

# The City of Henderson

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Finance Department

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June 25, 2024

## INVITATION TO BID

Bid Reference No. 24-16

Competitive sealed bids will be received by the City of Henderson, Kentucky for the following:

### Firefighter Protective Clothing

Bids will be accepted in the Office of the Director of Finance, 222 First Street, Henderson, Kentucky, 42420, until 1:30 p.m., prevailing local time, on Friday, July 26, 2024, at which time the bids will be publicly opened and read.

The bids are being solicited pursuant to KRS 45A.365.

City of Henderson, Kentucky  
Invitation to Bid

Bid Reference No. 24-16

TABLE OF CONTENTS

	<u>Enclosed</u>
I. Instructions to Bidders	<input checked="" type="checkbox"/>
II. General Conditions	<input checked="" type="checkbox"/>
III. Special Conditions	<input checked="" type="checkbox"/>
IV. Lowest Evaluated Bid Price Criteria	<input checked="" type="checkbox"/>
V. Technical Specifications	<input checked="" type="checkbox"/>
VI. Bid Pricing Sheet	<input checked="" type="checkbox"/>
VII. Required Affidavit for Non-Resident Bidders Claiming Kentucky Resident Bidder Status (Enclosure A)	<input checked="" type="checkbox"/>
VIII. KRS 45A.395 Statement Required (Enclosure B)	<input checked="" type="checkbox"/>

City of Henderson, Kentucky  
Invitation to Bid

INSTRUCTIONS TO BIDDERS

1. Each bid must be signed by the bidder with his usual signature. Bids by a Partnership must be signed with the partnership name by one of the members of the partnership, or by an authorized representative, followed by the signature and title of the person signing. Bids by Corporations must be signed with the name of the corporation, followed by the signature and designation of the president, secretary, or person authorized to legally bind the corporation.
2. Bids must be received prior to the specified time of closing as designated in the invitation. Bids received late will be returned unopened to the bidder.
3. Envelopes must be sealed when submitted and must be properly noted with the bid reference number. Separate bids must be submitted for each reference number.
4. Bids containing erasures or corrections thereon will be rejected unless said erasures or corrections are noted over the initials or signature of the bidder.
5. Bids may be submitted on any one item or any group of items unless otherwise stated herein. The unit price must be shown for each item or group of items as requested.
6. References in the Technical Specifications describing the material, supplies, or services required of a particular trade name, catalog or model number are made for descriptive purposes to guide the bidder in interpreting the type of material or supplies or nature of the work described. They should not be construed as excluding offers on other type of materials and supplies or of performing the work in a manner other than specified. However, the bidders attention is called to Paragraph 6 of the General Conditions which must be strictly adhered to.
7. Bids are to be mailed to or delivered to the Office of the Director of Finance, Henderson Municipal Center, 222 First Street, PO Box 716, Henderson, Kentucky 42419.
8. The City's sales tax exemption status may not be used by the bidder to acquire materials or supplies on a sales tax exempt basis. Any sales taxes or other taxes incurred by the bidder remain the responsibility of the bidder. It is assumed that all such costs incurred by any bidder are included in his bid price.

- End of Section -

City of Henderson, Kentucky  
Invitation to Bid

GENERAL CONDITIONS

1. The City of Henderson reserves the right to reject any and all bids, and unless otherwise specified by the bidder, to accept any item or group of items in the bid. In case of error in extending the total amount of the bid, the unit price will govern.
2. The City of Henderson's payment terms are net 30.
3. In case of default by the bidder or contractor, the City of Henderson may procure the articles or services from other sources and hold the bidder or contractor responsible for any excess cost occasioned thereby.
4. Prices shall be stated in units of quantities specified.
5. Prices quoted, unless otherwise stated by bidder, will be considered as being based on delivery to destination as designated and to include any charges for packing, crating, containers, etc., and being in strict accordance with specifications as shown.
6. Whenever a reference is made in the specifications or in describing the materials, supplies or services required, or a particular trade name, manufacturer's catalog, or model number, the bidder, if awarded a contract, will be required to furnish the particular item referred to in strict accordance with the specifications or description unless a departure or substitution is clearly noted and described in the proposal by the bidder.
7. The bidder, if awarded an order or contract, agrees to protect, defend, and save harmless the City against any demand for the use of any patented materials, process, article, or device, that may enter into the manufacture, construction, or form a part of the work covered by either order or contract and he further agrees to indemnify and save harmless the City from suits or actions of every nature and description brought against it, for or on account of any injuries or damages received or sustained by any party or parties, by or from any of the acts of the contractor, his servants, or agents.
8. Samples, when requested, must be furnished free of expense prior to the opening of bids and if not destroyed will, upon request, be returned at the bidder's expense.
9. Terms and conditions, unless stated otherwise herein, are to be effective for one year from the date of bid acceptance by the City Commission.

GENERAL CONDITIONS

Page 2

10. All bids shall remain valid for a period of thirty (30) days after bid opening unless a longer period is otherwise stated herein.
11. Bidder may be required to obtain a City of Henderson Occupational License within ten days of contract award.
12. All federal, state, and local law requirements must be followed.
13. The City accepts responsibility of merchandise upon receipt at the City's delivery point unless otherwise noted herein.
14. Prior to a contract being awarded to the lowest responsible and responsive bidder whose bid meets specifications, a resident bidder of the Commonwealth shall be given a preference against a nonresident bidder registered in any state that gives or requires a preference to bidders from that state. The preference shall be equal to the preference given or required by the state of the nonresident bidder.

Bids will be evaluated and awarded on the following basis (*as marked*):

☐

Lowest Bid Price; or

☒

Lowest Evaluated Bid Price. The objective measurable criteria for this evaluation are enclosed.

“Responsible bidder” means a person who has the capability in all respects to perform fully the contract requirements, and the integrity and reliability which will assure good faith performance.

15. Special Conditions, if any, are enclosed. A conflict between *Special Conditions* and *General Conditions* shall be construed in favor of the *Special Conditions*.
16. The Description of Requirements and Specifications (technical specifications) for the procurement are enclosed herewith.
17. Conflict of interest -- Gratuities and kickbacks -- Use of confidential information. (KRS 45A.455)
  - (1) It shall be a breach of ethical standards for any employee with procurement authority to participate directly in any proceeding or application; request for ruling or other determination; claim or controversy; or other particular matter pertaining to any contract, or subcontract, and any solicitation or proposal therefore, in which to his knowledge:
    - (a) He, or any member of his immediate family has a financial interest therein; or

GENERAL CONDITIONS

Page 3

- (b) A business or organization in which he or any member of his immediate family has a financial interest as an officer, director, trustee, partner, or employee, is a party; or
  - (c) Any other person, business, or organization with whom he or any member of his immediate family is negotiating or has an arrangement concerning prospective employment is a party. Direct or indirect participation shall include but not be limited to involvement through decision, approval, disapproval, recommendation, preparation of any part of a purchase request, influencing the content of any specification or purchase standard, rendering of advice, investigation, auditing, or in any other advisory capacity.
- (2) It shall be a breach of ethical standards for any person to offer, give, or agree to give any employee or former employee, or for any employee or former employee to solicit, demand, accept, or agree to accept from another person, a gratuity or an offer of employment, in connection with any decision, approval, disapproval, recommendation, preparation of any part of a purchase request, influencing the content of any specification or purchase standard, rendering of advice, investigation, auditing, or in any other advisory capacity in any proceeding or application, request for ruling or other determination, claim or controversy, or other particular matter, pertaining to any contract or subcontract and any solicitation or proposal therefore.
- (3) It is a breach of ethical standards for any payment, gratuity, or offer of employment to be made by or on behalf of a subcontractor under a contract to the prime contractor or higher tier subcontractor or any person associated therewith, as an inducement for the award of a subcontract or order.
- (4) The prohibition against conflicts of interest and gratuities and kickbacks shall be conspicuously set forth in every local public agency written contract and solicitation therefore.
- (5) It shall be a breach of ethical standards for any public employee or former employee knowingly to use confidential information for his actual or anticipated personal gain, or the actual or anticipated personal gain of any other person.

**Effective:** April 9, 1980

**History:** Amended 1980 Ky. Acts ch. 250, sec. 16, effective April 9, 1980. -- Created 1978 Ky. Acts ch. 110, sec. 92, effective January 1, 1980.

- End of Section -

06-01-14D

City of Henderson, Kentucky  
Invitation to Bid

Bid Reference No. 23-19

SPECIAL CONDITIONS

The City of Henderson is seeking sealed bids for the purchase of approximately ten (10) sets of firefighter clothing protection to the upper and lower body, excluding head, hands, feet, against adverse environmental effects during structural fire fighting. All materials and construction will meet or exceed NFPA Standard #1971 and OSHA for structural fire fighters protective clothing. Additional replacement items or sets may be purchased throughout the year at bid prices.

1. The following is a description of bloodborne pathogen resistant protective clothing turnout coats and pants that will meet the minimum requirements of this specification. These specifications are to be considered as minimum and expressed as such. If the protective clothing delivered under this contract does not comply with these specifications, the protective clothing will not be accepted.
2. The successful bidder will be awarded a contract for one (1) year from the date of acceptance by the Henderson Board of Commissioners with an option to renew the contract for an additional year if mutually agreeable to both the City of Henderson and the bidder. All terms and conditions including price shall remain the same.
3. The successful bidder shall have the inventory and/or capability of delivering up to ten sets of coats and pants to the specified address within a maximum of 90 calendar days from the date the order is received. Delivery time in excess of the specified 90 days shall be considered grounds to void this contract.
4. The City reserves the right to cancel the contract of the successful bidder after thirty (30) days written notice if, in the opinion of the City Manager and/or Fire Chief, the successful bidder delivers items that fail to meet specifications or fails to deliver ordered items in a timely manner.
5. Bid prices shall include delivery to the Henderson Fire Department at 332 Washington Street, Henderson, Kentucky 42420. Bid prices shall remain firm throughout the contract term.
6. To ensure a perfect fit, sizing shall be based on actual measurements taken of the firefighter by a trained company representative. Sizing shall be taken according to a schedule and location mutually agreed between the manufacturer and the Henderson Fire Department.
7. Bid items that are discontinued during the contract period shall not be substituted without prior approval of the Fire Chief.

SPECIAL CONDITIONS

Page 2

8. It is not the intent of these specifications to restrict or prevent any vendor from submitting a proposal on their product. The brands and styles listed represent a minimum quality sought by the Henderson Fire Department. Any substitution to these specifications indicated herein must be clearly defined and identified in writing and a sample of substituted item provided. Substitutions shall be equal or equivalent to the specified brands.
9. It is not the intent of these specifications to call for new, unusual, or experimental products, nor is it the intent of this agency to accept such proposals. Therefore, upon request, as proof of the ability to manufacture protective clothing of the type called for in this specifications, the manufacturer shall show proof that they have produced protective clothing for a minimum period of twenty (20) years.
10. The purpose of the clothing is to provide protection during structural firefighting operations or when certain physical hazards are likely to be encountered during non-fire related rescue operations, emergency medical operations, and victim extrication.
11. The vendor will do a NFPA 1851 class on three separate dates on OSHA approved cleaning and inspection of bunker gear.

Technical question may be directed to Lt. Casey Howard, at 270-831-1217. Bid procedure questions may be directed to Dawn Winn, Assistant Finance Director at 270-831-1290, ext. 2220.

- End of Section -



City of Henderson, Kentucky  
Invitation to Bid

Bid Reference No. 23-19

LOWEST EVALUATED BID PRICE CRITERIA

The City expects to purchase annually the estimated quantities listed on the Bid Pricing Sheet. However, the City does not guarantee any minimum or maximum quantities.

The bid will be awarded to the bidder with the lowest Evaluated Total Bid Price using bid unit prices times the estimated annual quantities.

Bidders must furnish a single unit price for each, and every item in all sections of the Bid Pricing Sheet in order to be considered responsive and eligible for evaluation. Bidders must not submit different prices for different sizes. The bid will not be split.

- End of Section –

City of Henderson, Kentucky  
Invitation to Bid  
Bid Reference No. 23-19

TECHNICAL SPECIFICATIONS

**SCOPE**

**This specification details design and materials criteria to afford protection to the upper and lower body, excluding head, hands, feet, against adverse environmental effects during structural fire fighting. All materials and construction will meet or exceed NFPA Standard #1971 and OSHA for structural fire fighters protective clothing.**

\_\_\_\_\_Comply          \_\_\_\_\_Exception

**SIZING**

In order to insure that every member of the department can safely perform to the maximum of their ability without extra bulk and without restriction, Jackets and Pants shall be available in all sizes and dimensions as follows:

**Pants:**

Gender:	Gender specific Men's and Women's patterns
Waist:	Even sizes
Body Shape:	Men's: Relaxed and Regular Note: Relaxed is a fuller cut in the hips and thighs, like relaxed Jeans. Women's: Relaxed
Inseam:	Even sizes

**Jackets:**

Gender:	Gender specific Men's and Women's patterns will be available.
Chest:	Even sizes
Back Length:	Men's 29 inches, 32 inches, 35 inches, 40 inches Women's 26 inches, 29 inches
Body Shape:	Men's: Straight and Tapered Note: The straight cut offers more fullness at the hips (i.e. jacket sweep) and is recommended when an IH Ready pant is being specified. Women's: Straight
Sleeve:	1 inch increments

Jackets and Pants available in only one standard shape will not be acceptable.

\_\_\_\_\_Comply          \_\_\_\_\_Exception

## **OUTER SHELL MATERIAL - JACKETS AND PANTS**

The "**PBI GEMINI® XT MATRIX™**" (a.k.a. **PBI® XT**) outer shell, trade name Gemini XT shall be manufactured by TENCATE and constructed of 60/40 Kevlar®/PBI™ modified plain weave outer shell fabric featuring a patented high tech grid of composite filament & spun yarns in a "Matrix Technology" with an approximate weight of 7.5 oz. per square yard. The shell material must be treated with **SST□ (SUPER SHELLTITE)** which is a durable water-repellent finish that also enhances abrasion resistance. Color of the garments shall be natural/gold.

**Bids offering a 600 denier Matrix product and/or the Matrix shell without the SST□ will not be considered.**

\_\_\_\_\_Comply                      \_\_\_\_\_Exception

## **THERMAL INSULATING LINER - JACKET AND PANTS**

An optional thermal liner shall be constructed of TENCATE "**CALDURA® ELITE SL2i**"; with an approximate weight of 7.7 oz. per square yard. This thermal liner consists of one layer of 1.5 oz. and one layer of 2.3 oz. per square yard Nomex® E-89™ spunlaced Nomex®/Kevlar® aramid blend, quilt stitched to a Kevlar® filament and FR rayon/para-aramid/nylon inherently wicking Caldura® face cloth. The thermal liner shall be attached to the moisture barrier and bound together by bias-cut neoprene coated cotton/polyester around the perimeter. This provides superior abrasion resistance to the less expensive, less durable, "stitch and turn" method. An approximate 8 inch by 10 ½ inch pocket, constructed of thermal liner over-edged to a layer of moisture barrier material, shall be affixed to the inside of the jacket thermal liner on the left side by means of a single needle stitch. Further mention of "Thermal Liner" in this specification shall refer to this section.

## **MOISTURE BARRIER - JACKETS AND PANTS**

The moisture barrier material shall be W.L. GORE **CROSSTECH® black moisture barrier** - Type 2F, which is comprised of a CROSSTECH® membrane laminated to a 3.3 ounce per square yard Nomex® IIIA woven pajama check substrate. The CROSSTECH® membrane is an enhanced bicomponent membrane comprised of an expanded PTFE (polytetrafluoroethylene, for example Teflon®) matrix having a continuous hydrophilic (i.e. water-loving) and oleophobic (i.e. oil-hating) coating that is impregnated into the matrix. CROSSTECH® moisture barrier seams shall be sealed with GORE-SEAM® tape using a Series 6000 (or higher) GORE-SEAM™ sealing machine to afford comparable bacteriophage penetration resistance performance. Further mention of "Specified Moisture Barrier" in this specification shall refer to this section.

\_\_\_\_\_Comply                      \_\_\_\_\_Exception

### **SEALED MOISTURE BARRIER SEAMS**

All moisture barrier seams shall be sealed with a minimum 1 inch wide sealing tape. One side of the tape shall be coated with a heat activated glue adhesive. The adhesive side of the tape shall be oriented toward the moisture barrier seam. The adhesive shall be activated by heat and the sealing tape shall be applied to the moisture barrier seams by means of pressure exerted by rollers for that purpose.

\_\_\_\_\_Comply                      \_\_\_\_\_Exception

### **METHOD OF THERMAL LINER/MOISTURE BARRIER ATTACHMENT FOR JACKETS AND PANTS**

The thermal liner and moisture barrier shall be completely removable from the jacket shell. A minimum of six snap fasteners shall secure the thermal liner/moisture barrier to the outer shell along the length of the neck line under the top most collar. The top most collar shall be turned under and finished such that the snaps on the collar will not be able to contact the wearers skin. Corresponding snaps shall be installed through a moisture barrier leader measuring an approximate height of 1.75 – 2 inches and shall not penetrate through to the outer shell on the backside of the collar. The remainder of the thermal liner/moisture barrier shall be secured with snap fasteners appropriately spaced on each jacket facing and Ara-Shield® snap fasteners at each sleeve end. There shall be one Ara-shield® snap tabs at the liner sleeve end which shall be colored to correspond with color coded snap tabs on the shell sleeve end for ease of matching the liner system to the outer shell after inspection or cleaning is completed.

The thermal liner and moisture barrier shall be completely removable from the pant shell. Nine snap fasteners shall be spaced along the waistband to secure the thermal liner to the shell. The legs of the thermal liner/moisture barrier shall be secured to the shell by means of Ara-Shield® snap fasteners, 2 per leg. The Ara-shield® snap tabs on the shell shall be color coded to corresponding color coded snap tabs in the liner for ease of matching the liner system to the outer shell after inspection or cleaning is completed. There shall be no hook and loop used to close the liner access opening.

\_\_\_\_\_Comply                      \_\_\_\_\_Exception

### **THERMAL PROTECTIVE PERFORMANCE**

The assembled garment, consisting of an outer shell, moisture barrier and thermal liner, shall exhibit a TPP (Thermal Protective Performance) rating of not less than 35.

\_\_\_\_\_Comply                      \_\_\_\_\_Exception

## **STITCHING**

The outer shell shall be assembled using stitch type #301, #401, #514 and #516. The thermal liners and moisture barriers shall be assembled using stitch type #301, #401, #504, #514, and #516. Major A outer shell structural seams and major B structural liner seams, shall have a minimum of 8 to 10 stitches per inch. All major A seams shall be sewn with ball point needles only. All seams shall be continuously stitched only.

\_\_\_\_\_Comply          \_\_\_\_\_Exception

## ***JACKET CONSTRUCTION***

### **BODY**

The body of the shell liner system shall be constructed of three separate panels consisting of two front panels and one back panel. The body panels shall be shaped so as to provide a tailored fit thereby enhancing body movement and shall be joined together by double stitching with Nomex® thread. One-piece outer shells shall not be acceptable.

\_\_\_\_\_Comply          \_\_\_\_\_Exception

### **AXTION® BACK**

The jacket outer shell shall include inverted pleats to afford enhanced mobility and freedom of movement. The outer shell shall have two inverted pleats (one each side) installed on either side of the back body panel. The inverted pleats shall begin at the top of each shoulder and extend vertically down the sides of the jacket to the hem. Maximum expansion of the pleats shall occur at the shoulder area and taper toward the hem. Pleats that do not extend to the hem will not be considered.

The moisture barrier and thermal liner layers shall be designed with darts corresponding to the added length in the shell provided by the AXTION® back pleats. The darts are positioned at the shoulder blades, outside of the SCBA straps and work together with the corresponding outer shell pleats in the back, providing maximum expansion. The moisture barrier darts will be seam sealed to assure liquid resistance integrity.

\_\_\_\_\_Comply          \_\_\_\_\_Exception

### **DRAG RESCUE DEVICE (DRD)**

A Firefighter Drag Rescue Device (DRD) shall be installed in each jacket. The ends of a 1 inch wide strap, constructed of Kevlar®, shall be sewn together to form a continuous loop. The strap shall be installed in the jacket between the liner system and outer shell such that when properly installed will loop around each arm. The strap will be accessed through a

portal between the shoulders on the upper back where it is secured in place by an FR strap. The DRD shall be removable for laundering. The access port shall be covered by an outside flap of shell material, designed to fit between the shoulder straps of an SCBA. The flap will have a NFPA-compliant 3M Scotchlite™ reflective logo patch sewn to the outside to clearly identify the feature as the DRD (Drag Rescue Device). The DRD shall not extend beyond the outside flap. This device provides a quickly deployed means of rescuing a downed firefighter. Flimsy, rope-style DRD straps will not be considered.

\_\_\_\_\_Comply                      \_\_\_\_\_Exception

#### **LINER ACCESS OPENING (JACKET)**

The liner system of the jacket shall incorporate an opening at the leading edge of the right front panel. This opening shall run a minimum of 11 inches for the purpose of inspecting the integrity of the jacket liner system. When installed into the outer shell the Liner Access Opening shall be covered and protected by the overlap of the outer shell facing.

\_\_\_\_\_Comply                      \_\_\_\_\_Exception

#### **RETROREFLECTIVE FLUORESCENT TRIM**

The retroreflective fluorescent trim shall be lime/yellow 3M Scotchlite™ Triple Trim (L/Y borders with silver center). Each jacket shall have an adequate amount of retroreflective fluorescent trim affixed to the outside of the outer shell to meet the requirements of NFPA 1971 and OSHA.

The trim shall be in the following widths and shall be **NYC style**; 3 inch wide stripes - around the bottom of the jacket within approximately 1 inch of the hem, around the back and chest area approximately 3 inches below the armpit, around each sleeve below the elbow, around each sleeve above the elbow.

\_\_\_\_\_Comply                      \_\_\_\_\_Exception

#### **REINFORCED TRIM STITCHING**

All reflective trim is secured to the outer shell with Nomex® thread, using a locking chainstitch protected by our exclusive TrimTrax® system. Developed exclusively by Globe Manufacturing Co., LLC. this strip of 3/32-inch strong, durable, flame resistant black Kevlar® cording provides a bed for the stitching along each edge of the retroreflective fluorescent trim surface and affords extra protection for the thread from abrasion. TrimTrax® has been proven to be 5 to 7 times more durable than single or even double rows of stitching, significantly reducing maintenance costs and providing more value and a longer service life. Two rows of stitching used to attach the trim in place of the TrimTrax® shall be considered an

## SPECIAL CONDITIONS AND TECHNICAL SPECIFICATIONS

Page 6

unacceptable alternative, since it has been proven that the two rows of stitching has insignificant impact on wear life. All trim ends shall be securely sewn into a seam for a clean finished appearance.

\_\_\_\_\_Comply                      \_\_\_\_\_Exception

### **SEWN ON RETROREFLECTIVE LETTERING**

Each jacket shall have 3" lime/yellow 3M Scotchlite™ lettering on Row A reading: H F D

\_\_\_\_\_Comply                      \_\_\_\_\_Exception

### **LETTER PATCH**

#### **Hanging Letter Patch**

The hanging letter patch shall be constructed of a double layer of outer shell material. The letter patch will attach to the rear inside hem of the jacket with a combination of snap fasteners and FR hook & loop fastener tape.

\_\_\_\_\_Comply                      \_\_\_\_\_Exception

### **COLLAR & FREE HANGING THROAT TAB**

The collar shall consist of a minimum four-layer construction and be of one-piece design. There shall be two layers of specified moisture barrier material sandwiched in between two layers of outer shell fabric (see Moisture Barrier section). The forward inside ply of moisture barrier shall be sewn to the inside of the collar along the edges only. The multi-layered configuration shall provide protection from water and other hazardous elements, while maintaining thermal protection. The collar shall be a minimum of 3 inches high and graded to chest size. The leading edges of the collar shall extend up evenly from the leading edges of the jacket front body panels so that no gap occurs at the throat area. The collar back layers of outer shell and moisture barrier shall be joined to the body panels with a minimum of two rows of stitching. The collar front layers of outer shell and moisture barrier fabric shall have a series of minimum 6 snap fasteners spaced equidistant to minimize gaps on lower edge of the collar. The top most collar shall be turned under and finished such that the snaps on the collar will not be able to contact the wearer's skin. There shall be corresponding snap fasteners on a moisture barrier leader, which is sewn to the thermal liner system to engage the snaps on the collar. The snaps on the thermal liner system leader will be installed such that they do not penetrate from the outer shell through to the inner layers. This moisture barrier leader on the thermal liner system shall be sandwiched between the underside of the top collar shell fabric and moisture barrier material and the bottom collar shell fabric and moisture barrier material so as to reduce the possibility of liner detachment while donning and doffing.

The throat tab shall consist of a minimum of four-layer construction and be a scoop type design. There shall be of two plies of outer shell material with two center plies of moisture barrier material. The throat tab shall measure not less than 3 inches wide at the center tapering to 2 inches at each end with a total length of approximately 9 inches. The throat tab will be attached to the right side of the collar by a 1 inch wide by 1 inch long piece of Nomex® twill webbing. The throat tab shall be secured in the closed and stowed position with FR hook and loop fastener tape. The FR hook and loop fastener tape shall be oriented to prevent exposure to the environment when the throat tab is in the closed position. Two 1½ inch by 3 inch pieces of FR loop fastener tape shall be sewn horizontally to the inside of each end of the throat tab. Corresponding pieces of FR hook fastener tape measuring 1 inch by 3 inches shall be sewn horizontally to the leading outside edge of the collar on each side, for attachment and adjustment when in the closed position and wearing a breathing apparatus mask. In order to provide a means of storage for the throat tab when not in use, a 1 inch by 3 inch piece of FR hook fastener tape shall be sewn horizontally to the inside of the throat tab immediately under the 1½ inch by 3 inch pieces of FR loop fastener tape. The collar closure strap shall fold in half for storage with the FR loop fastener tape engaging the FR hook fastener tape.

A hanger loop constructed of a double layer of outer shell material shall be sewn to the top of the collar at the center.

\_\_\_\_\_Comply                      \_\_\_\_\_Exception

## **JACKET FRONT**

The jacket shall incorporate separate facings to ensure there is no interruption in thermal or moisture protection in the front closure area. The facings shall measure approximately 2½ inches wide, extend from collar to hem, and be double stitched to the underside of the outer shell at the leading edges of the front body panels. A breathable moisture barrier material shall be sewn to the jacket facings and configured such that it is sandwiched between the jacket facing and the inside of the respective body panel. The breathable film side shall face inward to protect it. There shall be wicking barrier constructed of Crosstech® 2F moisture barrier material installed on the front closure system on the left and right side directly below the front facings to ensure continuous protection and overlap. The wicking barrier shall extend no more than a maximum of ¾ inch beyond the inner facing and false facing shall be unacceptable. The thermal liner and moisture barrier assembly shall be attached to the jacket facings by means of snap fasteners.

\_\_\_\_\_Comply                      \_\_\_\_\_Exception

## **STORM FLAP**

A rectangular storm flap measuring approximately 3 inches (6 inches for hook and dee inside/FR hook and loop fastener tape outside closure; aka #7C) wide and a minimum of 23 inches long (based on a 32 inch length jacket) shall be centered over the left and right body panels to ensure there is no interruption in thermal or moisture protection in the front of the jacket. The outside storm flap shall be constructed of two plies of outer shell material with a



center ply of breathable moisture barrier material. The outside storm flap shall be double stitched to the right side body panel and shall be reinforced at the top and bottom with backtacks.

\_\_\_\_\_Comply          \_\_\_\_\_Exception

### **STORM FLAP AND JACKET FRONT CLOSURE SYSTEM**

The jacket shall be closed by means of a 22 inch size #10 heavy duty high-temp smooth-gliding YKK Vislon® zipper on the jacket fronts and FR hook and loop fastener tape on the storm flap. The teeth of the zipper shall be mounted on black Nomex® tape and shall be sewn into the respective jacket fronts. The storm flap shall close over the left and right jacket body panels and shall be secured with FR hook and loop fastener tape. A 1½ inch piece of FR loop fastener tape shall be installed along the leading edge of the storm flap on the underside with four rows of stitching. A corresponding 1½ inch piece of FR hook fastener tape shall be sewn with four rows of stitching to the front body panel and positioned to engage the loop fastener tape when the storm flap is closed over the front of the jacket.

\_\_\_\_\_Comply          \_\_\_\_\_Exception

### **CARGO/HANDWARMER EXPANSION (BELLOWS) POCKETS**

Each jacket front body panel shall have a 2 inch deep by 8 inch wide by 8 inch high expansion pocket, double stitched to it and shall be located such that the bottom of the pockets are at the bottom of the jacket for full functionality when used with an SCBA. Retroreflective trim shall run over the bottom of the pockets so as not to interrupt the trim stripe. Two rust resistant metal drain eyelets shall be installed in the bottom of each expansion pocket to facilitate drainage of water. *The expansion pocket shall be reinforced with a layer of Kevlar® approximately 5 inches up on the inside of the pocket.* The pocket flaps shall be rectangular in shape, constructed of two layers of outer shell material and shall measure approximately 3 inches deeper than the pocket expansion and ½ inch wider than the pocket. The upper pocket corners shall be reinforced with proven backtacks and pocket flaps shall be reinforced with backtacks. The pocket flaps shall be closed by means of FR hook and loop fastener tape. Two pieces of 1 ½ inch by 3 inch FR hook fastener tape shall be installed vertically on the inside of each pocket flap (one piece on each end). Two corresponding pieces of 1 ½ inch by 3 inch FR loop fastener tape shall be installed horizontally on the outside of each pocket near the top (one piece on each end) and positioned to engage the hook fastener tape.

Additionally, a separate hand warmer pocket compartment will be provided under the expandable cargo pocket. This compartment will be accessed from the rear of the pocket and shall be lined with Nomex® Fleece for warmth and comfort. Shell material linings shall not be considered acceptable.

\_\_\_\_\_Comply          \_\_\_\_\_Exception

### **AXTION® SLEEVES**

The sleeves shall be of two piece construction and contoured, having an upper and a lower sleeve. Both the under and upper sleeve shall be graded in proportion to the chest size. For unrestricted movement, on the underside of each sleeve there shall be two outward facing pleats located on the front and back portion of the sleeve on the shell and thermal liner. On the moisture barrier, the system will consist of two darts, rather than pleats, to allow added length in the under sleeve. The moisture barrier darts will be seam sealed to assure liquid resistance integrity.

The pleats shall expand in response to upper arm movement and shall fold in on themselves when the arms are at rest. This expansion shall allow for greater multi-directional mobility and flexibility in the shoulder and arm areas, with little restriction or jacket rise. Neither stove-pipe nor raglan-style sleeve designs will be considered acceptable.

\_\_\_\_\_Comply                      \_\_\_\_\_Exception

### **SLEEVE CUFF REINFORCEMENTS**

The sleeve cuffs shall be reinforced with black Ara-Shield® material. The cuff reinforcements shall not be less than 2 inch in width and folded in half, approximately one half inside and one half outside the sleeve end for greater strength and abrasion resistance. The cuff reinforcement shall be double stitched to the sleeve end; a single row of stitching shall be considered unacceptable. This independent cuff provides an additional layer of protection as compared to a turned and stitched cuff. Jackets finished with a turned and stitched cuff do not provide the same level of abrasion resistance and will be considered unacceptable.

\_\_\_\_\_Comply                      \_\_\_\_\_Exception

### **WRISTLETS / ELASTICIZED ADJUSTABLE SLEEVE WELLS**

Each jacket shall be equipped with **Nomex® hand and wrist guards** (over the hand) not less than 7 inches in length and of double thickness. A separate thumbhole with an approximate diameter of 2 inches shall be recessed approximately 1 inch from the leading edge. Nomex® knit is constructed of 96% Nomex® and 4% Spandex for shape retention. The color of the wristlets shall be white.

The wristlets shall be sewn to the end of the liner sleeves. Flame resistant neoprene coated cotton/polyester material shall be sewn to the inside of the sleeve shell approximately 5 inches from the sleeve end and extending toward the cuff forming the sleeve well. The neoprene sleeve well shall form an elasticized cuff end with an FR hook and loop fastener tape tab providing a snug fit at the wrist and covering the knit wristlet. This sleeve well configuration serves to prevent water and other hazardous elements from entering the sleeves when the arms are raised. The neoprene material shall also line the inside of the sleeve shell from the cuff to a point approximately 5 inches back, where it joins the sleeve well and is double stitched to

the shell. Four Ara-shield® snap tabs will be sewn into the juncture of the sleeve well and wristlet. The tabs will be spaced equidistant from each other and shall be fitted with female snap fasteners to accommodate corresponding male snaps in the liner sleeves. One of the Ara-shield® snap tabs shall be a different color in the liner to correspond with color coded snap tabs for ease of matching the liner system to the outer shell after inspection or cleaning is completed. This configuration will ensure there is no interruption in protection between the sleeve liner and wristlet.

\_\_\_\_\_Comply          \_\_\_\_\_Exception

#### **LINER ELBOW THERMAL ENHANCEMENT**

An additional layer of thermal liner material shall be sewn to the elbow area of the liner system for added protection at contact points and increased thermal insulation in this high compression area. The elbow thermal enhancement layers shall be sandwiched between the thermal liner and moisture barrier layers of the liner system and shall be stitched to the thermal liner layer only. Finished dimension shall be approximately 5 inches by 8 inches. All edges shall be finished by means of overedging. Raw or unfinished edges shall be considered unacceptable. Thermal scraps shall not be substituted for full-cut fabric padding.

\_\_\_\_\_Comply          \_\_\_\_\_Exception

#### **LINER SHOULDER AND UPPER BACK THERMAL ENHANCEMENT**

A minimum of one additional layer of thermal liner material shall be used to increase thermal insulation in the upper back, front and shoulder area of the liner system. This full-cut thermal enhancement layer shall drape over the top of each shoulder extending from the collar to the sleeve/shoulder seam, down the front approximately 5 inches from the juncture of the collar down the back to a depth of approximately 5 ¾ inches to provide greater CCHR protection in this high compression area. The upper back, front and shoulder thermal enhancement layers shall be sandwiched between the thermal liner and moisture barrier layers of the liner system and shall be stitched to the thermal liner layer only. The thermal enhancement layer shall have finished edges by means of overedging. Raw or unfinished edges shall be considered unacceptable. Thermal scraps shall not be substituted for full-cut fabric padding. Smaller CCHR reinforcements shall not be considered acceptable since they provide far less area of coverage.

\_\_\_\_\_Comply          \_\_\_\_\_Exception

#### **SHOULDER REINFORCEMENT**

The tops of the shoulders (front yoke) of the outer shell shall be reinforced on the outside with an extra layer of outer shell material. the additional shoulder reinforcement layer shall also serve to increase thermal insulation to the shoulder area. The reinforcements shall be double

## SPECIAL CONDITIONS AND TECHNICAL SPECIFICATIONS

Page 11

stitched to the shell and shall measure approximately 4 inches wide near the collar and approximately 6 inches wide at the juncture of the sleeve and body panels.

\_\_\_\_\_Comply          \_\_\_\_\_Exception

### **RADIO POCKET**

Each jacket shall have a pocket designed for the storage of a portable radio. This pocket shall be of box type construction, double stitched to the jacket and shall have one drainage eyelet in the bottom of the pocket. The pocket flap shall be constructed of two layers of outer shell material measuring approximately 3 inches longer than the depth of the pocket and ¼ inch wider than the pocket. The pocket flap shall be closed by means of FR hook and loop fastener tape. A 1½ inch by 3 inch piece of FR hook fastener tape shall be installed on the inside of the pocket flap beginning at the center of the bottom of the flap. A 1½ inch by 3 inch piece of FR loop fastener tape shall be installed horizontally on the outside of the pocket near the top center and positioned to engage the hook fastener tape. In addition, the entire inside of the pocket shall be lined with neoprene coated cotton/polyester material to ensure that the radio is protected from the elements. The impermeable barrier material shall also be sandwiched between the two layers of outer shell material in the pocket flap for added protection. The radio pocket shall measure approximately 3 inches deep by 3.5 inches wide by 9 inches high and shall be installed on the left chest.

\_\_\_\_\_Comply          \_\_\_\_\_Exception

### **MICROPHONE STRAP**

A strap shall be constructed to hold a microphone for a portable radio. It shall be sewn to the jacket at the ends only. The size of the microphone strap shall be 1 inch x 3 inches. The microphone strap shall be mounted above the radio pocket and shall be constructed of double layer outer shell material.

\_\_\_\_\_Comply          \_\_\_\_\_Exception

### **HELMET SNAP w/SELF STRAP AND HOOK & LOOP STRAP**

Each jacket shall be equipped with a Helmet Snap & Strap. An inward facing safety hook, attached to a double layer self material strap, shall be double stitched in a vertical position to the upper chest. Below the safety hook will be a strap constructed of outer shell material measuring approximately 1 inch by 12 inches and shall hold the barrel of the flashlight. The strap will be equipped with a 1 inch by 3 inches FR hook and loop closure at front of the strap to facilitate easy removal of the flashlight. There shall be approximately 4 inches between the safety hook and strap. The helmet strap shall be located on the right chest.

\_\_\_\_\_Comply          \_\_\_\_\_Exception

***PANT CONSTRUCTION***

**BODY**

The body of the shell shall be constructed of four separate body panels consisting of two front panels and two back panels. The body panels shall be shaped so as to provide a tailored fit, thereby enhancing body movement and shall be joined together by double stitching with Nomex<sup>®</sup> thread. The body panels and seam lengths shall be graded to size to assure accurate fit in a broad range of sizes.

The front body panels will be wider than the rear body panels to provide more fullness over the knee area. This is accomplished by rolling the side leg seams (inside and outside) to the rear of the pant leg beginning at the knee. The slight taper will prevent premature wear of the side seams by pushing them back and away from the primary high abrasion areas encountered on the sides of the lower legs.

\_\_\_\_\_Comply                      \_\_\_\_\_Exception

**AXTION<sup>®</sup> SEAT**

The rise of the rear pant center back seam, including gusset if any, from the top back of the waistband to where it intersects the inside leg seams at the crotch shall exceed the rise at the front of the pant by approximately 8 inches. The longer rear center back seam provides added length in the seat for mobility without restriction when stepping up, kneeling, or crawling and maintains proper alignment of the knee, without twisting, directly over the knee pads when kneeling and crawling.

\_\_\_\_\_Comply                      \_\_\_\_\_Exception

**LINER ACCESS OPENING (PANT)**

The thermal liner and moisture barrier layers of the pant liner system shall be constructed in such a way as to allow an access opening for interior inspection, service and replacement. The thermal liner and moisture barrier layers shall be stitched together for security and prevention of inadvertent use of one layer without the other. The liner system shall have a reinforcement material sewn to the bottom of the fly opening. This reinforcement will serve to prevent the liner from tearing in that area from the constant donning and doffing of the pants.

The liner system of the pant shall incorporate an opening along the back of the waistline for ease in inspecting the inner layers and to facilitate performing the complete Liner Inspection. The thermal liner and moisture barrier shall be individually bound with a neoprene coated bias cut tape and joined together on each of the front panels, along the waistband from the front fly opening to side seam. The back of the liner system will be allowed to remain open with two snaps on either side of the back seam to attach the moisture barrier layer to the thermal liner layer. As described previously, the pant thermal layer system snaps directly to

the independent waistband by means of nine snap fasteners. There shall be no hook and loop used to close the liner access opening.

\_\_\_\_\_Comply          \_\_\_\_\_Exception

### **RETROREFLECTIVE FLUORESCENT TRIM**

The pants shall have a stripe of retroreflective fluorescent trim encircling each leg below the knee to comply with the requirements of NFPA #1971 in 3 inch lime/yellow 3M Scotchlite™ Triple Trim (L/Y borders with silver center). Bottom of trim band shall be located approximately 3" above cuff.

\_\_\_\_\_Comply          \_\_\_\_\_Exception

### **REINFORCED TRIM STITCHING**

All reflective trim is secured to the outer shell with Nomex® thread, using a locking chainstitch, durable, flame resistant black Kevlar® cording provides a bed for the stitching along each edge of the retroreflective fluorescent trim surface and affords extra protection for the thread from abrasion. TrimTrax® has been proven to be 5 to 7 times more durable than single or even double rows of stitching, significantly reducing maintenance costs and providing more value and a longer service life. Two rows of stitching used to attach the trim in place of the TrimTrax® shall be considered an unacceptable alternative, since it has been proven that the two rows of stitching has insignificant impact on wear life. All trim ends shall be securely sewn into a seam for a clean finished appearance.

\_\_\_\_\_Comply          \_\_\_\_\_Exception

### **ELASTICIZED WAISTBAND**

The pant design facilitates the transfer of the weight of the pant to the hips instead of shoulders and suspenders. The two rear outer-shell body panels, beginning at the pant side seams, shall incorporate an elasticized waist insert, running from the side seam towards the back of the trouser for an approximate distance of 4 inches. The rear elasticized waist inserts shall be integral to the shell of the pant and the elasticized portions shall be covered by the outer shell fabric of the pant.

The waist area of the pants shall be reinforced on the inside with a separate piece of black aramid outer shell material, cut on the bias (diagonally). The reinforcement shall be folded in half, for a finished bottom edge and shall have a finished width of not less than approximately 1½ inches. The top edge of the waistband reinforcement shall be double stitched to the outer shell at the top of the pants. The lower edge of the waistband shall be unattached to the shell to accept the thermal liner and moisture barrier. The top of the thermal liner and moisture barrier shall be secured to the underside of the waistband reinforcement by means of nine snaps, spaced equidistant along the length of the waistband reinforcement. Inserting the liner system between the waistband reinforcement and outer

## SPECIAL CONDITIONS AND TECHNICAL SPECIFICATIONS

Page 14

shell serves to reduce the possibility of liner detachment while donning and doffing. The independent waistband construction affords greater comfort and fit than a turned and stitched method. Pants that do not include an independent waistband or are not cut on the bias will not provide the same amount of stretch to the garment and shall be considered unacceptable.

\_\_\_\_\_Comply                      \_\_\_\_\_Exception

### **EXTERNAL / INTERNAL FLY FLAP**

The pants will have a vertical outside fly flap constructed of two layers of outer shell material, with a layer of moisture barrier material sandwiched between. The fly flap shall be double stitched to the left front body panel and shall measure approximately 2 ¾ inches wide, with a length graded to size based on waist measurement and reinforced with bartacks at the base. An internal fly flap constructed of one layer of outer shell material, thermal liner and specified moisture barrier, measuring approximately 2 inches wide, with a length graded to size based on waist, shall be sewn to the leading edge of the right front body panel.

The underside of the outside fly flap shall have a 1½ inch wide piece of FR loop fastener tape quadruple stitched full length along the shell material only; stitching shall not penetrate the moisture barrier insert between the two shell fabric layers to insure greater thermal protection and reduced water penetration. A corresponding strip of 1½ inch wide piece of FR hook fastener tape shall be quadruple stitched to the outside right front body panel securing the fly in a closed position.

\_\_\_\_\_Comply                      \_\_\_\_\_Exception

### **BELT**

Each pant shall include an approximate 2 inch wide black aramid belt with a self locking hi-temp thermoplastic buckle serving as the exterior primary positive locking closure. Sizing adjustment shall be provided by means of the black belting which can be threaded through the male portion of the 2 inch thermoplastic buckle; this buckle shall also provide a quick-release mechanism for donning and doffing.

The belt shall be attached to the two front body panels of the pant at the side seams and shall run through tunnels constructed of black 6.0 osy aramid outer shell material, protecting the belt from damage. The tunnels will begin at the side seams and run to the front of the pant, terminating at the buckle closure system. A single belt loop constructed of a double layer of black 6.0 osy aramid measuring approximately ½ inch by 3 inches shall be attached to the topside of the right side tunnel. The belt loop will be located approximately 2 inches from the tunnel opening for storage of the belt tab.

\_\_\_\_\_Comply                      \_\_\_\_\_Exception

## **KNEE**

The outer shell of the pant legs shall be constructed with horizontal expansion pleats in the knee area with corresponding darts in the liner to provide added fullness for increased

freedom of movement and maximum flexibility. The pleats shall be folded to open outwardly towards the side seams to insure no restriction of movement. The knee will be installed proportionate to the pant inseam, in such a manner that it falls in an anatomically correct knee location.

The thermal liner shall be constructed with four darts per leg in the front of the knee. Two will be located above the knee (one on each side) and two will be located below the knee (one on each side). On the moisture barrier, the system will consist of two darts, rather than pleats, to allow added length in the under knee. The darts in the liner provide a natural bend at the knee. The darts in the liner work in conjunction with the expansion panels in the outer shell to increase freedom of movement when kneeling, crawling, climbing stairs or ladders, etc.

\_\_\_\_\_Comply                      \_\_\_\_\_Exception

## **LINER KNEE THERMAL ENHANCEMENT**

A minimum of one additional layer of specified thermal liner and one additional layer of moisture barrier material, measuring a minimum of 9 inches by 11 inches, will be sewn to the knee area of the liner system for added CCHR protection and increased thermal insulation in this high compression area. The knee thermal enhancement layers shall be sandwiched between the thermal liner and moisture barrier layers of the liner system and shall be stitched to the thermal liner layer only. The thermal enhancement layer shall have finished edges by means of overedging. Raw or unfinished edges shall be considered unacceptable. Thermal scraps shall not be substituted for full-cut fabric padding. Smaller CCHR reinforcements shall not be considered acceptable since they provide far less area of coverage.

\_\_\_\_\_Comply                      \_\_\_\_\_Exception

## **KNEE REINFORCEMENTS**

The knee area shall be reinforced with black Ara-Shield® material. The knee reinforcement shall be centered on the leg to insure proper coverage when bending, kneeling and crawling. The knee reinforcements shall measure approximately 9 inches wide by 12 inches high and shall be double stitched to the outside of the outer shell in the knee area for greater strength and abrasion resistance. The knee reinforcement specified shall be removable without opening up any seams of the outer shell of the pant. The knee reinforcement specified shall be removable for replacement without opening Major A seams of the outer shell of the pant. The lower edge of the Ara-Shield® knee reinforcement



## SPECIAL CONDITIONS AND TECHNICAL SPECIFICATIONS

Page 16

shall be turned under so that the lower row of stitching is covered and protected from abrasion.

\_\_\_\_\_Comply                      \_\_\_\_\_Exception

### **PADDING UNDER KNEE REINFORCEMENTS**

Padding for the knees shall be accomplished with one layer of neoprene coated aramid batt and one layer of quilted aramid batt. Both layers of padding shall be sandwiched between the shell and the knee reinforcement layers. The neoprene shall face outward.

There shall be an additional 2 layers of Q8 padding on the liner.

There shall be an additional 2 layers of Q9 padding on the shell.

\_\_\_\_\_Comply                      \_\_\_\_\_Exception

### **EXPANSION (BELLOWS) POCKETS**

An expansion pocket, measuring approximately 2 inches deep by 10 inches wide by 10 inches high shall be double stitched to the side of each leg straddling the outseam above the knee and positioned to provide accessibility. *The lower half of each expansion pocket shall be reinforced with an additional layer of Kevlar® twill material on the inside.* Two rust resistant metal drain eyelets shall be installed on the underside of each expansion pocket to facilitate drainage of water. The pocket flaps shall be rectangular in shape, constructed of two layers of outer shell material and shall measure approximately 3 inches deeper than the pocket expansion and ½ inch wider than the pocket. The upper pocket corners shall be reinforced with proven backtacks and pocket flaps shall be reinforced with backtacks. The pocket flaps shall be closed by means of FR hook and loop fastener tape. Two pieces of 1½ inch by 3 inch FR hook fastener tape shall be installed vertically on the inside of each pocket flap (one piece on each end). Two corresponding pieces of 1½ inch by 3 inch FR loop fastener tape shall be installed horizontally on the outside of each pocket near the top (one piece on each end) and positioned to engage the hook fastener tape. The right pocket flap shall be split 50/50.

\_\_\_\_\_Comply                      \_\_\_\_\_Exception

### **EXPANSION POCKET REINFORCEMENTS**

The lower half of the expansion pockets shall be reinforced on the outside with black Ara-Shield® material.

\_\_\_\_\_Comply                      \_\_\_\_\_Exception

### **POCKET DIVIDER**

The right side expansion pocket shall be equipped with a vertical divider made of self

material separating the pocket into two compartments. The divider will split the pocket 50/50.

\_\_\_\_\_Comply                      \_\_\_\_\_Exception

## **PANT CUFF REINFORCEMENTS**

The cuff area of the pants shall be reinforced with black Ara-Shield® material. The cuff reinforcement shall not be less than 2 inch in width and folded in half, approximately one half inside and one half outside the end of the legs for greater strength and abrasion resistance. The cuff reinforcement shall be double stitched to the outer shell for a minimum of two rows of stitching. This independent cuff provides an additional layer of protection over a hemmed cuff. Pants that are turned and stitched at the cuff, as opposed to an independent cuff reinforcement, do not provide the same level of abrasion resistance and shall be considered unacceptable.

\_\_\_\_\_Comply                      \_\_\_\_\_Exception

## **PADDED RIP-CORD SUSPENDERS & ATTACHMENT**

On the inside waistband shall be attachments for the standard "H" style "Padded Rip-Cord" suspenders. There will be four attachments total – 2 front, 2 back. The suspender attachments shall be constructed of black Ara-Shield® material measuring approximately ½ inch wide by 3-inches long. They shall be sewn in a horizontal position on the ends only to form a loop. The appearance will be much like a horizontal belt loop to capture the suspender ends.

A pair of "H" style "Padded Rip-Cord" suspenders shall be specially configured for use with the pants. The main body of the suspenders shall be constructed of 2 inch wide black webbing straps. The suspenders shall run over each shoulder to a point approximately shoulder blade high on the back, where they shall be joined by a 2 inch wide horizontal piece of webbing measuring approximately 8-inches long, forming the "H". This shall prevent the suspenders from slipping off the shoulders. The shoulder area of the suspenders will be padded for comfort by fully encasing the webbing with aramid batting and wrap-around black aramid.

The rear ends of the suspenders will be sewn to 2-inch wide elasticized webbing extensions measuring approximately 8-inches in length and terminating with thermoplastic loops. The forward ends of the suspender straps shall be equipped with specially configured black powder coat non-slip metal slides with teeth. Through the metal slides will be the 9 inch lengths of strap webbing "Rip-Cords" terminating with thermoplastic loops on each end. Pulling on the "Rip-Cords" shall allow for quick adjustment of the suspenders.

Threaded through and attached to the thermoplastic loops on the forward and rear ends of the suspenders will be black aramid suspender attachments incorporating two snap fasteners. The aramid suspender attachments are to be threaded through the suspender attachment loops on

## SPECIAL CONDITIONS AND TECHNICAL SPECIFICATIONS

Page 18

the inside waistband of the pants. The aramid suspender attachments will then fold over and attach to themselves securing the suspender to the pants.

\_\_\_\_\_Comply                      \_\_\_\_\_Exception

### **REVERSE BOOT CUT**

The outer shell pant leg cuffs will be constructed such that the back of the leg is approximately 1 inch shorter than the front. The liner will also have a reverse boot cut at the rear of the cuff and a concave cut at the front to keep the liner from hanging below the shell. This construction feature will minimize the chance of premature wear of the cuffs and injuries due to falls as a result of "walking" on the pant cuffs. Pants that have "cut-outs" in the back panel rather than a contoured boot cut shall be considered unacceptable.

\_\_\_\_\_Comply                      \_\_\_\_\_Exception

### **THIRD PARTY TESTING AND LISTING PROGRAM**

All components used in the construction of these garments shall be tested for compliance to NFPA Standard #1971 by Underwriters Laboratories (UL). Underwriters Laboratories shall certify and list compliance to that standard. Such certification shall be denoted by the Underwriters Laboratories certification mark.

\_\_\_\_\_Comply                      \_\_\_\_\_Exception

### **LABELS**

Appropriate warning label(s) shall be permanently affixed to each garment. Additionally, the NFPA certification label shall include the following information.

Compliance to NFPA Standard #1971  
Underwriters Laboratories classified mark  
Manufacturer's name  
Manufacturer's address  
Manufacturer's garment identification number  
Date of manufacture  
Size

\_\_\_\_\_Comply                      \_\_\_\_\_Exception

### **ISO CERTIFICATION / REGISTRATION**

The protective clothing manufacturer shall be certified and registered to ISO Standard 9001 to assure a satisfactory level of quality. Indicate below whether the manufacturer is so certified and registered by checking either "Yes" or "No" in the space provided.

\_\_\_\_\_Yes                      \_\_\_\_\_No

### **WARRANTY:**

The manufacturer shall warrant these jackets and pants to be free from defects in materials and workmanship for their serviceable life when properly used and cared for.

\_\_\_\_\_Comply                      \_\_\_\_\_Exception

### **HOOK AND LOOP SUPPORT PROGRAM**

Support program shall cover hook or loop tape that has begun to fray or otherwise degrade from normal wear. This program shall remain in effect for a period of five years from the original date of manufacture of the garment. This support program shall cover the repair or replacement, without charge, of any hook and/or loop on the garments produced by the manufacturer providing the garments are otherwise serviceable.

This support program does NOT cover damage from fire, heat, chemicals, misuse, accident or negligence. Failure to properly care for garments will serve to void this support program.

\_\_\_\_\_Comply                      \_\_\_\_\_Exception

### **SIZING BY VENDOR:**

Both male and female sizing samples shall be available.

\_\_\_\_\_Comply                      \_\_\_\_\_Exception

### **BAR-CODE/RECORD KEEPING INTERFACE**

A 1 dimensional barcode, in the interleaved 2 of 5 format shall be printed on the label of each separable layer of the garment.

This barcode shall represent the serial number of the garment. The manufacturer shall be able to provide a detailed list of each asset of a drop-shipped order, and shall include the following:

- Brand
- Order Number
- Serial Number
- Style Number
- Color
- Description

## SPECIAL CONDITIONS AND TECHNICAL SPECIFICATIONS

Page 20

- Chest/Waist Size
- Jacket/pant Length
- Sleeve Length
- Date of Manufacture
- Mark-For Data

This information shall be able to be imported into the manufacturers web-based system designed to facilitate the organization and tracking of assets in accordance with the cleaning and inspection requirements of OSHA and NFPA 1851.

\_\_\_\_\_Comply          \_\_\_\_\_Exception

### **PPE RECORD KEEPING**

The manufacturer shall make available and no-charge, a password protected data based backed website that does not care whose brand of PPE assets are being recorded. The website shall have the functionality to allow the manufacturer to import all of the pertinent data into the department's account so that the initial data entry by fire department personnel is eliminated.

The website shall allow for the department to use a barcode scanner, if desired, to scan the Interleaved 2 of 5 barcode found in the gear by going to the Search the Serial Number page in PPE record keeping program, and scanning the asset's barcoded serial number.

\_\_\_\_\_Comply          \_\_\_\_\_Exception

### **EXCEPTIONS TO SPECIFICATIONS**

Any and all exceptions to the above specifications must be clearly stated for each heading. Use additional pages for exceptions, if necessary.

### **COUNTRY OF ORIGIN**

Jackets and Pants shall be manufactured in the United States

-End Section-

City of Henderson, Kentucky  
Invitation to Bid

Bid Reference No. 24-16

BID PRICING SHEET

<u>Item #</u>	<u>Description</u>	<u>Estimated Qty.</u>	<u>Unit Price</u>	<u>Extension</u>
1.	Turnout Coat	10	_____	_____
2.	Turnout Pants	10	_____	_____
			Total Bid Price	\$ _____

Addendum # received \_\_\_\_\_

Non-Collusive Bid Statement: The undersigned bidder, having fully informed himself regarding the accuracy of the statements made herein, certifies that: (1) The bid has been arrived at by the bidder independently and has been submitted without collusion with, and without any agreement, understanding, or planned common course of action with any other vendor of materials, supplies, equipment, or services described in the bid, designed to limit independent bidding or competition, and (2) The contents of the bid have not been communicated by the bidder or its employees or agents to any person not an employee or agent of the bidder or its surety on any bond furnished with the bid, and will not be communicated by any such person prior to the official opening of the bid.

\_\_\_\_\_  
Signature of Authorized Official

\_\_\_\_\_  
Name and Title (printed)

\_\_\_\_\_  
Legal Name of Business

\_\_\_\_\_  
Address

\_\_\_\_\_  
Address

\_\_\_\_\_  
Telephone Number

\_\_\_\_\_  
Date

Affix seal below if bid is by corporation.

This seal was herewith affixed in the presence of:

Signature \_\_\_\_\_ Title \_\_\_\_\_

City of Henderson, Kentucky  
Invitation to Bid

Bid Reference No. 24-16

REQUIRED AFFIDAVIT FOR NON-RESIDENT BIDDERS CLAIMING KENTUCKY  
RESIDENT BIDDER STATUS

The bidder or offeror hereby swears and affirms under penalty of perjury that, in accordance with KRS 45A.494(2), the entity bidding is an individual, partnership, association, corporation, or other business entity that, on the date the contract is first advertised or announced as available for bidding:

1. Is authorized to transact business in the Commonwealth;
2. Has for one year prior to and through the date of advertisement
  - a. Filed Kentucky corporate income taxes;
  - b. Made payments to the Kentucky unemployment insurance fund established in KRS 341.49; and
  - c. Maintained a Kentucky workers' compensation policy in effect.

The City of Henderson reserves the right to request documentation supporting a bidder's claim of resident bidder status. Failure to provide such documentation upon request shall result in disqualification of the bidder or contract termination.

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Printed Name

\_\_\_\_\_  
Title

\_\_\_\_\_  
Date

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

Address \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Subscribed and sworn to before me by \_\_\_\_\_

\_\_\_\_\_  
(Affiant)

\_\_\_\_\_  
(Title)

of \_\_\_\_\_ this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.  
(Company Name)

\_\_\_\_\_  
Notary Public

[seal of notary]

My commission expires: \_\_\_\_\_

REQUIRED TO BE SUBMITTED WITH BID

The provisions of KRS 45A.395 required that any bidder or offeror submit a sworn statement in conformity with such statute as a prerequisite to a determination that such bidder or offeror is a responsible bidder.

The undersigned, individually and as the \_\_\_\_\_  
(Office or Title)

of \_\_\_\_\_  
(Bidder or Offeror)

states under penalty of perjury that neither he (she), nor, to the best of his (her) knowledge, anyone acting on behalf of Bidder or Offeror, has knowingly violated any provision of the campaign finance laws of the Commonwealth of Kentucky and that the award of a contract to the Bidder or Offeror will not violate any provision of the campaign finance laws of the Commonwealth. "Knowingly" means, with respect to conduct or to a circumstance described by a statute defining an offense, that a person is aware or should have been aware that his conduct is of that nature or that the circumstance exists.

This the \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_\_.

\_\_\_\_\_  
(Company Name)

\_\_\_\_\_  
(Typed or printed name)

\_\_\_\_\_  
(Signature)

\_\_\_\_\_  
(Title)