble Conditions*

15. *Sensitivity Adjust: The system shall provide Automatic Detector Sensitivity Adjust based on Occupancy schedules including a Holiday list of up to 15 days.*

16. *Environmental Drift Control: The system shall provide means for setting Environmental Drift Compensation by device. When a detector accumulates dust in the chamber and reaches an unacceptable level but yet still below the allowed limit, the control panel shall indicate a maintenance alert warning. When the detector accumulates dust in the chamber above the allowed limit, the control panel shall indicate a maintenance urgent warning.*

17. *Custom Action Messages: The system shall provide means to enter up to 100 custom action messages of up to 160 characters each. It shall be possible to assign any of the 100 messages to any point.*

18. *Local Mode: If communication is lost to the central processor the system shall provide added survivability through the intelligent loop control modules. Inputs from devices connected to the SLC and loop control modules shall activate outputs on the same loop when the inputs and outputs have been set with point programming to participate in local mode or when the type codes are of the same type: that is, an input with a fire alarm type code shall activate an output with a fire alarm type code.*

19. *Read status preview - enabled and disabled points: Prior to re-enabling points, the system shall inform the user that a disabled device is in the alarm state. This shall provide notice that the device must be reset before the device is enabled thereby avoiding activation of the notification circuits.*

20. *Custom Graphics: When fitted with an LCD display, the panel shall permit uploading of a custom bit-mapped graphic to the display screen.*

21. *Multi-Detector and Cooperating Detectors: The system shall provide means to link one detector with up to two detectors at other addresses on the same loop in cooperative multi-detector sensing. There shall be no requirement for sequential addresses on the detectors and the alarm event shall be a result of all cooperating detectors chamber readings.*

22. *ACTIVE EVENT: The system shall provide a Type ID called FIRE CONTROL for purposes of air-handling shutdown, which shall be intended to override normal operating automatic functions. Activation of a FIRE CONTROL point shall cause the control panel to (1) initiate the monitor module Control-by-Event, (2) send a message to the panel display, history buffer, installed printer and annunciators, (3) shall not light an indicator at the control panel, (4) Shall display ACTIVE on the LCD as well a display a FIRE CONTROL Type Code and other information specific to the device.*

23. *NON-FIRE Alarm Module Reporting: A point with a type ID of NON-FIRE shall be available for use for energy management or other non-fire situations. NON-FIRE point operation shall not affect control panel operation nor shall it display a message at the panel LDC. Activation of a NON-FIRE point shall activate control by event logic but shall not cause any indication on the control panel.*

24. **Mass Notification Override:** The system shall be UL 2572 listed for Mass Notification and shall be capable, based on the Risk Analysis, of being programmed so that Mass Notification/Emergency Communications events take precedence over fire alarm events.

25. **Security Monitor Points:** The system shall provide means to monitor any point as a type security.

26. **One-Man Walk Test:** The system shall provide both a basic and advanced walk test for testing the entire fire alarm system. The basic walk test shall allow a single operator to run audible tests on the panel. All logic equation automation shall be suspended during the test and while annunciators can be enabled for the test, all shall default to the disabled state. During an advanced walk test, field-supplied output point programming will react to input stimuli such as CBE and logic equations. When points are activated in advanced test mode, each initiating event shall latch the input. The advanced test shall be audible and shall be used for pull station verification, magnet activated tests on input devices, input and output device and wiring operation/verification.

27. **Control By Event Functions:** CBE software functions shall provide means to program a variety of output responses based on various initiating events. The control panel shall operate CBE through lists of zones. A zone shall become listed when it is added to a point's zone map through point programming. Each input point such as detector, monitor module or panel circuit module shall support listing of up to 10 zones into its programmed zone map.

28. **Permitted zone types:** shall be general zone, releasing zone and special zone. Each output point (control module, panel circuit module) can support a list of up to 10 zones including general zone, logic zone, releasing zone and trouble zone. It shall be possible for output points to be assigned to list general alarm. Non-Alarm or Supervisory points shall not activate the general alarm zone.

29. **1000 General Zones:** The system shall support up to 1000 general purpose software zones for linking inputs to outputs. When an input device activates, any general zone programmed into that device's zone map will be active and any output device that has an active general zone in its map will be active. It shall also be possible to use general zone as arguments in logic equations.

30. **1000 Logic Equations:** The system shall support up to 1000 logic equations for AND, OR, NOT, ONLY1, ANYX, XZONE or RANGE operators that allow conditional I/O linking. When any logic equation becomes true, all output points mapped to the logic zone shall activate.

31. **100 trouble equations per device:** The system shall provide support for up to 100 trouble equations for each device, which shall permit programming parameters to be altered, based on specific fault conditions. If the trouble equation becomes true, all output points mapped to the trouble zone shall activate.

32. **Control-By-Time:** A time based logic function shall be available to delay an action for a specific period of time based upon a logic input with tracking feature. A latched version shall also be available. Another version of this shall permit activation on specific days of the week or year with ability to set and restore based on a 24 hour time schedule on any day of the week or year.

33. **Multiple agent releasing zones:** The system shall support up to 10 releasing zones to protect against 10 independent hazards. Releasing zones shall provide up to three cross-zone and four abort options to satisfy any local jurisdiction requirements.

34. **Alarm Verification, by device, with timer and tally:** The system shall provide a user-defined global software timer function that can be set for a specific detector. The timer function shall delay an alarm signal for a user-specified time period and the control panel shall ignore the alarm verification timer if another alarm is detected during the verification period. It shall also be possible to set a maximum verification count between 0 and 20 with the "0" setting producing no alarm verification. When the counter exceeds the threshold value entered, a trouble shall be generated to the panel.

## NETWORK COMMUNICATION

1. **The FACP shall be capable of communicating on Noti-Fire-Net over a Local Area Network (LAN) or Wide Area Network (WAN) utilizing a peer-to-peer, inherently regenerative communication format and protocol. The network shall support communication speed up to 100 Mb and support up to 200 panels/nodes per network.**

## CENTRAL PROCESSING UNIT

1. The Central Processing Unit shall contain and execute all control-by-event (including Boolean functions including but not limited to AND, OR, NOT, ANYx, and CROSSZONE) programs for specific action to be taken if an alarm condition is detected by the system. Such control-by-event programs shall be held in non-volatile programmable memory, and shall not be lost with system primary and secondary power failure.
2. The Central Processing Unit shall also provide a real-time clock for time annotation, to the second, of all system events. The time-of-day and date shall not be lost if system primary and secondary power supplies fail.
3. The CPU shall be capable of being programmed on site without requiring the use of any external programming equipment. Systems that require the use of external programmers or change of EPROMs are not acceptable.
4. The CPU shall provide an EIA-232 interface between the fire alarm control panel and the UL Listed Electronic Data Processing (EDP) peripherals.
5. The CPU shall provide two EIA-485 ports for the serial connection to annunciation and control subsystem components.
6. The EIA-232 serial output circuit shall be optically isolated to assure protection from earth ground.

#### DISPLAY

1. The system display shall provide a 640-character backlit alphanumeric Liquid Crystal Display (LCD). It shall also provide eleven Light-Emitting-Diodes (LEDs) that indicate the status of the following system parameters: AC POWER, FIRE ALARM, PREALARM, SECURITY, SUPERVISORY, SYSTEM TROUBLE, OTHER EVENT, SIGNALS SILENCED, POINT DISABLED, CONTROLS ACTIVE, and CPU FAILURE.
2. The system display shall provide a QWERTY style keypad with control capability to command all system functions, entry of any alphabetic or numeric information, and field programming. Two different password levels with up to ten (one Master and nine User) passwords shall be accessible through the display interface assembly to prevent unauthorized system control or programming.

#### LOOP (SIGNALING LINE CIRCUIT) CONTROL MODULE:

1. The Loop Control Module shall monitor and control a minimum of 318 intelligent addressable devices. This includes 159 intelligent detectors (Ionization, Photoelectric, or Thermal) and 159 monitor or control modules.
2. The Loop Control Module shall contain its own microprocessor and shall be capable of operating in a local/degrade mode (any addressable device input shall be capable of activating any or all addressable device outputs) in the unlikely event of a failure in the main CPU.
3. \_\_\_\_\_ Each SLC shall be capable of NFPA 72 Style 4, Style 6, or Style 7 (Class A or B) wiring.
4. The SLC interface board shall receive analog or digital information from all intelligent detectors and shall process this information to determine whether normal, alarm, or trouble conditions exist for that particular device. Each SLC Loop shall be isolated and equipped to annunciate an Earth Fault condition. The SLC interface board software shall include software to automatically maintain the detector's desired sensitivity level by adjusting for the effects of environmental factors, including the accumulation of dust in each detector. The analog information may also be used for automatic detector testing and the automatic determination of detector maintenance requirements.

#### ADDRESSABLE CHARGER POWER SUPPLY

1. The auxiliary addressable power supply is a remote 24 VDC power supply used to power Notification Devices and field devices that require regulated 24 VDC power; NOTIFIER model # ACPS-610
2. The addressable power supply for the fire detection system shall provide up to a minimum of 6.0 amps of 24 volt DC regulated power for Notification Appliance Circuit (NAC) power or 10.0 amps of 24 volt DC general power. The power supply shall have an additional 0.5 amp of 24 VDC auxiliary power for use within the same cabinet as the power supply. It shall include an integral charger designed to charge 12 - 200 amp hour batteries.

3. The addressable power supply shall provide four individually addressable Notification Appliance Circuits that may be configured as Class "A" or Class "B" circuits. All circuits shall be power-limited per UL 864 requirements.
4. The addressable power supply shall provide built-in synchronization for certain Notification Appliances on each circuit without the need for additional synchronization modules. The power supply's output circuits shall be individually selected for synchronization. A single addressable power supply shall be capable of supporting both synchronized and non-synchronized Notification Devices at the same time.
5. The addressable power supply shall operate on 120 or 240 VAC, 50/60 Hz.
6. The interface to the power supply from the Fire Alarm Control Panel (FACP) shall be via the Signaling Line Circuit (SLC) or other multiplexed means. Power supplies that do not use an intelligent interface are not suitable substitutes. The required wiring from the FACP to the addressable power supply shall be a single unshielded twisted pair wire.
7. The addressable power supply shall supervise for battery charging failure, AC power loss, power brownout, battery failure, NAC loss, and optional ground fault detection. In the event of a trouble condition, the addressable power supply shall report the incident and the applicable address to the FACP via the SLC.
8. The addressable power supply shall have an AC Power Loss Delay option. If this option is utilized and the addressable power supply experiences an AC power loss, reporting of the incident to the FACP will be delayed. A delay time of zero, two, eight or sixteen hours shall be programmable.
9. The addressable power supply shall have an option for Canadian Trouble Reporting and this option shall be programmable.
10. The addressable power supply mounts in either the FACP backbox or its own dedicated surface mounted backbox with cover.
11. Each of the power supply's four output circuits shall be programmed for Notification Appliance Circuit or General Purpose 24 VDC power. Any output circuit shall be able to provide up to 2.5 amps of 24 VDC power.
12. The addressable power supply's output circuits shall be individually supervised when they are selected to be either a Notification Appliance Circuit when wired Class "A" or by the use of an end-of-line resistor. When the power supply's output circuit is selected as General 24 VDC power, the circuit shall be individually supervised when an end-of-line relay is used.
13. When selected for Notification Appliance Circuits, the output circuits shall be individually programmable for Steady, March Time, Dual Stage or Temporal.
14. When selected as a Notification Appliance Circuit, the output circuits of the addressable power supply shall have the option to be coded by the use of a universal zone coder.
15. The addressable power supply shall interface and synchronize with other power supplies of the same type. The required wiring to interface multiple addressable power supplies shall be a single unshielded, twisted pair wire.
16. An individual or multiple interfaced addressable power supplies shall have the option to use an external charger for battery charging. Interfaced power supplies shall have the option to share backup battery power.

#### REMOTE TRANSMISSIONS:

1. Provide local energy or polarity reversal or trip circuits as required.
2. The system shall be capable of operating a polarity reversal or local energy or fire alarm transmitter for automatically transmitting fire information to the fire department.
3. Provide capability and equipment for transmission of zone alarm and trouble signals to remote operator's terminals, system printers and annunciators.
4. Transmitters shall be compatible with the systems and equipment they are connected to such as timing, operation and other required features.

#### FIELD PROGRAMMING

1. The system shall be programmable, configurable and expandable in the field without the need for special tools, laptop computers, or other electronic interface equipment. There shall be no firmware changes required to field modify the system time, point information, equations, or annunciator programming/information.

2. It shall be possible to program through the standard FACP keyboard all system functions.

3. All field defined programs shall be stored in non-volatile memory.

4. Two levels of password protection shall be provided in addition to a key-lock (that fits into the existing box on the wall) cabinet. One level shall be used for status level changes such as point/zone disable or manual on/off commands (Building Manager). A second (higher-level) shall be used for actual change of the life safety program (installer). These passwords shall be five (5) digits at a minimum. Upon entry of an invalid password for the third time within a one minute time period an encrypted number shall be displayed. This number can be used as a reference for determining a forgotten password.

5. The system programming shall be "backed" up via an upload/download program, and stored on compatible removable media. A system back-up disk shall be completed and given in duplicate to the building owner and/or operator upon completion of the final inspection. The program that performs this function shall be "non-proprietary", in that, it shall be possible to forward it to the building owner/operator upon his or her request.

6. The installer's field programming and hardware shall be functionally tested on a computer against known parameters/norms which are established by the FACP manufacturer. A software program shall test Input-to-Output correlations, device Type ID associations, point associations, time equations, etc. This test shall be performed on an IBM-compatible PC with a verification software package. A report shall be generated of the test results and two copies turned in to the engineer(s) on record.

7. Must download memory from existing unit to new unit

#### SPECIFIC SYSTEM OPERATIONS

1. *Smoke Detector Sensitivity Adjust: A means shall be provided for adjusting the sensitivity of any or all addressable intelligent detectors in the system from the system keypad. Sensitivity range shall be within the allowed UL window and have a minimum of 9 levels.*

2. *Alarm Verification: Each of the intelligent addressable smoke detectors in the system may be independently selected and enabled to be an alarm verified detector. The alarm verification delay shall be programmable from 0 to 60 seconds and each detector shall be able to be selected for verification. The FACP shall keep a count of the number of times that each detector has entered the verification cycle. These counters may be displayed and reset by the proper operator commands.*

#### SYSTEM POINT OPERATIONS:

1. *Any addressable device in the system shall have the capability to be enabled or disabled through the system keypad or video terminal.*

2. *System output points shall be capable of being turned on or off from the system keypad or the video terminal.*

3. *Point Read: The system shall be able to display the following point status diagnostic functions without the need for peripheral equipment. Each point shall be annunciated for the parameters listed:*

- a. Device Status.
- b. Device Type.
- c. Custom Device Label.
- d. Software Zone Label.
- e. Device Zone Assignments.
- f. Analog Detector Sensitivity.
- g. All Program Parameters.

4. *System History Recording and Reporting: The fire alarm control panel shall contain a history buffer that will be capable of storing up to 4000 system events. Each of these events will be stored, with time and date stamp, until an operator requests that the contents be either displayed or printed. The contents of the history buffer may be*

*manually reviewed; one event at a time, and the actual number of activations may also be displayed and or printed. History events shall include all alarms, troubles, operator actions, and programming entries.*

*5. The history buffer shall use non-volatile memory. Systems which use volatile memory for history storage are not acceptable.*

*6. Automatic Detector Maintenance Alert: The fire alarm control panel shall automatically interrogate each intelligent system detector and shall analyze the detector responses over a period of time.*

*7. If any intelligent detector in the system responds with a reading that is below or above normal limits, then the system will enter the trouble mode, and the particular Intelligent Detector will be annunciated on the system display, and printed on the optional system printer. This feature shall in no way inhibit the receipt of alarm conditions in the system, nor shall it require any special hardware, special tools or computer expertise to perform.*

*8. The system shall include the ability (programmable) to indicate a "pre-alarm" condition. This will be used to alert maintenance personal when a detector is at 80% of its alarm threshold in a 60 second period.*

## **EXECUTION**

### **INSTALLATION:**

**A. INSTALLATION SHALL BE IN ACCORDANCE WITH THE NEC, NFPA 72, LOCAL AND STATE CODES, AS SHOWN ON THE DRAWINGS, AND AS RECOMMENDED BY THE MAJOR EQUIPMENT MANUFACTURER.**

**B. ALL CONDUIT, JUNCTION BOXES, CONDUIT SUPPORTS AND HANGERS SHALL BE CONCEALED IN FINISHED AREAS AND MAY BE EXPOSED IN UNFINISHED AREAS. SMOKE DETECTORS SHALL NOT BE INSTALLED PRIOR TO THE SYSTEM PROGRAMMING AND TEST PERIOD. IF CONSTRUCTION IS ONGOING DURING THIS PERIOD, MEASURES SHALL BE TAKEN TO PROTECT SMOKE DETECTORS FROM CONTAMINATION AND PHYSICAL DAMAGE.**

**C. ALL FIRE DETECTION AND ALARM SYSTEM DEVICES, CONTROL PANELS AND REMOTE ANNUNCIATORS SHALL BE FLUSH MOUNTED WHEN LOCATED IN FINISHED AREAS AND MAY BE SURFACE MOUNTED WHEN LOCATED IN UNFINISHED AREAS.**

**D. MANUAL FIRE ALARM BOXES SHALL BE SUITABLE FOR SURFACE MOUNTING OR SEMI-FLUSH MOUNTING AS SHOWN ON THE PLANS, AND SHALL BE INSTALLED NOT LESS THAN 42 INCHES (1067 MM), NOR MORE THAN 48 INCHES (122 MM) ABOVE THE FINISHED FLOOR.**

### **TEST:**

The service of a competent, factory-trained engineer or technician authorized by the manufacturer of the fire alarm equipment shall be provided to technically supervise and participate during all of the adjustments and tests for the system. All testing shall be in accordance with NFPA 72.

**A. Before energizing the cables and wires, check for correct connections and test for short circuits, ground faults, continuity, and insulation.**

**B. Close each sprinkler system flow valve and verify proper supervisory alarm at the FACP.**

**C. Open initiating device circuits and verify that the trouble signal actuates.**

**E. Open and short signaling line circuits and verify that the trouble signal actuates.**

**F. Open and short notification appliance circuits and verify that trouble signal actuates.**

**G. Ground all circuits and verify response of trouble signals.**

H. Check presence and audibility of tone at all alarm notification devices.

I. Check installation, supervision, and operation of all intelligent smoke detectors using the walk test.

J. Each of the alarm conditions that the system is required to detect should be introduced on the system. Verify the proper receipt and the proper processing of the signal at the FACP and the correct activation of the control points.

K. When the system is equipped with optional features, the manufacturer's manual shall be consulted to determine the proper testing procedures. This is intended to address such items as verifying controls performed by individually addressed or grouped devices, sensitivity monitoring, verification functionality and similar.

#### **FINAL INSPECTION:**

A. AT THE FINAL INSPECTION, A FACTORY-TRAINED REPRESENTATIVE OF THE MANUFACTURER OF THE MAJOR EQUIPMENT SHALL DEMONSTRATE THAT THE SYSTEM FUNCTIONS PROPERLY IN EVERY RESPECT.

#### **INSTRUCTION:**

A. INSTRUCTION SHALL BE PROVIDED AS REQUIRED FOR OPERATING THE SYSTEM. HANDS-ON DEMONSTRATIONS OF THE OPERATION OF ALL SYSTEM COMPONENTS AND THE ENTIRE SYSTEM INCLUDING PROGRAM CHANGES AND FUNCTIONS SHALL BE PROVIDED.

B. THE CONTRACTOR AND/OR THE SYSTEMS MANUFACTURER'S REPRESENTATIVES SHALL PROVIDE A TYPEWRITTEN "SEQUENCE OF OPERATION."

### **1.0 Statement of Work**

#### **1.1 Engineering**

- Update/convert the existing fire alarm system program for use in the new fire alarm control panel. Note: No changes will be made to the operation or equipment of the existing fire alarm system. New Panel must work with the existing fire alarm devices and equipment

#### **1.2 Permit Applications**

- Provide and pay for permits and associated fees as required by the Authority Having Jurisdiction. Note: No drawings are included in this submission price. If drawings of the existing fire alarm system are required for any reason additional charges will apply.

#### **1.3 Technician/Installer Services –**

- Furnish and install the following Control Equipment (Head End) to replace the existing fire alarm head end equipment;
  - One (1) new Notifier NFS2-640 Fire Alarm Control CPU with display to replace the existing control board.
  - One (1) addressable main power supply
  - One (1) loop expansion module
- Reuse the following equipment and devices (list may not be all inclusive)
  - Smoke Detectors
  - Heat detectors
  - Duct detectors
  - Horn/Strobes

- Strobes
- Remote Signaling Power Supplies
- Monitor Modules
- Control Modules
- Relay Modules
- Manual Pull Stations
- Reuse existing cabling
  - This submission price is based on reusing the entire existing LVC cabling infrastructure in “as-is” condition. The LVC is in working condition and must be compatible with the proposed new system equipment.
- **Programming** – Duplicate the existing system programming for use in the new FACP (no changes to system operation will be made). Device descriptions shall be the same as existing.
- **Testing** - Provide full functional testing for all field devices and confirm system functions as described in this submission; sprinkler system testing will not be done at this time and will be the responsibility of the County to schedule with their sprinkler system contractor for testing.

#### 1.4 Training

- Provide training on the functions of the main Fire Alarm Control Panel and sequence of events on alarm.
- Train on user operation of the system.
  - Understanding of information displayed on screen
  - Acknowledge the system
  - Silence the system
  - Reset the system

**In Witness thereof, the parties hereto have executed this Agreement, in triplicate, as of this \_\_\_\_\_ day of \_\_\_\_\_ 2015:**

\_\_\_\_\_  
**Company Name**

**County of Jefferson, State of Missouri**

\_\_\_\_\_  
**Signature**

\_\_\_\_\_  
**Kenneth B. Waller County Executive**

\_\_\_\_\_  
**Print**

\_\_\_\_\_  
**Company Address:** \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_  
**Phone:** \_\_\_\_\_

I hereby certify under section 50.660 RSMo there is either: (1) a balance of funds, otherwise unencumbered, to the credit of the appropriation to which the obligation contained herein is chargeable, and a cash balance otherwise unencumbered, in the treasury, to the credit of the funds from which payment is to be made, each sufficient to meet the obligation contained herein; or (2) bonds or taxes have been authorized by vote of the people and there is a sufficient unencumbered amount of the bonds yet to be sold or of the taxes levied and yet to be collected to meet the obligation in case there is not a sufficient unencumbered cash balance in the treasury.

\_\_\_\_\_  
**County Auditor**

**APPROVED AS TO FORM**

\_\_\_\_\_  
**County Counselor**

## COOPERATIVE BID FORM

**Bid Name:** \_\_\_\_\_

**INSTRUCTIONS:** Bidders **MUST** fill out this form as part of the bidding process and attach to your bid response to Jefferson County, Missouri.

### **COOPERATIVE PROCUREMENT CONTRACT**

This is a cooperating supply contract in accordance with Chapter 130, Section 130.020. K.3., of the Procurement Policy and Procedures, Jefferson County Code of Ordinances.

**Will you extend bid prices, cash terms, and all other terms and conditions of any contract resulting from this bid with Jefferson County, Missouri, to any Jefferson County, Missouri, Municipality, government agency, district, sub-district or other tax-supported entity?**

**Yes**  **No**

Although agreeing to the extension of the terms of this contract to municipalities or other tax-supported entities, ***is not a prerequisite for award***, Jefferson County, Missouri, may take this factor into consideration if tie bids are received, in addition to the normal Terms and Conditions of the Invitation for Bid, enclosed herewith as a part of this bid.

**Bidders are encouraged to extend contract prices to Municipalities and any other tax-supported entities.**

If agreeable to the above, state the **minimum** dollar value *per order* you will require from a Municipality or any other tax-supported entity (this shall not apply to Jefferson County, Missouri Government, Departments or Divisions):

**MINIMUM DOLLAR VALUE PER ORDER:** \$ \_\_\_\_\_

**BY:** \_\_\_\_\_

**TITLE:** \_\_\_\_\_

**COMPANY:** \_\_\_\_\_

### **CONTACT INFORMATION FOR COOPERATIVE AGREEMENT**

**Phone** \_\_\_\_\_ **E-mail** \_\_\_\_\_

**THIS FORM WILL BECOME PART OF THE BID DOCUMENT PACKAGE SUBMITTED TO JEFFERSON COUNTY, MISSOURI**