



TOWN OF HILTON HEAD ISLAND, SC

REQUEST FOR PROPOSALS

(RFP 2014-0012)

**Personal Protective Equipment**

May 2014



**TOWN OF HILTON HEAD ISLAND  
REQUEST FOR PROPOSALS  
Personal Protective Equipment  
RFP 2014-0012**

The Town of Hilton Head Island is soliciting proposals from qualified vendors for an indefinite delivery/services contract to supply new Personal Protective Equipment (PPE) in accordance with the enclosed scope of work based on the estimated annual quantities provided. These quantities are not guaranteed but will be utilized to compare cost proposals from offerors. The vendor must demonstrate in their proposal that they have the resources and ability to provide Globe GXCEL PPE that fully matches the specifications currently used by Fire Rescue. The initial contract will be for a one year period. If the vendor's performance at the conclusion of the first year is satisfactory the Town reserves the right with the vendor's concurrence to extend the contract for four additional years.

Sealed proposals will be due not later than 1:00 PM 21, May 2014. Sealed proposals should be either hand delivered or delivered by traceable means (Fed Ex) to the Town's receptionist at One Town Center Court, Hilton Head Island SC. No faxes or emails will be accepted. All proposals should be clearly marked on the outside with RFP 2014-0012 Personal Protective Equipment. For information concerning this proposal or to obtain a copy of the proposal please contact Deputy Fire Chief Ed Boring at (843) 682 5100.

The Town reserves the right to refuse any and all proposals and to waive any technicalities and formalities.

The Town reserves the right to accept or reject any or all proposals received as a result of this solicitation or to negotiate with all qualified offerors, or to cancel in part or in its entirety this solicitation if it is in the best interest of the Town to do so.

This solicitation does not commit the Town to award a contract or to pay for any costs incurred in the preparation of your proposal; or to procure or contract for any goods or services.

Your proposal must be signed by someone authorized to bind the offeror, and shall contain a  
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statement that it is good for a period of at least 60 days.

The Town does not discriminate on the basis of race, color, national origin, sex, religion, age or disability in employment or in the provision of goods and services.

## **Selection Criteria**

**The award of a contract will be made based on the following selection criteria:**

Proposed PPE is fully compliant and fully meets all the Town's required specifications reflected in the below Scope of Services section of this RFP. Proposed PPE must be identical in style, appearance, performance, and specification and interchangeable with PPE trousers and jackets already in our inventory. Any offeror not meeting this requirement will be deemed non-responsive.

Cost of providing and servicing PPE gear.

Documented performance record that demonstrates your firm's ability to properly fit size and provide PPE for organizations of similar size and scope and provide warranty services. (Provide complete reference information to include name, valid phone number and email address of current and past clients).

## **Scope of Services**

The Town regularly purchases PPE and expects to purchase approximately 10 complete PPE sets in the upcoming Fiscal year (July 2014-June 2015). This is not a guarantee of 10 sets and pricing should be determined upon your scale or quantity pricing. PPE shall be identical to the Globe GXCEL PPE currently used by the Town and be in compliance in materials and construction will meet or exceed NFPA Standard #1971 (2013 revision) and OSHA for structural fire fighters protective clothing. Any errors or inconsistencies in the specification shall be corrected to the most current version of the NFPA #1971 standard. The Town intends to renew this contract annually for at least four successive years after the initial term, providing it is in the best interest of the Town.

1. **Base Service** Provide PPE sets as per the specification below and indicate your compliance with the specification detail;

**All materials and construction will meet or exceed NFPA Standard #1971 (2013 revision) and OSHA for structural fire fighters protective clothing.**

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

**OUTER SHELL MATERIAL - JACKETS AND TROUSERS**

The outer shell shall be constructed of TENCATE " **ULTRA™**" 60/20/20 Kevlar®/Nomex®/PBO blend material with an approximate weight of 7.5 oz. per square yard in a rip stop weave. The shell material must be treated with **SST™ (SUPER SHELLTITE)** which is a durable water-repellent finish that also enhances abrasion resistance. Color of garments is to be dark gold. **Bids offering this shell material without the SST™ will not be considered.**

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

**THERMAL INSULATING LINER - JACKET AND TROUSERS**

The thermal liner shall be constructed of TENCATE thermal lining fabric consisting of one layer of 1.5 oz. and one layer of 2.3 oz. per square yard E-89™ spunlaced Kevlar® aramid blend, quilt stitched to a face cloth with a Wickwell™ Plus finish, or current equivalent. A 7 inch by 9 inch pocket, constructed of self material and lined with moisture barrier material, shall be affixed to the inside of the jacket thermal liner on the left side by means of a lock stitch. 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. Further mention of "Thermal Liner" in this specification shall refer to this section. *NOTE: This thermal liner MUST be used exclusively with a minimum 7 oz. per square yard outer shell material.*

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

**MOISTURE BARRIER - JACKETS AND TROUSERS**

The moisture barrier material shall be **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.

\_\_\_\_\_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 TROUSERS**

The thermal liner and moisture barrier shall be completely removable from the jacket shell. Two strips of 5/8 inch wide FR Velcro® fastener tape shall secure the thermal liner/moisture barrier to the outer shell along the length of the neck line under the collar (see Collar section). The remainder of the thermal liner/moisture barrier shall be secured with a minimum of four snap fasteners appropriately spaced on each jacket facing and four Ara-Shield® snap fasteners at each sleeve end. One of the Ara-shield® snap tabs shall be color coded to a corresponding snap tab in the liner 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 trouser 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 two Ara-Shield®<sup>snap</sup> fasteners per leg. One of the Ara-shield® snap tabs shall be color coded to a corresponding snap tab in the liner for ease of matching the liner system to the outer shell after inspection or cleaning is completed.

\_\_\_\_\_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, and #516. The thermal liners and moisture barriers shall be assembled using stitch type #301, #401, #504, #514, and #516. Stitching in all seams shall be continuous. There shall be no joined stitching in midseam. All major A outer shell structural seams, major B structural liner seams, shall have a minimum of 8 to 10 stitches per inch.

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

## ***JACKET CONSTRUCTION***

### **BODY**

The body of the shell and AXTION 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

### **SIZING**

The jacket length shall be measured from the juncture of the collar and back panels to the hem of the jacket and shall measure 27 inches in the front/31 inches long in the back (ladies), 29 inches in the front/33 inches long in the back (standard) or 32 inches in the front/36 inches long in the back. The jacket shall be available in male and female patterns

in even size chest measurements of two inch increments, and shall range from a small size of 30 to a large size of 58. Generalized sizing, such as small, medium, large, etc., will not be considered acceptable.

\_\_\_\_ Comply      \_\_\_\_ Exception

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

A Firefighter Drag Rescue Device shall be installed in each jacket. The ends of a 1½ inch wide strap, constructed of black Kevlar® with a red Nomex® center stripe, will be sewn together to form a continuous loop. The strap will 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 a hook and loop strap. The access port will be covered by an outside flap with beveled corners 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 left front. This opening shall run approximately 10 inches along the perimeter for the purpose of inspecting the integrity of the jacket liner system. When installed into the outer shell the Liner Access Opening will be covered and protected by the overlap of the outer shell facing.

\_\_\_\_ Comply      \_\_\_\_ Exception

#### **RETROREFLECTIVE FLUORESCENT TRIM**

The retroreflective fluorescent trim shall be red/orange 3M Scotchlite™ Triple Trim (R/O 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 (2013 edition) and OSHA. The trim shall be in the following widths and shall be **NYC style**; 3 inch wide stripes - around each sleeve below the elbow, around each sleeve above the elbow, 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.

\_\_\_\_ 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 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

## SEWN ON RETROREFLECTIVE LETTERING

Each jacket shall have 3" red/orange 3M Scotchlite™ lettering on Row B reading: **H.H.I.F.R.**

\_\_\_\_\_ Comply                      \_\_\_\_\_ Exception

## LETTER PATCH

### Sew-On Letter Patch

Lettering on Row B will be on a Sewn-on letter Patch. The sewn-on letter patch shall be constructed of a layer of outer shell material.

### FR Velcro® Letter Patch

Lettering on Row G will be on a FR Velcro® letter Patch. The patch shall be constructed of a double layer of outer shell material. The letter patch will attach to the back of the jacket with FR Velcro® hook & loop fastener tape.

\_\_\_\_\_ Comply                      \_\_\_\_\_ Exception

## COLLAR & FREE HANGING THROAT TAB

The collar shall consist of a four-layer construction and be of two-piece design. The outer layers shall consist of outer shell material on outside and a layer of PCA black Advance™ on the inside, There shall be a layer of specified moisture barrier and a layer of aramid pajama check material sandwiched in between (see Moisture Barrier section). The rear inside ply of aramid pajama check shall be sewn to the collar's back layer of outer shell at the edges only. The forward inside ply of moisture barrier shall be sewn to the inside of the collar at the edges only. The multi-layered configuration shall provide protection from water and other hazardous elements. The collar shall be a minimum of 3 inches high and graded to 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's back layers of outershell and moisture barrier shall be joined to the body panels with two rows of stitching. Inside the collar, above the rear seam where it is joined to the shell shall be a strip of 5/8 inch wide FR Velcro® loop fastener tape running the full length of the collar. The collar's front layers of moisture barrier and outershell shall have an additional strip of 5/8 inch wide Velcro® hook fastener tape stitched to the inside lower edge and running the full length of the collar. These two inside strips of 5/8 inch wide FR Velcro® fastener tape sewn to the underside of the collar shall engage corresponding pieces of FR Velcro® fastener tape on the neck extension of the liner system. A self material fabric hanger loop shall be sewn at the top of collar.

The throat tab shall be a scoop type design and constructed of two plies of outer shell material with two center plies of moisture barrier material. The throat tab shall measure not less than 2½ inches wide at the center tapering to 2 inches at each end with a total length of approximately 7½ inches. The throat tab will be attached to the right side of the collar by a 1 inch wide by 1½ inch long piece of Nomex® twill webbing. The throat tab shall be secured in the closed and stowed position with FR Velcro® hook and loop fastener tape. The FR Velcro® hook and loop fastener tape shall be oriented to prevent exposure to the environment when the throat tab is in the closed position. A 1½ inch by 3 inch piece of FR Velcro® loop fastener tape shall be sewn horizontally to the inside leading end of the throat tab and a 1½ inch by 3 inch piece of FR Velcro® hook fastener tape shall be sewn horizontally to the opposite end of the throat tab. A corresponding piece of FR Velcro® hook fastener tape measuring 1½ inches by 3 inches shall be sewn horizontally to the leading outside edge of the collar on the left side, for attachment and adjustment when in the closed position and wearing a breathing apparatus mask. The collar closure strap shall fold in half for storage with the FR Velcro® loop fastener tape engaging the FR Velcro® hook fastener tape.

\_\_\_\_\_ 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 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. Jackets that use “false facings” shall be considered 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 3¼ inches (6 inches for hook & dee inside/FR Velcro® outside closure; aka #7C) wide and 24 inches long 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 flame resistant Velcro® 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 facings. The storm flap shall close over the left and right jacket body panels and shall be secured with flame resistant Velcro® fastener tape. A 1½ inch by 24 inch piece of FR Velcro® 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 by 23 inch piece of FR Velcro® 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

### **SEMI-EXPANSION (BELLOWS) POCKETS**

Each coat front body panel shall have a 8 inch wide by 8 inch high semi-expansion pocket double stitched to it and shall be located to provide accessibility. The leading edge of the pockets shall be sewn flush with the coat. The rear of the pockets shall expand to a depth of 2 inches. The lower half of each semi-expansion pocket shall be reinforced with a layer of Kevlar® on the inside. Two rust resistant metal drain eyelets shall be installed in the bottom of each semi-expansion pocket to facilitate drainage of water. The pocket flaps shall be constructed of two layers of outer shell material and shall measure 3 inches deeper than the pocket expansion and ½ inch wider than the pocket. The pocket flaps shall be angled with the front edge 1” shorter than the back edge, the upper pocket corners shall be reinforced with proven backtacks, and pocket flaps shall be reinforced with bartacks. The pocket flaps shall be closed by means of flame resistant Velcro® hook and loop fastener tape. Two pieces of 1½ inch by 3 inch FR Velcro® 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 Velcro® 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.

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

### **AXTION SLEEVES**

The sleeves shall be of two piece construction, having an upper and a lower sleeve. The sleeve seams shall be of a double needle seam construction and shall be contoured to follow the natural flex of the arm at rest. 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 undersleeve. 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 coat 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 an extra layer of outer shell material. The cuff reinforcements shall not be less than 2 inches 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 for a total of four rows of stitching. This independent cuff provides an additional layer of protection over a turned and stitched cuff. Coats finished with a turned and stitched cuff do not provide the same level of abrasion resistance and will be considered unacceptable.

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

### **WRISTLETS / SLEEVE WELLS**

Each jacket shall be equipped with **Nomex<sup>®</sup> 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.

The wristlets shall be sewn to a piece of self material leader that is then stitched into the cuff. Flame resistant Neoprene coated cotton/polyester impermeable barrier material will be sewn to the thermal liner sleeve from the cuff to 6” up the sleeve between the thermal and moisture barrier layers. Two Nomex<sup>®</sup> 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 snap tabs sewn onto the liner sleeves. This configuration will ensure there is no interruption in protection between the sleeve liner and wristlet.

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

### **LINER SHOULDER THERMAL ENHANCEMENT**

An additional layer of thermal liner material shall be used to increase thermal insulation in the shoulder area of the liner system. This thermal enhancement layer shall drape over the top of each shoulder extending from the collar to the sleeve/shoulder seam, and 2” to the front, 2” to the back of the shoulder cap. The 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.

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

## **TAKE UP STRAPS (JACKET)**

The jacket shall be equipped with two take up straps. The straps shall be constructed of 1 inch wide black Aramid twill and be positioned in the waist area on the outside of the garment; one on each side. Each take up strap shall be comprised of two sub-component straps. The rear strap component shall be constructed of black twill Nomex<sup>®</sup>. The rear strap shall measure 1 inch wide and 4 inches long, folded back to form a loop, and shall be bartacked to the jacket. The loop shall hold a high temp thermoplastic buckle. The buckle shall point toward the front. The front strap component shall measure 1 inch wide by approximately 9 inches long (finished dimension). One end shall be folded back on itself to form a loop. A high temp thermoplastic slide fastener shall be captured within the loop. The front strap component shall be inserted through the buckle on the rear strap component, back through the slide fastener, and the end shall be bartacked to the trousers. A pull-tab of 1 inch black Aramid twill shall be affixed to the slide fastener. The take up strap pull-tabs shall pull toward the front to tighten. This shall allow for approximately 4 inches of adjustment per strap (8 inches overall).

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

## **MICROPHONE STRAPS**

A strap shall be constructed to hold a microphone for a portable radio. It shall be sewn to the coat at the ends only. The microphone strap shall be mounted above the trim on the left chest next to the stormflap. A second microphone strap shall be mounted on the stormflap six inches from the top. Both shall be constructed of double layer gold "Arashield<sup>®</sup>" material.

## **CLIPS FOR RADIO STRAP**

"D" rings attached, one each on left and right sides of jacket at the rear right beside the take-up straps.

## **FLASH LIGHT HOLDER**

A flashlight holder designed to secure a right angle flashlight shall be attached to the right chest, 6" down from the collar and 2" centered from storm flap. Exact style to be Globe "Sunlance Flashlight Holder".

## ***TROUSER 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.

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

### **LINER ACCESS OPENING (TROUSER)**

The combined moisture barrier and the thermal liner shall be completely removable for the pant. The thermal liner and moisture barrier layers of the liner system shall be stitched together and bound around the top waist and cuffs with Bias-Cut Neoprene coated cotton/polyester binding for a finished appearance that prevents fraying and wicking of contaminants. The liner system shall have a reinforcement of black Nomex<sup>®</sup> Twill 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 trousers.

The liner system of the trouser shall incorporate an opening at the right side of the waist, a minimum of 11 inches, for the

purpose of inspecting the integrity of the trouser liner system.

\_\_\_\_\_ Comply                      \_\_\_\_\_ Exception

**SIZING**

The trousers shall be available in even size waist measurements of two inch increments and shall be available in a range of sizes from 24 to 58. The trouser inseam measurement shall be available in two inch increments. Generalized sizing, such as small, medium, large, etc., will not be considered acceptable. Sizing specifically for women shall also be available.

\_\_\_\_\_ Comply                      \_\_\_\_\_ Exception

**RETROREFLECTIVE FLUORESCENT TRIM**

The trousers shall have a stripe of retroreflective fluorescent trim encircling each leg below the knee to comply with the requirements of NFPA #1971 (2013 revision) in 3 inch red/orange 3M Scotchlite™ Triple Trim (R/O borders with silver center).

\_\_\_\_\_ 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 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

**WAISTBAND**

The waist area of the trousers shall be reinforced on the inside with a separate piece of black aramid outer shell material not less than two inches in width. Neoprene coated cotton/polyester shall be sewn to the back of the waistband as a reinforcement to create a three-layer protection. The top edge of the waistband reinforcement shall be double stitched to the outer shell at the top of the trousers. The lower edge of the waistband shall be serged and 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 so as to be sandwiched between the waistband reinforcement and outer shell to reduce the possibility of liner detachment while donning and to avoid pass through of snaps from the outer shell to the inner liner. The independent waistband construction affords greater comfort and fit than a turned and stitched method. Trousers that do not include an independent waistband only serve to save the manufacturer both money and labor and shall be considered unacceptable.

\_\_\_\_\_ Comply                      \_\_\_\_\_ Exception

**TROUSER CLOSURE SYSTEM**

The exterior primary positive locking closure shall be an inward facing metal safety hook and dee ring. The safety hook shall be attached to a leather strap that is triple riveted to the right front body panel in the waist area. A leather backed dee ring shall be riveted to the leading edge of the fly flap near the top. The snap hook shall engage the dee ring located on the fly flap when in the closed position.

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

**EXTERNAL / INTERNAL FLY FLAP**

The trousers 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 ½ inches wide by 9½ inches long 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 by 9½ inches long, shall be sewn to the leading edge of the right front body panel. The inside of the right front body panel shall be thermally enhanced directly under the outside fly with a layer of moisture barrier and thermal liner material.

The trousers shall close by means of a heavy duty zipper and 1½ inch wide by full length flame resistant hook and loop fastener tape. The teeth of the zipper shall be mounted on Nomex® cloth and shall be sewn into the leading edges of the respective left and right front body panels from the crotch area to the waist band. Flame resistant hook and loop fastener tape shall close the flap. The FR loop portion shall be sewn with four rows of stitching to the inside of the leading edge of the external fly flap. The corresponding portion of FR hook fastener tape shall be sewn with four rows of stitching to the right front body panel positioned to engage the loop portion when the external fly flap is in the closed position.

Appropriate male and female snap fastener halves shall be installed at the leading edge of the waistband for the purpose of further securing the trousers in the closed position.

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

**AXTION KNEE**

The outer shell of the trouser 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. Two expansion pleats measuring approximately 1½ inches deep, shall be installed along both the inseam and outseam on each leg in the knee area. The pleats shall be folded to open outwardly towards the side seams to insure no restriction of movement. The AXTION knee will be installed proportionate to the trouser inseam, in such a manner that it falls in an anatomically correct knee location.

The liner system 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). Each dart will be approximately 2 inches long. 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**

An additional layer of specified thermal liner and neoprene coated impermeable barrier material will be sewn to the knee area of the liner system for added protection and increased thermal insulation at contact points. 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.

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

### **KNEE REINFORCEMENTS**

The knee area shall be reinforced with gold "Arashield®" material. The knee reinforcement shall be slightly offset to the outside of the leg to insure proper coverage when bending, kneeling and crawling. The knee reinforcements shall measure 10 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 lower edge of the "Arashield®" knee reinforcement 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 aramid batt shall be sandwiched between the shell and the knee reinforcement layers. The neoprene shall face outward.

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

### **EXPANSION 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 a layer of Kevlar 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 3 inches deeper than the pocket expansion and ½ inch wider than the pocket. The pocket flaps shall be closed by means of flame resistant Velcro® hook and loop fastener tape. Two pieces of 1½ inch by 3 inch FR Velcro® 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 Velcro® 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.

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

### **POCKET DIVIDER**

The right side expansion pocket shall be equipped with a vertical divider separating the pocket into two compartments. The divider will be installed three inches from the rear of the pocket.

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

### **TROUSER CUFF REINFORCEMENTS**

The cuff area of the trousers shall be reinforced with an extra layer of outer shell material. The cuff reinforcements shall not be less than 2 inches in width and folded in half, approximately one half inside and one half outside the leg cuff for greater strength and abrasion resistance. The cuff reinforcement shall be double stitched to the end of the leg for a total of four rows of stitching.

This independent cuff provides an additional layer of protection over a hemmed cuff. Trousers that are turned and stitched at the cuff, as opposed to 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 a double layer of black Nomex® 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 trousers. The main body of the suspenders shall be constructed of 2 inch wide black strap webbing. 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 Nomex®.

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. 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 Nomex® suspender attachments incorporating two snap fasteners. The Nomex® suspender attachments are to be threaded through the suspender attachment loops on the inside waistband of the trousers. The Nomex® suspender attachments will then fold over and attach to themselves securing the suspender to the trousers.

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

### **ACTION SEAT**

The rise of the rear trouser center back seam, 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 trouser by 2½ inches. The longer rear center back seam provides added fullness to the seat area for extreme mobility without restriction when stepping up or crouching and will be graded to size. This feature in combination with other design elements will maintain alignment of the knee directly over the knee pads when kneeling and crawling.

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

### **TAKE UP STRAPS**

The trousers shall be equipped with two take up straps. The straps shall be constructed of 1 inch wide black Aramid twill and be positioned in the waist area on the outside of the garment; one on each side. Each take up strap shall be comprised of two sub-component straps. The rear strap component shall be constructed of black twill Nomex®. The

rear strap shall measure 1 inch wide and 4 inches long, folded back to form a loop, and shall be bartacked to the trousers. The loop shall hold a high temp thermoplastic buckle. The buckle shall point toward the front. The front strap component shall measure 1 inch wide by approximately 9 inches long (finished dimension). One end shall be folded back on itself to form a loop. A high temp thermoplastic slide fastener shall be captured within the loop. The front strap component shall be inserted through the buckle on the rear strap component, back through the slide fastener, and the end shall be bartacked to the trousers. A pull-tab of 1 inch black Aramid twill shall be affixed to the slide fastener. The take up strap pull-tabs shall pull toward the front to tighten. This shall allow for approximately 4 inches of adjustment per strap (8 inches overall).

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

**REVERSE BOOT CUT**

The outer shell trouser 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 trouser cuffs. Trousers 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 (2013 revision) by Underwriters Laboratories (UL). Underwriters Laboratories shall certify and list compliance to that standard. Such certification shall be denoted by the Underwriters Laboratories certification label.

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

**LABELS**

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

- Compliance to NFPA Standard #1971 - 2013 edition
- Underwriters Laboratories classified mark
- Manufacturer's name
- Manufacturer's address
- Manufacturer's garment identification number
- Date of manufacture
- Size
- Fiber contents

\_\_\_\_\_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

**BETTER BUSINESS BUREAU:**

The manufacturer is accredited by the Better Business Bureau, showing a commitment to ethical and principled business practices.

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**

The Garments shall be manufactured in the United States.

**SIZING BY VENDOR**

Both male and female sizing samples shall be available. Vendor shall at no additional cost to the Town provide sizing on site at a Town Facility.

**Garment Warranty**

The Town performs routine and advanced inspections similar to that prescribed by NFPA. Please describe in detail the manufactures warranty, it inclusions, exclusions and term as well, as process for returning PPE for warranty repair. Please describe any and all cost associated with warranty repairs and returns as well as turnaround time for warranty repairs.

3. **Manufacturer Training** Provide training and certification to Town employees (number to be determined approximately 10) on the proper care and inspection/testing process for routine and advanced inspections to be fully compliant with all applicable NFPA standards relevant to PPE. This training is to take place at a Town facility to be determined later. Please describe in detail the contents of the class and its compliance with NFPA.

4. **References** the vendor shall provide **3** references of similar entities that the vendor has provided the requested services for. Valid points of contact including phone number shall be included in the proposal Tabulation Sheet.

## Proposal Tabulation Sheet

Vendor Name \_\_\_\_\_

Address \_\_\_\_\_

Primary Contact \_\_\_\_\_ Contact Phone \_\_\_\_\_

Authorized Signature & Title \_\_\_\_\_ Date \_\_\_\_\_

**Can you provide the Town with PPE that is identical in style, appearance, performance, and specification and interchangeable with PPE trousers and jackets already in its inventory?**

Yes \_\_\_\_\_ No \_\_\_\_\_

**Item 1. Provide total pricing for PPE elements and services listed below including applicable sales tax, shipping and other fees:**

Complete set of PPE (Jacket, Trousers, Suspenders, and Name Panel) \_\_\_\_\_

Jacket with Loop Velcro for name panel only \_\_\_\_\_

Trousers only \_\_\_\_\_

Suspenders only \_\_\_\_\_

Name Panel (Hook) only \_\_\_\_\_

Oversized Jacket \_\_\_\_\_

Oversized Pants \_\_\_\_\_

**Item 2. Employee Training:** The Town requests pricing for providing training and certification to Town employees (number to be determined) on the proper care and inspection process for routine and advanced inspections in order to be fully compliant with all applicable NFPA standards relevant to PPE. This training is to take place at a Town facility or Globe facility to be determined later. Please provide pricing for this service and describe in detail the contents of the class and its compliance with NFPA. (Use additional space if necessary)

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**Item 3. Reference** Provide 3 references of similar entities that the vendor has provided the requested services for. Valid points of contact, including phone number, shall be included in the Executive Summary.

Contact Name	Contact Phone Number	Contact Place of Business
1.		
2.		
3.		