

**EVALUATED INVITATION TO BID
CITY OF KNOXVILLE
Personal Protective Equipment**

The City of Knoxville seeks to establish a fixed price agreement for firefighter personal protective equipment (PPE or "turn out gear") consisting of both structural firefighting turnout coat and pant for the Knoxville Fire Department, to include all applicable accessories and the warranty of all purchased equipment. The agreement shall be for one year with two optional one-year renewals.

Sealed bids are due to the Office of the Purchasing Agent by 11:00:00 a.m., February 10, 2017 (instructions below). In making its award, the City will evaluate, in addition to pricing, adherence to specification, overall serviceability and quality, and timely availability; furthermore, samples of turnout gear are to be subjected to rigorous field testing by the Knoxville Fire Department (KFD) as part of the evaluation process. In short, the lowest price quoted may not win the subsequent award, as these other evaluation criteria are extremely important to the City; and the City's evaluated decision shall be final.

INSTRUCTIONS AND CONDITIONS

1. Sealed bids will be received by the Purchasing Agent of the City of Knoxville in Room 667-674, City/County Building; 400 Main Avenue; Knoxville, Tennessee 37902 until **Friday, February 10, 2017, at 11:00:00 a.m.**, at which time they will be publicly opened and read aloud and the contract awarded as soon as practicable. **No bid will be received or accepted after the above-specified time for the opening of bids.** Bids that arrive late due to the fault of U. S. Postal Service, United Parcel Service, DHL, FEDEX, any delivery/courier service, or any other carrier of any sort are still considered late and shall not be accepted by the City. Such bids shall remain unopened and will be returned to the submitting entity upon request.
2. The City of Knoxville reserves the right to reject any or all bids, to accept or reject any items thereon, to waive technicalities or informalities, to split orders if in the best interest of the City, to evaluate bids by various criteria, and to accept any bid which, in its opinion, may be for the best interest of the City.
3. Included in the Invitation to Bid is an affidavit in proof that the undersigned has not entered into any collusion with any person in respect to this bid or any other bid. The Bidder will be required to execute and submit this affidavit with the sealed bid.
4. Each bid must be submitted in a sealed envelope, addressed to the Purchasing Agent, City of Knoxville, Room 667-674, City/County Building, 400 Main Street, Knoxville, Tennessee, 37902. Each sealed envelope containing a bid must be plainly marked on the outside as: "Personal Protective Equipment."
5. **NO CONTACT POLICY:** After the posting of this solicitation to the Purchasing Division's website, any contact initiated by any proposer with any City of Knoxville representative concerning this proposal is strictly prohibited, unless such contact is made with the Purchasing Division representative listed herein or with said representative's authorization.

Any unauthorized contact may cause the disqualification of the proposer from this procurement transaction.

6. **INCLEMENT WEATHER:** During periods of inclement weather, the Purchasing Division will enact the following procedures with regard to solicitations and weather delays:
 - If City offices are closed due to inclement weather on the date that bids/proposals/qualifications/letters of interest are due into the Purchasing Office, all solicitations due that same day will be moved to the next operational business day.
 - The City of Knoxville shall not be liable for any commercial carrier's decision regarding deliveries during inclement weather.
7. All bids must be made on the Bid Form supplied with the contract documents, and no interlineations, excisions, or special conditions shall be made or included in the Bid Evaluation Sheet by the Bidder. **Any bid on which there is an alteration of or departure from the Bid Form may be considered irregular and may be rejected.** All bids must be signed in full by the Bidder or Bidders in their business name or style when submitted and must show his or their complete address.
8. No bidder may withdraw his bid for a period of 60 days after the actual date of the opening thereof.
9. Prior to submitting their bids, bidders are to be registered with the Purchasing Division by setting up a Vendor Self-Service Account. Instructions for registering on-line are available at www.knoxvilletn.gov/purchasing. **Bid submissions from un-registered bidders may be rejected.**
10. Payment for completed services delivered to and accepted by the City shall be at the contract price.
11. State make or brand on each item. If quoting on other than the make, model, or brand specified, the manufacturer's name and catalog number must be given, along with warranty information and detailed specifications. Because the City is committed to environmentally sound practices, brands are expected to be procured with environmental responsibility in mind.
12. Time of delivery is part of the consideration and must be stated in definite terms; time of delivery is guaranteed by the bidder and must be adhered to upon award. If time varies on different items, the bidder shall so state.
13. All quotations must be signed with the firm name and by a responsible officer or employee. Obligations assumed by such signature must be fulfilled.
14. Samples of items, when required, must be furnished free of expense to the City. If not called for within fifteen (15) days from the date of notification that field testing is complete, same will be disposed of in a manner deemed to be in the best interest of the City. Items shipped as a result of an Agreement to purchase (Purchase Order) must match the sample provided with Vendor's bid submission. The City of Knoxville will be the sole judge as to whether or not the shipped items match said supplied sample, and the City's decision will be final. Should shipped items not, in the City's judgment, be as represented by the sample

provided, Vendor shall pay the City in full for all costs associated with returning shipped items to the Vendor. No restocking fee or other fees will be assessed against the City of Knoxville.

15. Bidders shall verify bids before submission, as bids cannot be withdrawn or corrected after being opened. Bids will be evaluated by unit price.
16. If federal excise tax applies, show amount of same and deduct. Bear in mind that the City is exempt from Tennessee sales tax.
17. Prices are considered FOB Knoxville unless otherwise stated in the Invitation to Bid.
18. All bids in totaling in excess of \$100,000 must be accompanied by a cashier's check or a certified check or by a surety bond in an amount equal to five (5) percent of the total annual amount as a guarantee that if the bid is accepted the required contract will be executed and payment and performance bonds (if required) furnished. Attorneys-in-fact who sign Bid Bonds must file with each bond a certified and effective dated copy of their power of attorney. Said bond or check will be returned to the unsuccessful bidder as soon as the contract has been awarded and to the successful bidder as soon as he has executed the contract and furnished any other required bonds and the contract has been executed by the City of Knoxville.
19. By execution and delivery of a bid submission, the bidder agrees that any additional terms and conditions, whether submitted to the City purposely or inadvertently, shall have no force or effect.
20. Regarding the Equal Business Opportunity Program contracting, the appropriate Form 1 or Form 2 **must** be submitted with the bid. Successful bidders who include Form I with their bid, stating their intent to use MOB or WOB subcontractors for any part of the contract, will be required to submit Form III, Statement of Payments to MOB/WOB Subcontractor(s) & Supplier(s). Contractors will use Form III to report the amount(s) they have paid to MOB and/or WOB subcontractors on June 30th and December 31st of each year during the life of the contract and with the final payment. Failure to submit this reporting data may result in a delay of payments. Final payment will not be released by the City until Form III is submitted.
21. Bidders must comply with the President's Executive Orders No.11246 and 11375 which prohibit discrimination in employment regarding race, color, religion, sex or national origin. Bidders must not maintain or provide for their employees any facilities that are segregated on the basis of race, color, religion or national origin. Bidders must also comply with Title VI of the Civil Rights Act of 1964, Copeland Anti-Kick Back Act, the Contract Work Hours and Safety Standard Act, Section 402 of the Vietnam Veterans Adjustment Act of 1974 and Section 503 of the Rehabilitation Act of 1973, all of which are herein incorporated by reference.
22. All bidders must comply with Title VI of the Civil Rights Act of 1964, as codified in 42 U.S.C. 2000d. The successful bidder must follow Title VI guidelines in all areas including hiring practices, open facilities, insurance, and wages. The City of Knoxville reserves the right to review all compliance records by a contract compliance officer designated by the City.
23. No interpretation of the meaning of the plans, specifications, or other pre-bid documents will be made to any bidder orally. Each request for such interpretation should be in writing

addressed to Janice McClelland, Assistant Purchasing Agent for the City of Knoxville, 400 Main Street, Room 667, Knoxville, TN 37902, or emailed to her at jmcclelland@www.knoxvilletn.gov. **To be given consideration, such requests/questions must be received no later than close of business on February 3, 2017.** Any and all such interpretations and any supplemental instructions will be in the form of written addenda to the specifications which, if issued, will be posted to the City's website at www.knoxvilletn.gov. Submitting organizations are strongly encouraged to view this website often to see if addenda are posted. Failure of any bidder to receive such addendum or interpretation shall not relieve such Bidder from any obligation under his bid as submitted. All addenda so issued shall become part of the Contract Documents.

24. Attention of all bidders is directed to the set off provision contained in Article II, Section 24-33, entitled, "Debts owed by persons receiving payments other than salary", and Section 2-1049 entitled "Receipt of benefits from City contracts by council members, employees, and officers of the City" of the Code of the City of Knoxville.
25. Before a Purchase Order is issued, the submitting entity, if selected, **must** provide the City Purchasing Division with a copy of its valid business license **or** with an affidavit explaining why it is exempt from the business licensure requirements of the city or county in which it is headquartered. If a contract is signed, the contractor's business license shall be kept current throughout the duration of the contract, and the contractor shall inform the City of changes in its business name or location. Any Agreement to purchase resulting from this Invitation to Bid shall be governed by and construed in accordance with the substantive laws of the State of Tennessee and its conflict of laws provisions. Venue for any action arising between the City and the Vendor from the Agreement shall lie in Knox County, Tennessee.
26. By acceptance and delivery of the Purchase Order resulting from the award of this Invitation to Bid, the Vendor agrees to the following:

Contractor shall defend, indemnify and hold harmless the City, its officers, employees and agents from any and all liabilities which may accrue against the City, its officers, employees and agents or any third party for any and all lawsuits, claims, demands, losses or damages alleged to have arisen from an act or omission of Contractor in performance of this Agreement or from Contractor's failure to perform this Agreement using ordinary care and skill, except where such injury, damage, or loss was caused by the sole negligence of the City, its agents or employees.

Contractor shall save, indemnify and hold the City harmless from the cost of the defense of any claim, demand, suit or cause of action made or brought against the City alleging liability referenced above, including, but not limited to, costs, fees, attorney fees, and other expenses of any kind whatsoever arising in connection with the defense of the City; and Contractor shall assume and take over the defense of the City in any such claim, demand, suit, or cause of action upon written notice and demand for same by the City. Contractor will have the right to defend the City with counsel of its choice that is satisfactory to the City, and the City will provide reasonable cooperation in the defense as Contractor may request. Contractor will not consent to the entry of any judgment or enter into any settlement with respect to an indemnified claim without the prior written consent of the City, such consent not to be unreasonably withheld or delayed. The City shall have the right to participate in the defense against the indemnified claims with counsel of its choice at its own expense.

Contractor shall save, indemnify and hold City harmless and pay judgments that shall be rendered in any such actions, suits, claims or demands against City alleging liability referenced above.

The indemnification and hold harmless provisions of this Agreement shall survive termination of the Agreement.

SPECIFICATION

1. SCOPE OF WORK

This specification describes the criteria to provide **Firefighter Personal Protective Equipment (PPE) Turnout Gear**, all applicable accessories, and the warranty of all purchased equipment. Additional requirements within this scope is the training and certification of Knoxville Fire Department personnel in the maintenance and repair of the PPE and accessories and the training of Knoxville Fire Department Firefighters in the use of PPE as it pertains to their specific responsibilities. Historically the Department procures an average of 65 sets annually.

2. APPLICABLE STANDARDS AND OTHER DOCUMENTS

2.1. All garments produced shall meet or exceed the criteria set forth in the current edition of NFPA 1971 PROTECTIVE CLOTHING FOR STRUCTURAL FIRE FIGHTING, FED-OSHA CFR 1910, Subpart L, OSHA 29 CFR Part 1910.1030 and/or the requirements of CAL-OSHA title 8, Article 10.1, Para. 3406.

2.2 All components and composites used in the construction of garments shall be third party tested, certified and listed for compliance to NFPA 1971. The label of the third party tester shall denote certification.

2.3 The manufacturer shall be registered to the ISO Standard 9001 to assure a satisfactory level of quality.

3. FIELD TEST AND SAMPLES

BIDDERS SHALL PROVIDE THE FOLLOWING SAMPLE SIZES FOR EVALUATION WITH THEIR BIDS. Samples must be exact examples of the items bid:

Two (2) Coat Samples: 40 x 32R and 50 x 32R
Two (2) Pant Samples: 36R and 42L

3.1 Field testing shall be performed on the samples provided, and both the resulting quantifiable data and subjective information shall be used as part of the PPE selection process.

3.2 Firefighters will complete test stations in their assigned turn out gear for one day; hydrate and visit rehab for a complete set of vital statistics; they then will fill out surveys assessing the performance of the turnout gear at that station. Meanwhile, the turn out gear worn will either be placed in a gear dryer temporarily or air dried to remove any accumulation of perspiration. Removing the perspiration will ensure the turn out gear is ready for the next round of testing.

3.3 The firefighters will then rotate around each station subsequently; testing the gear, rehabbing, and completing surveys.

3.4 Test stations are:

- Station 1 Extension Ladder Raise and Removal
- Station 2 Basic Hose Stretch and Advance; Removal, Draining, and Loading
- Station 3 Apparatus Interfacing/Confined Space
- Station 4 Second Floor Emergency Bail-Out
- Station 5 Sprinkler Test/Water Absorption Rate
- Station 6 500 degree Heat Test in Live Fire

4. BIDDER REQUIREMENTS

4.1. Vendor shall have a minimum of ten years of service in the production of firefighter turnout gear for fire service.

4.2 Vendor shall provide training to no fewer than five (5) Knoxville Fire Department technician candidates. Training shall meet or exceed NFPA 1500 training requirements on the safe use of firefighter turnout gear. This training includes but is not limited to:

- Personal Responsibility of the Individual Firefighter
- Purpose and Limitations
- Structural PPE Construction, Features, and Functions
- Routine Inspection
- Donning and Doffing
- Proper Fit and Overlap
- Using Your PPE Safely
- How Fire Fighting Affects the PPE
- Routine Cleaning of PPE
- Assembly and Disassembly of PPE
- Storage
- Useful Life and Retirement of PPE

4.3 Additionally, online training satisfying NFPA 1851 training requirements on advanced inspection advanced cleaning and basic repairs (turnouts and helmets) shall be available throughout the term of the contract for each member of the department.

4.4 Vendor shall provide discounted pricing for all applicable products and accessories for the term of the contract.

4.5 Vendor shall be responsible for the accurate measurement of all KFD personnel requiring these goods, ensuring the proper fit for garments supplied at the commencement of award of contract.

4.6 Vendor shall re-measure, if requested, all KFD personnel requiring these garments at the time of re-order.

4.7 Vendor shall measure recruit classes on an "as needed" basis. KFD shall provide the Contractor a thirty (30) day notice for class measurement.

4.8 Vendor shall be responsible for maintaining the measurement records of the KFD personnel. The awarded supplier shall maintain the measurement records and shall be held responsible for the proper fit for all garments supplied in response to the terms of the contract.

4.9 Vendor shall provide a tracking system (software) necessary for labeling and retrieving information from the track labeling bar code system

4.10 Vendor shall furnish the KFD with a copy of the measurement records in a format compatible with Microsoft Excel.

4.11 Vendor shall deliver all garments to the KFD at 1625 Highland Ave, Knoxville, TN 37916-1411 (downstairs).

4.12 Vendor shall to maintain a stock of twenty (20) sets of clothing, consisting of coats and pants, and suspenders. Sizes for coats and pants shall be determined after award of contract and sizing of KFD personnel.

4.13 In special circumstances, vendor shall offer specialty sizing ("sized to fit") when requested.

4.14 Vendor shall allot three (3) days for sizing of Fire Department personnel, and sizing shall occur within 14 calendar days of the issuance of the City's Purchase Order. Furthermore, vendor shall deliver all ordered garments within 90 calendar days of the final day of sizing; failure to do so will result in the assessment of liquidated damages by the City as detailed in the paragraph below.

4.15 Liquidated damages: By submitting a bid to the City, Bidder guarantees the complete delivery of all garments ordered by the City within 90 calendar days of issuance of Purchase Order. Failure to deliver the order in full within the 90-day time frame shall result in the assessment of liquidated damages against the Vendor in the amount of one hundred dollars (\$100.00) for each consecutive calendar day thereafter that the order has not been completely delivered to the City. **Prospective bidders who do not anticipate the ability to make a complete fulfillment of the ordered garments in the time specified are encouraged not to bid.**

Entities submitting bids to the City of Knoxville in response to this Invitation to Bid agree to the following: The delivery schedule of the garments set forth has been fixed so that the utilization of the garments is consistent with the City's requirements. If any of the required number of garments are not delivered within the time specified, the delay will interfere with the proper implementation of the City's programs utilizing the garments procured pursuant to this bid, to the loss and damage of the City. From the nature of the case, it would be impracticable and extremely difficult to fix the actual damages sustained in the event of any such delay. The City and the contractor, therefore, presume that in the event of any such delay, the amount of damage which will be sustained from a delay will be the amount of \$100 per consecutive calendar day that the entire required amount has not been delivered to the City; they further agree that in the event of any such delay, the contractor shall pay such amount as liquidated damages and not as a penalty. Amounts due the City as liquidated damages may be deducted

by the City from any money payable to the contractor pursuant to this contract. The City shall notify the contractor in writing of any claim for liquidated damages pursuant to this paragraph.

A. If the contractor does not completely fulfill the delivery of ordered garments (meeting the specifications detailed in the Invitation to Bid, awarded by Purchase Order, and ready for use by the City upon delivery) on or before the delivery date as specified (45 calendar days from date of issuance of Purchase Order), the contractor shall pay to the City, as fixed and agreed liquidated damages, for each calendar day between the date specified and the date of the certification of the completed delivery, an amount of **\$100.00 per day**.

B. Exception: The contractor shall not be liable for liquidated damages when delays arise out of acts of God or of The Public Enemy, acts of the City in either its sovereign or contractual capacity, fire, floods, epidemics, quarantine restrictions, strikes, freight embargoes, and unusually severe weather: but in each of these specific cases, the delays must be beyond the control and without the fault or negligence of the contractor; no other sources or causes of delay will be acceptable to the City. Manufacturer shortages, backorder situations, or competing demand will not be acceptable as an exception to the assessment of liquidated damages. As a agency of the City of Knoxville, the Knoxville Fire Department expects priority fulfillment of the Purchase Order.

5. LABELS AND PACKAGING

5.1 Each garment shall include a User Information Guide with information required by NFPA 1971. This guide shall include:

- A. Pre-use information:
 - Safety considerations.
 - Limitations of use
 - Garment marking recommendations and restrictions
 - A statement that most performance properties of the garment cannot be tested by the user in the field
 - Warranty information
- B. Preparation for use:
 - Sizing/adjustment.
 - Recommended storage practices
- C. Inspection:
 - Inspection frequency and details
- D. Don/Doff:
 - Donning and doffing procedures.
 - Sizing and adjustment procedures
 - Interface issues
- E. Use:
 - Proper use consistent with NFPA 1500, Standard on Fire Department, Occupational Safety and Health Program, and 29 CFR 1910, 132

F. Maintenance and Cleaning:

- Cleaning instructions and precautions with a statement advising users not to use garments that are not thoroughly cleaned and dried
- Inspection details
- Maintenance criteria and methods of repair where applicable
- Decontamination procedures for both chemical and biological contamination

G. Retirement and Disposal

- Retirement and disposal criteria and considerations

H. Drag Rescue Device (DRD)

- Use, inspection, maintenance, cleaning and retirement of the DRD

5.2 There shall be a PDF417, two dimensional bar code label permanently affixed to each garment for tracking purposes. The bar code shall be able to withstand customary wash and wear cycles. The PDF417 bar code must incorporate a minimum of a 30% "error correction" capability. The bar code shall contain a minimum of the following information:

- A. Unique serial number
- B. Item description (brand, model, material color)
- C. Lot information (date of mfg., size, etc.)
- D. Material description
- E. The standard to which the garment is compliant

5.3 Each garment shall have a garment label(s) permanently and conspicuously attached stating at least the following language, as well as detailed warning instructions provided by the manufacturer:

Do Not Remove This Label
THIS GARMENT MEETS THE GARMENT REQUIREMENTS OF NFPA 1971,
STANDARD ON PROTECTIVE ENSEMBLE FOR STRUCTURAL FIRE FIGHTING,
2013 EDITION

5.4 Each coat and pant shall be packaged separately in dark plastic bags in order to provide protection during shipping and prior to first use.

5.5 In compliance with NFPA 1851, garments or garment elements must be retired no more than 10 years from the date of manufacture or when the costs of repair would exceed 50% of the replacement cost. With that directive, garments are to be constructed so that if not subject to extreme levels of use and if properly cared for they should have an expected useful lifespan of seven to 10 years.

6. COMPLIANCE WITH NFPA 1971 - STRUCTURAL FIREFIGHTING CLOTHING

6.1 The fire protection clothing shall meet the requirements of National Fire Protection Association ("NFPA") Standard on Protective Ensemble for Structural Fire Fighting 1971, 2013 edition.

6.2 The manufacturer of fire protection clothing shall be registered to ISO 9001, Quality Management Systems. Contractor shall provide a copy of the ISO registration certificate.

7. DESIGN AND CONSTRUCTION

7.1. General

7.1.1 All outer shell stress points, including top and bottom pocket corners, pocket flap corners, top and bottom of storm flap/fly shall be reinforced using a 42 stitch minimum bar tack.

7.1.2 The garment composite, consisting of the outer shell, moisture barrier and thermal liner, shall provide a Thermal Protective Performance (TPP) of not less than 43 when tested in accordance with NFPA 1971 standard. The garment composite, consisting of the outer shell, moisture barrier and thermal liner, shall provide a Total Heat Loss (THL) of not less than 270 when tested in accordance with NFPA 1971 standard. The Heat Transfer Index rating shall be 25 seconds for the shoulder when measured at 2 psi (pounds per square inch) and 25 seconds for the knee when measured at 8 psi.

7.2 Outer Shells and Moisture Barriers

7.2.1 The outer shell shall be constructed of +/- 7.0 oz./sq. yd. 70% "PBI MAX" PBI®/KEVLAR® spun yarns/30% 600 denier KEVLAR® filament molecularly bonded with DuPont Teflon F in a twill weave with water resistant Teflon® FPE alloy finish in black unless otherwise requested .

7.2.2 The thermal liner shall be comprised of Glide™ high-lubricity, stress reducing filament/spun face cloth weighing approximately .6 oz./sq./yd. The Kevlar filament yarns shall represent no less than 60% of the face cloth's composition and be positioned in the warp direction of the weave in order to optimize their slippery characteristics on the face. Nomex spun yarns shall be used within the garment. The Glide™ face cloth shall be quilted to one layer of E-89™ spunlace aramid 85%NOMEX®/15% KEVLAR®) molecularly bonded with DuPont Teflon F weighing approximately 2.3 oz./sq. yd. and one layer of apertured (11-13 apertures/sq. inch) E-89™ spunlace aramid (85% NOMEX®/15% KEVLAR®) weighing approximately 1.5 oz./sq. yd. The thermal liner and outer shell shall be treated with a Teflon® finish (Total weight +/- 7.3 oz./sq. yd.).

7.2.3 The Moisture Barrier shall consist of STEDAIR Gold®.

7.2.4 The Moisture Barrier Thermal Liner Construction Design shall be compatible with the outer shell so that the liner does not buckle, pull, or otherwise restrict body motion. A 9" inch minimum of the bottom of each thermal leg shall be constructed of 3.0 oz./sq. yd. Teflon® treated Chambray (NOMEX® spun) face cloth quilted to one layer E-89™ spunlace aramid 85% NOMEX®/15% KEVLAR® weighing approximately 2.3 oz./sq. yd. with a Teflon® finish and one layer of apertured (11-13 apertures/sq. inch) E-89™ spunlace aramid 85% NOMEX®/15% KEVLAR® molecularly bonded with DuPont Teflon F weighing approximately 1.5 oz./sq. yd. with a Teflon® finish. (Total weight +/- 6.8 oz./sq. yd.). The waist of the moisture barrier/thermal liner shall be secured to the waist of the outer shell such that when donning the pant a leg may not be accidentally caught between the outer shell and its inner linings along the waist and between the legs of the pant.

7.2.5 Quilted Thermal Liner Construction of the moisture barrier shall be completely sewn to the thermal liner at its perimeter with the breathable membrane oriented inward toward the thermal liner and away from the outer shell. The moisture barrier/thermal liner shall finish no more than 3" from the cuffs.

7.2.6 The moisture barrier/thermal liner shall be completely detachable from the outer shell for ease of cleaning and inspection by using zippers.

7.2.7 All moisture barrier seams shall be sealed as required by NFPA 1971.

7.3 Reflective Trim

7.3.1 All trim excepting that of identifying lettering and patches shall be sewn with four (4) rows lockstitch 301, minimum (6) stitches/inch for most secure trim attachment. Trim shall be of 3" Reflexite (two-tone) of lime/yellow. It shall be the bidder's discretion as to which means of current technological advances that shall be employed to prevent thermal insult as a result of stored energy under the trim material. Bidder must supply detailed specifications of the technology to be employed for City consideration.

7.3.2 Coat trim shall be applied as follows: New York Pattern: One 3" strip shall be set full circumference at the bottom sweep of the outer shell; one 3" strip shall be set around each sleeve approximately 2" above the cuff; one 3" strip shall be set around each sleeve just above the elbow; one 3" strip shall be set full circumference at the chest.

7.3.3. Pant trim shall be applied as follows: one (1) strip set full circumference around the bottom of the cuff 3" from the bottom cuff.

7.4 Lettering and Patches

7.4.1 There shall be one 5"x18" contoured 2-layer self-fabric one-line Letter Patch attached to hang from back hem via hook & loop and upper-corner snaps.

7.4.2 There shall be 3" lime yellow Scotchlite letters, sewn-on to the hanging patch for first initial and last name.

7.4.3 There shall be a 2"x3" NOMEX® A® embroidered American flag patch. The flag shall be located on right sleeve in accordance with the Federal Flag code Public Law 94-344.

7.4. Coat Design and Construction

7.4.1 The coat shell shall be of 3-panel construction in all layers with an inverted pleat on each side where the back front and back body panel pieces meet. Each pleat shall begin at the back of each shoulder and shall extend vertically down the side of the coat. A combination moisture barrier/thermal shall include a corresponding 1" inward dynamic fold approximately 1.5" from each sleeve seam at the shoulder. This fold shall provide for coat expansion when extending arms forward and shall interface with the inverted pleats of the outer shell to maximize mobility and function of the outer shell and thermal liner. The coat shell and moisture barrier/thermal liner shall be oversized to assure proper chest fit and insure maximum mobility without restriction of the arms and shoulders. Bi-swing construction shall provide better fit, longer wear and greater comfort. Sleeves- preference will be given to a design of "athletic shirt" design. It

shall be the bidder's discretion as to which means of current technological advances that shall be employed.

7.4.2 All outer shell stress points, including top and bottom pocket corners, pocket flap corners, top and bottom of storm flap/fly shall be reinforced using a 42 stitch minimum bar tack.

7.4.3 Bellows underarm construction shall be used in all layers of the coat-outer shell/moisture barrier/thermal liner-ensuring maximum upper body freedom of movement including complete arm mobility when reaching up and/or forward. Bellows construction shall extend to all inner layers of the coat making it possible for the fit and freedom of movement, derived from the outer shell bellows construction, to be passed through the inner layers to the wearer's body. The outer shell/moisture barrier/thermal liner bellows shoulder construction shall consist of an underarm and shoulder bellows of elongated football shape not less than 8" wide by not less than 15" long sewn into each of the coats fabric layers by two-needle construction. The bellows in each layer shall begin at a point corresponding to the front of the armpit, wrap around under the arm and shoulder joint, and terminate at the rear top of the shoulder.

7.4.4 The sleeve shall have an insert throughout all layers that shall provide a natural bend in the sleeve. This elbow shall include cut outs, shaped pieces and darts to allow for free movement with few restrictions. It shall be the bidder's discretion as to which means of current technological advances that shall be employed.

7.4.5 When measured at the center of the back from the collar seam to the hem bottom, the coat shall measure 35" long for male, with option for male 32" and female 29" or 32".

7.4.6 Coats shall be made available in even chest sizes with corresponding sleeve lengths. They shall be available in short, regular, long, athletic, male, and female.

7.4.7 Drag Rescue Device provides mechanical leverage for dragging a downed and incapacitated structural firefighter from a life-threatening environment. The design of the device enables the rescuer to drag the downed firefighter in line with the axis of the firefighter's skeletal frame, in order to decrease the risk of further injury.

7.4.7.1 A Drag Rescue Device shall be constructed of a one and one-half inch wide KEVLAR® strap that shall be installed between the outer shell and the thermal liner. This device shall have a hand loop (16" in circumference) that exits the outer shell through a 2" polymer coated aramid reinforced slot on the back of the coat just below the collar and is held in place by means of a piece of 1.5" x 2" hook on the strap and a piece of 1" x 2" loop attached to the outer shell. This strap is then secured under a 2.25" x 5.25" flap that is sewn in at the neck /collar area. Two pieces 1" x 2" loop shall be set vertically on shell to align with two pieces of 1" x 2" hook set vertically to the underside of the flap. The device is also held in proper alignment by means of a 2" x 2" piece of loop placed on the inside of the outer shell underneath the chest trim that corresponds to a piece of 1.5"x 2" hook located on the device. Two 1" x 3.5" self-fabric straps with 1" x 2" hook on one end and 1" x 2" loop on other end shall be set to coat in the shoulder cap area to keep straps in proper position for use.

7.4.8 The collar shall be of three piece contoured 4-layer configuration such that when the collar is raised it shall remain standing while providing continuous thermal and moisture protection around the neck and face. To ensure this protection, the two layers of outer shell collar shall be fully lined with one layer of Stedair Gold™ PTFE moisture barrier material and two layers of 1.5 oz. aperture NOMEX®/Kevlar® spunlace thermal liner. A black Nomex liner shall be attached to

the inside of the collar where it interfaces with the front of the neck and throat for personal comfort and protection. The collar shall provide proper interface with liner to insure no moisture penetration through the collar seam to inside of coat. The throat tab shall be of a crescent shaped design so as to contour to the shape of an SCBA facemask. It will close from right to left, employing a flame resistant hook and loop tape system. The collar of the coat shall be a minimum of 3" high in the throat area to meet NFPA minimum standards.

7.4.9 The collar shall be contoured and shall completely cover the neck and throat area when in the raised position. Raised height shall be approximately three inches with a contoured overlap at the front of the coat. The coat collar shall be of layered construction, consisting of two layers of outer shell material, fully lined with Stedair Gold. Collar closure shall be provided by hook and loop 1.5" x 4", with hook portion sewn on right side of collar, and loop portion sewn on left, set horizontal. Collar shall be of such design so as not to interfere with SCBA face masks, or helmet.

7.4.10 When examined prior to donning, the turned up collar shall completely wrap around the front of the neck opening such that left and right collars touch or overlap to maximize facial protection.

7.4.11 The three piece contoured layered collar shall be sewn with a pleat on the innermost layer. Pleat shall have 3/4" hook sewn on the underside to engage the moisture barrier extension on the liner.

7.4.12 An external hanger loop constructed of a double layer of outer shell material and reinforced with two 42-stitch bar tacks shall be provided on the outside of the coat at the collar seam. It shall be designed to provide long service and shall not tear or separate from the coat when the coat is hung by the hanger loop, loaded evenly with a minimum weight of 80 lbs. and allowed to hang for one minute.

7.4.13 A layer of 3.0 oz./sq. yd. Teflon® treated Chambray (NOMEX® spun) face cloth quilted to araflo/E-89™ molecularly bonded with DuPont F Teflon (total weight +/- 6.0-6.8 oz./sq. yd.) shall be positioned between the moisture barrier and thermal liner for extra thermal protection in a high heat and compression area of the coat. It shall be sewn to the inside of the upper back portion of the thermal liner across the upper back from the back shoulder and collar seams 7" down, over the tops of shoulders and down the front approximately 4" ending at the armhole.

7.4.14 A 4" wide area at the top of the shoulders extending 6" from the collar seam shall be capped with outershell material for abrasion resistance and thermal protection. For additional thermal protection and cushioning, one layer of uninterrupted 1/8" thick, fire retardant closed-cell foam shall be oriented between the outer shell and the shoulder cap reinforcement.

7.4.15 The elbow shall be reinforced with black polymer coated KEVLAR® or equivalent material for abrasion resistance and thermal protection. In addition to reinforcement, elbows shall be padded using 1/8" thick, fire retardant closed-cell foam. The reinforcement material shall be oriented between the outer shell and elbow insert reinforcement.

7.4.16 The cuff of the sleeve shall be reinforced with a binding of outer shell material not less than 3" in total width for abrasion resistance and thermal protection. At least 2" of the cuff reinforcement shall extend down the interior of the outer shell sleeve with a .75" wide strip of FR hook sewn full circumference to the topside of the cuff reinforcement. One (1) female snap fastener shall be set in the hook fastener to attach the outer shell to the moisture barrier/thermal

liner

7.4.17 An internal wristlet shall consist of a 2-ply knit of 48% NOMEX®/48% KEVLAR® and 4% Spandex for superior recovery. The wristlet shall consist of a combination of natural and bronze colors producer dyed by DuPont with a Teflon® water resistant alloy of not less than 8". It shall extend completely over the palm with a thumbhole to prevent the wristlet from sliding back and be double stitched and bound to the moisture barrier/thermal liner.

7.4.18 A combination 3.0 oz./sq. yd. Teflon® treated Chambray (NOMEX® spun) face cloth quilted to araflo/E-89™ molecularly bonded with DuPont F Teflon (total weight +/- 6.0-6.8 oz./sq. yd) and three layer STEDAIR GOLD® moisture barrier leader shall be sewn no more than 1" back from the combination liner sleeve end to form a sleeve well. One male snap and one .75"wide strip of FR loop shall be sewn full circumference to the end of the thermal liner/three layer STEDAIR GOLD® moisture barrier that secures liner to the outer shell. The sleeve well shall prevent elements from entering the sleeve when arms are in a raised position.

7.4.19 The combination liner sleeve ends shall be inserted into the outer shell sleeve ends by means of lining up the male snap then attaching the FR loop fastener of the combination liner sleeve end with the female snap and FR hook fastener of the outer shell cuff. This liner attachment shall prevent any gaps from occurring between the combination liner and sleeve well during a full range of motion. The combination liner shall extend to within 1" of the sleeve end.

7.4.20 There shall be continuous thermal and moisture protection around the entire torso including the storm flap. Both right and left inside front facings of the coat outer shell shall incorporate outer shell fabric and Stedair Gold™ PTFE moisture barrier, extending from collar to hem.

7.4.21 The complete outer shell coat front closure design shall consist of a FRONT CLOSURE SYSTEM completely protected by an OUTSIDE STORM FLAP which shall have its own, independent STORM FLAP CLOSURE SYSTEM.

7.4.22 A storm flap measuring not less than 5" wide, nor less than 22" in length shall be set on the outside of the right side of the coat opening for maximum thermal protection and clear drainage. The inner lining of the storm flap shall be Stedair Gold PTFE moisture barrier meeting all requirements for moisture barriers sandwiched between two layers of outer shell fabric.

7.4.23 Coat Closure System. Bidders must offer separate pricing for one of the coat closure features detailed below. The firefighter being fitted for the turnout gear will be able to select one of the options listed below for their coat closure system. The closure system shall be a Chicago Style bi-swing of no less than 5" storm flap for option #1 and 3" storm flap for option #2.

Option #1: The jacket shall be closed by means of reinforced/leather-backed four non-ferrous hook and "D" rings and flame resistant hook and loop tape. The inward facing hooks shall be set with leather reinforced rivets at the extreme right side of the coat front underneath the storm flap. Opposite of each snap hook, a corresponding leather reinforced riveted "D" ring shall be placed on the left front body panel. Three starter snaps shall be placed in between the spacing of the hook and "D" rings at the top, middle and bottom to assure proper closure. The storm flap shall close from right to left with flame resistant hook and loop tape that extends the full length of the flap, eliminating all exposure of frontal hardware.

Option #2: The jacket shall be closed by means of a heavy duty, high-temp smooth-gliding black zipper on the jacket front panels and flame resistant hook and loop tape extending the length of the storm flap. The teeth of the zipper shall be mounted on black Nomex® (or equivalent material) tape and shall be sewn into the respective jacket facings. A black polymer coated Kevlar® (or equivalent material) pull tab shall be installed at the bottom of the zipper. The storm flap shall close from right to left with flame resistant hook and loop tape that extends the full length of the flap, eliminating all exposure of the zipper.

7.4.24 A layer of 3.0 oz./sq. yd. Teflon® treated Chambray (NOMEX® spun) face cloth quilted to araflo/E-89™ molecularly bonded with DuPont F Teflon (Total weight +/- 6.0-6.8 oz./sq. yd)) shall be sewn under shell completely across pleated back approximately 7" in length. It shall be sewn to the inside of the upper back portion and sleeve 8" in length and 12" across the sleeve, and continue down the front approximately 9".

7.4.25 There shall be an opening located on the coat liner approximately 11" in length at the center back of the neck separating the thermal barrier and moisture barrier to allow for the inspection of the liner. There shall be one piece .75"x 4" loop sewn to the back side of the liner system with a corresponding piece of .75"x 4" hook sewn to the inside of the outer shell to ensure proper alignment when installing the liner system into the outer shell. This is completely hidden when the liner is properly installed into the outer shell.

7.4.26 There shall be two (2) 1" X 5" triple layer outer shell material microphone straps, attached on the ends only, to accommodate radio mics, located on the left shoulder above the radio pocket and the right shoulder above the utility snap hook.

7.4.27 There shall be one reverse oriented, reinforced utility snap hook for hanging items such as a flashlight. One flashlight strap of outer shell material securable by flame resistant hook and loop tape below the utility snap hook. The strap shall be long enough to accommodate the barrel of the flashlight and overlap and close.

7.4.28 One pocket shall be located on the left front bottom and one pocket on the right front bottom and they shall be constructed as follows:

- A. Two 9" x 9" semi-bellow and hand warmer pocket combination that expands by means of side and bottom gussets to a thickness of 2" in back only and 0" in front. The pockets shall be set at the bottom of the coat hem and reflective trim shall be set on each.
- B. There shall be a 6" opening on the rear side of the bellow of the pocket. Pockets shall be lined inside with fleece material and have a KEVLAR® twill backer.
- C. Pocket and flap shall be set with stitch 301, seam Ssb-2 with each corner of pocket opening and top corners of flap reinforced with bar tacks for additional strength. Drainage of moisture to be provided by brass eyelets.
- D. Each pocket flap shall measure 10" wide by 3" high in front and 5" high in rear. Each flap shall incorporate a 1" by 2" polymer coated aramid pull tab for easy opening. The corner under this tab shall be reinforced with two layers for stability.
- E. A hook and loop closure system shall be set with two pieces of 1.5" x 3" loop fastener set horizontally on the outside edge of the pocket opening with

corresponding 1.5" x 3" hook fastener set vertically on the underside of the flap.

6.5.30 A left slide chest pocket shall be as follows:

- A. One (1) 3.5" wide x 9" deep full bellows radio pocket that expands by means of side and front gussets to a thickness of 2" in front and back
- B. Pocket and flap shall be set with stitch 301, seam Ssb-2 with the top and bottom pocket corners and top corners of flap reinforced with a minimum 42-stitch bar tack
- C. A brass eyelet shall provide drainage of moisture. Pocket flaps shall be 4.5" x 5".
- D. Pocket shall be fully lined all three sides inside pocket with polycotton lining.
- E. Pocket flap shall close horizontally to the pocket top using 1 piece of 1" x 2" loop hook tape.
- G. Pocket flap shall include a notch on the flap to accommodate an antenna.

7.5 Pant Design and Construction

7.5.1 A low rise waist pant shall be designed with 5' high back panel. It shall be the bidder's discretion as to which means of current technological advances that shall be employed.

7.5.2 The pant inseam shall incorporate a comfort/mobility design that decreases the bunching of materials in all layers. The banded pant insert shall run continuously from the top of the mobile knee of one leg, through the crotch, to the top of the mobile knee of the opposite leg.

7.5.3 The knee shall incorporate a comfort/mobility design in all layers. The design shall allow for a natural bending motion of the knee. The Knee shall include cut outs, shaped pieces, and darts to create free movement with few restrictions. It shall be the bidder's discretion as to which means of current technological advances that shall be employed. Preference shall be given to manufactures that can provide options of adding additional layers of closed cell foam or like material.

7.5.4 The waist of the pants shall be reinforced on the inside with two-ply of outer shell material not less than 1.5" in width. The pant waist shall be turned under to provide double material strength with the independent waistband, which shall then be double stitched to the outer shell.

7.5.5 The outer shell shall have an overlapping fly front running the full length of the fly on the left side. The flap shall not be less than 2.5" wide at the waistband. The bottom of the fly shall be reinforced with a 42 stitch bar tack.

7.5.6 The storm fly shall be held closed along its length utilizing a hook and loop fastener closure 1.5" minimum width, along the leading edge for a distance of not less than 6" from the bottom of the fly closure to the waist area for proper alignment and secure closure. A hook and "D"ring closure shall be used for quick closing at the waist. The hook shall be 2.5" in length, made of a zinc nonferrous metal alloy and weigh 1.2 oz. +/- 5%. It shall be securely fastened to the pant by means of a 5/8" wide, treated leather take up strap looped through the rear of the buckle and triple riveted to the pant shell with leather backed rivets. The "D" shall be made of a nonferrous metal alloy 2" long x 1 1/16" wide and secured by two leather backed rivets to the

leading edge of fly flap. The storm fly shall be outer shell material, lined with a 3.5" strip STEDAIR GOLD® moisture barrier material to prevent wicking.

7.5.7 The moisture barrier/thermal liner shall be constructed with an extension on the left side at the waist of all layers of the fly opening to assure continuous thermal and moisture protection. This overlap shall be positioned between the layers of the outside storm fly. A 3/4" wide x 9" long hook fastener shall be sewn to the moisture barrier/thermal liner to engage corresponding loop fastener on the underside of the outside storm fly.

7.5.8 One adjustment device shall be affixed to the outside on each side of the pant. Each take-up strap shall be comprised of two sub-component straps. The front strap shall be 1" wide x 5" in length, folded in half to form a loop, and shall be affixed to the side of the pant by means of two bar tacks spaced 2" apart. The loop shall face toward the back and hold a nickel plated 1" metal loop. The back strap shall be 1" wide x 9" in length of double layered outer shell material and hook and loop fastener. The rear 4.5" shall be sewn and triple bar tacked to the shell. The front section of the strap shall remain loose and be aligned so that it is threaded through the metal loop. It shall have a piece of 1" x 3" hook fastener attached to the loose strap end to engage the corresponding 1" x 4.5" loop fastener at end of strap to allow for adjustment.

7.5.9 Knee construction: Any combination of options shall be used for added protection, comfort and increased thermal insulation at the contact points of the knee and shall be no less than a depth of 1/4." Padding shall be constructed of closed cell foam. The padding shall be encased in moisture barrier, graded in width and installed proportionate to the pant inseam, and contoured to the natural/anatomically correct bend of the knee thus creating increased freedom of movement, few restrictions and maximum flexibility. Proper semi-circumferential coverage when bending, kneeling, and crawling shall be required.

7.5.10 The cuff area of the pant shall be reinforced with a binding of black polymer coated aramid not less than 2" in total width for greater strength, abrasion resistance, and thermal protection. In addition a 3" x 3 1/2" piece of reinforcement material shall be sewn on the inseam area of the pant leg above the pant cuff and below the pant trim, in order to provide extra abrasion protection. The material used on the kick shield shall match that used on the pants cuffs.

7.5.11 The back portion of the cuff will gradually curve upward from each side seam to a maximum of 2" at the center back of the pant leg to prevent wear on the back of the cuff.

7.5.12 Two black leather leg tabs 3/4" wide x 1 3/4" long with female snaps shall be bar tacked 2" up from the bottom edge of the inside of the pant cuff. There shall be one on the inseam and one on the outseam.

7.6 Pant Pockets and Accessories

7.6.1 All pockets shall be lined with Kevlar® material and have, at a minimum, one (1) or two (2) brass eyelets to provide sufficient drainage.

7.6.2 Left Turn Out Pockets and Location with Tool Divider - One (1) fully lined Bellows expansion pocket no less than W10" x L10" x D2" with two-layer outer shell material flap opening secured by flame resistant hook and loop tape. Tool division slots for organization shall be provided on the interior of the pocket system. Reinforcement material shall be approximately 5" up from the bottom of the three exterior sides of the pocket with black polymer coated

Kevlar® or an equivalent material for abrasion resistance and improved strength. Corners shall be reinforced with bar tacking. Pockets shall be fully functional and accessible while wearing a bailout escape harness system. The pocket shall be located on the left outer leg at thigh high.

7.6.3 Right Turn Out Egress Pocket with Rope Storage and Location - One (1) fully lined pocket with two layer outer shell material flap opening secured by flame resistant hook and loop tape. The lower edge of the flap shall encase padding or rope, etc. to create a tactile grip differentiating the egress pocket from any other portion of the garment thus creating an easily opened pocket with a gloved hand. Reinforcement material shall be approximately 5" up from the bottom of the three exterior sides of the pocket with black polymer coated Kevlar® or an equivalent material for abrasion resistance and improved strength. Corners reinforced with bar tacking. Pockets shall be fully functional and accessible while wearing a bailout escape harness system. The pocket shall house escape rope then cradle and separate the Petzl EXO Escape system® above the rope for easy deployment. In addition, the pocket shall store a Crosby Hook in a tool division slot for quick access.

The City reserves the right to adjust the location of pants pockets prior to garment construction. Note that the location of the egress pocket shall not hinder the firefighter when in the seated position while driving or riding in fire apparatus (e.g., altering the anatomically correct seated posture due to poor egress pocket placement that is semi-under the wearer's thigh, bottom, or backside).

7.6.4 Integrated Harness with Belt Loops - A 100% Kevlar® Class 2 harness shall be integrated in the turnout pant and a non-ferrous hook and "D" ring harness closure system will serve as the final step in the secure closure for the pant fly. The Kevlar® harness shall be equipped with a Kevlar® tether of sufficient length (sized to the wearer) to attach to the Petzl EXO Escape system® to the A-frame of the integrated harness. Thus, the Kevlar® harness and tether shall be designed and integrated in such a manner that the Petzl EXO Escape system® deploys reliably to the front and center of the wearer. The Kevlar® harness shall securely attach to the waist portion of turnout pant with three or more outer shell (or equivalent material) belt loops, no less than 2" wide, system shall be internal. It will be scored on its design, function, attachment security and accessibility. Systems that allow excessive movement, slouching or sagging of the harness system; which could result in poor deployment of the Petzl EXO Escape system®, and systems that do not securely attach the harness to the pants will be rejected. Preference will be given to designs that have internal harness systems with the A-frame/Non-ferrous hook and "D" ring harness closures external. The harness system shall be removable for the purpose of laundering the turnout pant.

6.6.16 There shall be an opening located on the pant liner system to the right side of the waist separating the thermal barrier and moisture barrier, approximately 10" in length to allow for the inspection of the liner. This opening allows the pant liner to be completely inverted to properly view the integrity of the entire liner system. There shall be a piece of 1" x 3" FR loop sewn to the moisture barrier 3" over from beginning of opening and a corresponding piece of 1" x 3" FR hook sewn to the inside of the outer shell to ensure proper alignment when installing the liner system into the outer shell. This is completely hidden when the liner is properly installed into the outer shell.

6.6.19 Four 2" wide self-material suspender tabs with 1.75x3" leather reinforcement shall be attached to the waist. There shall be two on the front and two on the back. Each tab shall have two male and two female logo snaps. Each tab shall be reinforced with two bar

tacks on each tab. Each tab shall also have a 2" rectangular metal loop/slot.

6.6.20 Bidders shall offer suspender design that reflects current technological advances which will be employed to prevent excessive stretch and failure due to overly-elastic suspenders. Evaluation of the suspenders will include if the suspenders are easily/accidentally detachable and if the "H back," "V back," or "X back" is positioned too high (above the shoulder blade area) so as to cause undue stress on the neck of the wearer.

7.7 Miscellaneous Strap

7.7.1 A 100% Kevlar® miscellaneous strap device shall provide a means of connecting the wearer to a ladder and/or functioning as a rescue strap via the bailout escape harness. The device shall not extend greater than 24" in total length (including connection hardware, carabineer and buckle) on each end when measured from the surface of the harness to the inside of the connector device at the greatest distance from the harness when, for example, connected circumferentially to a ladder rung (per NFPA). However, when the miscellaneous strap is being utilized as a rescue strap, and therefore not in circumferential positioning, the length may exceed 24." The miscellaneous strap shall be constructed of dual layered one and three quarter inch (1.75") Kevlar® webbing with 138 bonded twisted Kevlar® thread. The strap shall be at the most 44"-48" long with a rated Shane sewn loop handle at one end and a forged steel alloy O ring at the other. Five Kevlar® 42 count stitch bar tacks secure the ends of the strap. The O ring shall have a two-stage forged steel alloy NFPA carabineer option.

7.7.2 Additionally, a snap adjuster buckle is used to adjust the strap when used in ladder operations and rescue operations; all buckles shall be constructed of forged alloy steel and at the minimum 100% proof load tested at 2500 lbs.

7.7.3 All webbing used in construction shall be UL tested and certified to NFPA 1983-2012 edition standards.

7.8 Warranty

7.8.1 Manufacturer's warranty information for the must be included in the bid submission, and cost of warranty must be included in the garment pricing.

7.8.2 Extended warranty program: Bid submission shall include the cost of extended service and maintenance program; pricing shall include annual cleaning and annual advanced inspections. This shall include all repairs due to wear and tear. This shall include free shipping to and from the repair location.

BID SUBMISSION REQUIREMENTS

Bidders must furnish the following information in writing with their submission:

1. Bid Form showing bidder's name, address, quoted price, business license number, date of expiration of business license. A copy of the bidder's current business license may be submitted in lieu of providing the license expiration date.
2. Written Manufacturer's Warranty

3. Non-Collusion Affidavit
4. Iran Divestment Act of 2014 Certification of Noninclusion
5. Form I **or** Form II to indicate Title VI compliance
6. Sample garments, as specified
7. Detailed garment specifications
8. Garment user instructions, as specified

EVALUATION CRITERIA

In making its award, the City will evaluate, in addition to pricing, adherence to specification, overall serviceability and quality, and timely availability; furthermore, samples of turnout gear are to be subjected to rigorous field testing by the Knoxville Fire Department (KFD) as part of the evaluation process. In short, the lowest price quoted may not win the subsequent award, as these other evaluation criteria are extremely important to the City; and the City's evaluated decision shall be final. Out of a total of 100 possible points, the following categories shall be ascribed to each for evaluation and scoring:

Pricing	30 points
Field Testing	25 points
Adherence to Specification	20 points
Overall Serviceability and Quality	20 points
Timely Availability	5 points

CITY OF KNOXVILLE

BID FORM

TO: City of Knoxville Purchasing Agent
400 Main Street, Suite 667
Knoxville, TN 37902

Having carefully examined the specifications entitled "Personal Protective Equipment" to open on February 10, 2017, at 11:00:00 a.m. and the other Contract Documents and addenda, and having familiarized ourselves with the existing conditions of the job, we hereby propose to furnish the supervision, labor, materials, equipment, delivery, and services to do the work as stated for the following sums:

BASE COAT BID: Total charge (includes shipping): _____

Coat Closure System: Option #1 _____
Option #2 _____

BASE PANT BID: Total charge (includes shipping): _____

Annual Cost of Extended Service and Maintenance Agreement: _____

Firm Name: _____

Official Address: _____

(By)

(Name Typed)

(Title)

Date _____

email address _____

Telephone _____

NON-COLLUSION AFFIDAVIT OF PRIME BIDDER

State of _____

County of _____

_____, being first duly sworn, deposes and says that:

- (1) He is owner, partner, officer, representative, or agent of _____, the Bidder that has submitted the attached Bid;
- (2) He is fully informed respecting the preparation and contents of the attached Bid and of all pertinent circumstances respecting such Bid;
- (3) Such Bid is genuine and is not a collusive or sham Bid;
- (4) Neither the said Bid nor any of its officers, partners, owners, agents, representatives, employees, or parties in interest, including this affiant, has in any way colluded, conspired, connived or agreed, directly or indirectly, with any other Bidder, firm or person to submit a collusive or sham Bid in connection with the Contract for which the attached Bid has been submitted or to refrain from proposing in connection with such Contract, or has in any manner, directly or indirectly, sought by agreement or collusion or communication or conference with any other Bidder, firm, or person to fix the price or prices in the attached Bid or of any other Bidder, firm, or person to fix any overhead, profit, or cost element of the bid price or the bid price of any other Bidder, or to secure through any collusion, conspiracy, connivance or unlawful agreement any advantage against the City of Knoxville or any person interested in the proposed Contract; and
- (5) The price or prices quoted in that attached Bid are fair and proper and are not tainted by any collusion, conspiracy, connivance or unlawful agreement on the part of the Bidder or any of its agents, representatives, owners, employees, or parties in interest, including this affidavit.

Signed: _____

Title: _____

NOTARY PUBLIC

Subscribed and sworn to before me this ____ day of _____, 2____.

My commission expires: _____

IRAN DIVESTMENT ACT of 2014
Certification of Noninclusion

NOTICE: Pursuant to the Iran Divestment Act of 2014, Tenn. Code Ann. § 12-12-106 requires the State of Tennessee Chief Procurement Officer to publish, using creditable information freely available to the public, a list of persons it determines engage in investment activities in Iran, as described in § 12-12-105. Inclusion on this list makes a person ineligible to contract with the state of Tennessee; if a person ceases its engagement in investment activities in Iran, it may be removed from the list. A list of entities ineligible to contract in the State of Tennessee Department of General Services or any political subdivision of the State may be found here:

[https://www.tn.gov/assets/entities/generalservices/cpo/attachments/List of persons pursuant to Tenn. Code Ann. 12-12-106, Iran Divestment Act-July.pdf](https://www.tn.gov/assets/entities/generalservices/cpo/attachments/List_of_persons_pursuant_to_Tenn._Code_Ann._12-12-106,_Iran_Divestment_Act-July.pdf)

By submission of this bid, each bidder and each person signing on behalf of any bidder certifies, and in the case of a joint bid each party thereto certifies as to its own organization, under penalty of perjury, that to the best of its knowledge and belief that each bidder is not on the list created pursuant to T.C.A. § 12-12-106.

Vendor Name (Printed)	Address
By (Authorized Signature)	Date Executed
Printed Name and Title of Person Signing	

NOTARY PUBLIC:

Subscribed and sworn to before me this _____ day of _____,
2_____.

My commission expires: _____

SECTION I

EQUAL BUSINESS OPPORTUNITY PROGRAM

"GOOD FAITH EFFORT PLAN"

The City of Knoxville strongly encourages contractors to employ minority owned businesses and women owned businesses as subcontractors whenever feasible. This is viewed favorably by the City of Knoxville. In fact, the City's goal for minority and women owned business participation is 10 percent of the contract amount.

Prime contractors will consider all competitive sub-bids and quotations received from minority owned businesses (MOB) and women owned businesses (WOB). When a subcontract is not awarded to the MOB/WOB submitting the lowest bid, the prime contractor must document the reason(s) the award was not made in writing. If the Contractor terminates an agreement and/or subcontract with a MOB/WOB, then the contractor is required to strongly consider selection of another MOB or WOB as a replacement.

GOOD FAITH EFFORTS

1. Soliciting through all reasonable and available means.
 - a. Advertising
 - b. Written notices to all certified MOB's and WOB's who have the capability to perform the work or provide the service.
 - c. Solicitation of interest must be within sufficient time to allow MOB's and WOB's to respond to the solicitation.
 - d. Faxes, direct mailings, and telephone requests.
2. Providing interested MOB's and WOB's with adequate information about plans, specifications, and requirements of the contract in a timely manner to assist them in responding to a solicitation.
3. Negotiating in good faith with interested MOB's and WOB's.
 - a. It is the **bidder's/proposer's** responsibility to make opportunities available to MOB's and WOB's subcontractors and suppliers and to select opportunities consistent with the available MOB/WOB business subcontractors and suppliers. Evidence of such negotiations includes the names, addresses, and telephone numbers of MOB's and WOB's considered.
 - (1) A description of the specifications for the work selection for subcontracting
 - (2) Evidence why agreements could not be reached for MOB's and WOB's to perform the work.

4. Effectively using the services of available minority, women contractor groups, local minority and women business assistance offices, small business groups, and other organizations on a case-by-case basis to provide assistance in the recruitment and placement of minority/women business.

SECTION II

MOB/WOB SUBMITTAL TIME FRAME

The Contractor will submit the following forms with the **bid/proposal**:

1. "Statement of Intent for MOB/WOB Utilization" (Form I Attached)

This form will be submitted by the bidder/proposer if he/she plans to subcontract any portion(s) of the work with a MOB and/or a WOB. This form illustrates the areas the Contractor has identified as potential MOB and/or WOB subcontract opportunities and the **dollar value** associated with these opportunities. The purpose of "Form I" is to measure the Contractor's "**Good Faith Efforts.**" It does not commit the prime to subcontracting these areas only to MOB and WOB firms or release the prime from negotiating with MOB/WOB firms for subcontract opportunities.

OR

2. "Statement of Intent of Performing Work Without Subcontracting" (Form II Attached)

This form will be submitted if the **bidder/proposer** does not plan to subcontract any portion(s) of the work and if there are not any sufficient material purchases in which MOB/WOB firms can be utilized. The **bidder/proposer** must certify that this has been a typical practice on projects of similar scope and dollar value. By submittal of Form II, the Contractor certifies that:

- (1) He/she does not typically subcontract on projects of similar scope and dollar value.
- (2) He/she will not enter into any subcontract for duration of the project, and if he/she does decide to subcontract any portion of the work, he/she will: notify the City immediately of the decision to subcontract and adhere to the provision of "**Good Faith Efforts**" in filling that subcontract opportunity.

The Purchasing Division may request the apparent low bidder/proposer to provide additional information to clarify the bidder's/proposer's responsiveness and intent in this regard.

These documents will be received by the Purchasing Division upon submission of a proposal/bid. Additionally, prime contractors who submit Form I stating their intent to use MOB or WOB subcontractors for any part of the contract are required to report the amount(s) they have paid to these subcontractors on June 30th and December 31st of each year. Failure to submit this reporting

data may result in a delay of payments. At the time of the final request for payment, the prime shall submit a Statement of Final Payments to MOB and WOB Subcontractors and Suppliers (Form III attached). Final payment will not be released by the City until Form III is submitted.

SECTION III

DEFINITIONS

Minority: A person who is a citizen or lawful admitted permanent resident of the United States and who is a member of one (1) of the following groups:

- a. Black American, which includes persons having origins in any of the Black racial groups of Africa;
- b. A Hispanic American, which includes persons of Mexican, Puerto Rican, Cuban, Central or South American or other Spanish culture or origin, regardless of race;
- c. Native American, which includes persons who are American Indians or Alaska Native;
- d. An Asian-Indian American, which includes persons whose origins are from Indian, Pakistan or Bangladesh.
- e. An Asian Pacific Islander, which includes persons whose origins are from Japan, China, Taiwan, Korea, Vietnam, Laos, Cambodia, the Philippines, Samoa, Guam, the U. S. Trust Territories of the Pacific and Northern Marinas.

Minority-Owned Business (MOB), Women-Owned Business (WOB): A business which is at least (51%) owned and controlled by minority group members or European American female(s). A MOB/WOB is bonafide only if the minority group interests are real and continuing and not created solely to meet the MOB/WOB requirement. In addition, the MOB/WOB must perform satisfactory work or services to provide supplies under the contract and not act as a mere conduit. In short, the contractual relationship must be bonafide.

Owned and Controlled: A business which is (1) a sole proprietorship legitimately owned by an individual who is a minority or European American female; (2) a partnership or joint venture controlled by minorities or European American females, and in which at least (51%) of the beneficial ownership interests legitimately are held by minorities or European American females; or (3) a corporation or other entity controlled by minorities or European American females, and in which at least 51% of the voting interests and 51% of the beneficial ownership interests are legitimately held by minorities or European American females. In addition, these persons must control the management and operation of the business on a day-to-day basis.

Subcontractor: Any named person, firm, partnership, or corporation which supplies any work, labor, services, supplies, equipment, materials, or any combination of the foregoing contract with the contractor on a public contract.

FORM I

**STATEMENT OF INTENT OF
M/WBE UTILIZATION
(TO BE SUBMITTED WITH THE BID/PROPOSAL)**

We, (Bidder) _____, do certify that on the (Project Name)

(_____)
(Dollar Amount of Bid)

MBE/WBEs will be employed as construction subcontractors, vendors, suppliers, or professional services. The bidder indicates that he (she) will utilize M/WBE in the following areas:

Description of Work	MBE Amount	WBE Amount	Name

TOTAL

The undersigned understands that they are committed to negotiate with additional M/WBE for other materials and services not listed in the above schedule.

Submitted by _____ Date: _____
(Authorized Representative)

TITLE:

ADDRESS:

TELEPHONE NO:

FORM II

STATEMENT OF INTENT TO PERFORM WORK WITHOUT SUBCONTRACTING (TO BE SUBMITTED WITH BID/PROPOSAL)

We, _____, hereby certify that it is our intent to perform 100 % of the work required for the _____ contract
(Name of Project)

In making this certification, the **Bidder/Proposer** states the following:

1. That it is a normal business practice of the bidder to perform all elements of this type contract with its own work forces without the use of subcontracts.

AND

2. That if it should become necessary to subcontract some portion of the work at a later date, the **bidder/proposer** will comply with all requirements of the "**Good Faith Efforts**" in providing equal opportunity to M/WBE Firms to subcontract the work.

The undersigned hereby certifies that he or she has read the terms of this statement and is authorized to bind the bidder as herein set forth.

Signature and title of authorized official of the company and the date must be properly executed on this document and a list of previous projects of similar scope and dollar value as stated in Section 11 attached or the bid may be deemed non-responsive.

Date: _____ Company Name:

Submitted By: _____
(Authorized Representative)

TITLE:

ADDRESS:

CITY/STATE/ZIP CODE:

TELEPHONE NO:

FORM III

STATEMENT OF PAYMENTS TO MOB/WOB SUBCONTRACTOR(S) & SUPPLIER(S) (TO BE SUBMITTED ON JUNE 30 AND DECEMBER 31 OF EACH YEAR FOR THE LIFE OF THE CONTRACT AND TO BE WITH FINAL PAYMENT REQUEST)

Project: _____ Contract#: _____

Contractor's Name: _____

Cert. #	MOB	WOB	Name of Firm / Address & Phone#	Total Amount Paid	Contact Person

I hereby certify that this statement is true and that above payments have been made.

Contractor: _____

Address: _____

By: _____

Contractor's Signature

Title

Subscribed and sworn to before me this _____ day of _____ 20__

Notary Public: _____

My Commission Expires: _____