REQUEST FOR PROPOSAL

RFP-22-04-01

SUPPLY OF STRUCTUAL FIREFIGHTING BUNKER GEAR

Closing Date 1pm April 29, 2022

Municipality of Arran-Elderslie

1925 Bruce Rd. 10

Chesley, Ontario

N0G 1L0

Submission Details

All submissions for responding to this request must be submitted to our office, as stated below, no laterthan:

Submissions accepted no later than – 1pm April 29th

Successful candidate will be notified.

The use of mail for delivery of proposal will be at the risk of the respondent. Submissions sent in electronic format will **not** be accepted.

Proposal must be submitted in a sealed envelope and shall be clearly marked with the following:

- ☐ The Name and Address of the Respondent
- ☐ The Request Number
- ☐ The Project Title

Administration staff will affix on the sealed envelope:

- ☐ Date and time of receipt

Submission Delivery Address, Submission Questions and Clarifications

You may contact the following lead person if you have any questions or require clarification on anytopics covered in this Bid Solicitation. The delivery address to be used for all submissions is:

Attention Fire Chief Steve Tiernan

Arran-Elderslie Municipal Office

1925 Bruce Rd. 10

Chesley, Ontario, N0G 1L0

519-363-3039 ext. 112

Submission Opening

Proposal will be publicly opened, and recorded on April 29th 2022 at 2pm at the Municipal Office. Staff will review the proposal and the successful candidate will be presented at the Regular Council Meeting.

Amendment and Withdrawal of Submission

Requests for withdrawal of a submission shall be allowed if the request is made before the closing time for the contract to which it applies. Requests shall be directed to the Lead person by letter or in person, by a Senior Official of the company, with a signed withdrawal confirming the details. Telephone requests shall not be considered. The withdrawal of a tender does not disqualify a bidder from submitting another tender on the same contract.

Addendums

The Municipality may, at its discretion, amend or supplement the documents for this request by addendum at any time prior to the closing date for receipt of Proposals. Changes to the request documents shall be made by ADDENDUM ONLY. Such changes made by addendum shall be supplementary to and an integral part of the request. All addendum must be signed and included in thefinal submission acknowledging all addenda issued by the Municipality. While the Municipality will endeavor to provide notification of the issuance of an addendum to prospective Proponents, the Municipality assumes no liability for the notification and it is the responsibility of each Proponent monitor and determine whether any addenda have been issued by the Municipality.

Detailed Specifications/Scope of Work

The Municipality of Arran-Elderslie (herein after referred to as the Municipality) is requesting proposals forthe purchase of Bunker Gear.

- The detailed specifications are attached in Schedule "B"
- Financial Components are attached in Schedule "A"

Assumptions and Constraints

The successful Proponent will ensure all services and products provided in respect to this proposal are inaccordance with, and under authorization of all applicable authorities, municipal, provincial and/or federal legislation.

The successful Proponent and its employees may have access to information confidential to the Municipality. This information may include, but is not limited to, terms of this agreement, business methods and systems, contractual terms, pricing, personal information, etc. subject to disclosure by force of law, the successful Proponent agrees that it and its employees who have access to this information will not either during the term of the agreement or at any time thereafter reveal to any third party any of this confidential information or use in any way, whether on the successful Proponent'sbehalf or on behalf of any third party, any such information

The information, reports, documentation, plans, etc. that are a product of this award by the successfulProponent, will become the exclusive property of the Municipality of Arran-Elderslie.

Terms and Conditions

Relating to the submission document:

- □ **Provincial and Federal Taxes (H.S.T.)-** Tenders shall include applicable H.S.T. taxes. This tax shall be shown separate from the unit price. The proponent shall include with the executed documents, at the time of submission, on company letterhead, notification to the Municipality of their H.S.T. Registration Number (if any)
- □ **Costs, Deliverables** & **Timelines** - as set out in Schedule A
- □ **Declaration** - Signed declaration must be submitted. (attached)
- □ **Other** - Proponents may include any additional information regarding their firm and/or services that may prove beneficial to the evaluation of the proposal. These would be provided in theform of appendices.

Relating to the Successful Candidates:

- **Notice of Acceptance** - Notice of acceptance may be made by fax or telephone, with written confirmation of same to follow, to the successful proponent at the number given by the proponent.
- **Payment** - shall be made upon receipt of invoice following the receipt of the product (net 30 days) with completion of the work to the satisfaction of the Municipality. The security deposit will be released upon completion of any deficiencies and receipt of payment by the Municipality of Arran-Elderslie of any late fees owing as per the contract clause above.
- **Servicing manuals** - need to be provided with the final product.
- **Price** - The Proponent shall abide by the total price stated in the submission document. No further payments beyond the contract amount will be made for any additional services required to provide a satisfactory deliverable. If additional requirements are requested by the Municipality beyond the original scope of work described in this Request, the cost of these services would be negotiated between the Municipality and the company that has been selected to perform the work. Any additional work will only be undertaken based on a request in writing from the Municipality of Arran-Elderslie.
- **Termination** - The Municipality reserves the right to immediately terminate the contract for sufficient cause, including but not limited to such items as non-performance, late deliveries, inferior quality, pricing problems, etc.
- **Warrantee** - Details of the warrantee need to be provided to the Municipality before the install is commenced.
- **Public Record** - Any personal information required on the proposal form is received under the authority of the Municipality. This information will be an integral component of the quote submission. All written proposals received by the Municipality become a public record; once a proposal is accepted by the Municipality, and a contract is signed, all information contained in it isavailable to the

public including personal information.

Selection Criteria

A combination of quality, experience and price will determine the successful firm. More specifically:

- The Proponent's experience overall and particularly in relation to similar projects.
- The Proponent's project management experience in managing subcontractors and delivering aseamless product to the client.
- The quality of the proposal.
- The quality of the proposed product.
- The proven ability to stay within project budget and meet project completion target date.
- Any additional features or advantages uniquely proposed by the Proponent which the Municipality has not identified in the project deliverables or description.
- The Proponent's financial proposal

The Municipality of Arran-Elderslie is not obligated to award the service contract to the lowest or any firm. The Municipality reserves the right to reject any or all proposals and to waive formalities as the interests of the Municipality may require without stating reasons. The Municipality will not be responsible for any liabilities, costs, expenses, loss or damage incurred, sustained or suffered by any Proponent by reason of the acceptance or the non-acceptance by the Municipality of any proposal or by reason of any delay in the acceptance of a proposal as well Any expenses incurred by the Proponent in the preparation of the proposal submission are entirely the responsibility of the Proponent and will not be charged to the Municipality.

To: The Municipality of Arran-Elderslie

I/We understand and accept that the prices set forth in this Quote Form include full compensation to furnish all labour, equipment, materials and supplies and transportation necessary or incidental to completing the work in strict accordance with said documents.

I/We understand that this Agreement terminates in the event that I fail to perform the work to the satisfaction of the Municipality.

I/We understand that the lowest or any quote will not necessarily be accepted and that TO BE CONSIDERED, Quote Forms must be in the Municipal Office by the Submission Deadlines and Methods.

Signed at_____ this_ day of_____2022.

GENERAL CONDITIONS

1. Notice of acceptance may be made by email, fax or telephone, with written confirmation ofsame to follow, to the respondent at the numbers given by the respondent.

Schedule "A"

Name and Address of the Respondent

_____

_____

_____

Phone: **Fax:** **Email:**

_____

The Respondent declares:

- No person, firm or Municipality other than the Respondent, has any interest in this proposal or in the proposed services for this proposal;
- This proposal is made without any connection, comparison of figures or arrangements with or knowledge of any other Municipality, firm or person making a proposal for the same service andis in all respect fair and without collusion or fraud;
- No member of the staff of the Municipality of Arran-Elderslie is, or will become interested directlyor indirectly; as a contracting party, partner shareholder, surety or otherwise; or in the performance of the service; or in the supplies, service or business to which it relates; or in any portion of the profits thereof; or in any of the monies to be derived there from;
- The content and requirements of this proposal document have been read and understood.
- All prices are quoted in Canadian funds.

All or any proposals not necessarily accepted.

Signed at_____ this_ day of_____2022.

_____ _____

Print Name - Witness Print - Respondent,

_____

Title - Respondent

_____ _____

Signature - Witness Signature - Respondent

Bunker Gear Cost

	Unit Price	Total
Price for (19) Suit		
Shipping Cost		
Other *{Multi purchase discounts)*		
Subtotal:		
HST {13%)		
Total		

Schedule "B"– Specifications for Compliance (NFPA)

Scope and Purpose

The following specification describes the minimum requirements for the materials, design and construction of protective clothing ensembles, excluding head and hands, affording protection against the adverse hazards associated with Structural Firefighting activities and certain other emergency operations as defined by NFPA 1971, *Standard on Protective Ensemble for Structural Fire Fighting,* 2018 Edition

The following specification describes the minimum requirements for the materials, design and construction of protective clothing ensembles, excluding head and hands, affording protection against the adverse hazards associated with Structural Firefighting activities and certain other emergency operations as defined by NFPA 1971, *Standard on Protective Ensemble for Structural Fire Fighting,* 2018 Edition

_____COMPLIANT _____ NON-COMPLIANCE

Thermal Protective Performance

The garment composite, consisting of the outer shell, moisture barrier and thermal liner, shall provide a Thermal Protective Performance (TPP) of not less than 35 when tested in accordance with NFPA 1971 standard. **This is a minimum requirement, no exceptions shall be considered.**

____COMPLIANT ____ NON-COMPLIANCE

Total Heat Loss (THL)

The garment composite, consisting of the outer shell, moisture barrier and thermal liner, shall provide a Total Heat Loss (THL) of not less than 205 when tested in accordance with NFPA 1971 standard. **This is a minimum requirement, no exceptions shall be considered.**

____COMPLIANT ____ NON-COMPLIANCE

Third Party Testing

All components used in the construction of these garments shall be tested for compliance to NFPA Standard #1971 2018 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.

____COMPLIANT ____ NON-COMPLIANCE

ISO Certification/Registration

The protective clothing manufacturer shall be certified and registered to ISO Standard 9001 to assure a satisfactory level of quality.

____COMPLIANT ____ NON-COMPLIANCE

Labeling

Each garment shall have a garment label(s) permanently and conspicuously attached stating at least the following language:

DO NOT REMOVE THIS LABEL
THIS GARMENT MEETS THE GARMENT REQUIREMENTS OF NFPA 1971, STANDARD ON PROTECTIVE ENSEMBLE FOR STRUCTURAL FIRE FIGHTING, 2018 EDITION

Additionally, the label(s) shall include the following information:

Compliance to NFPA Standard #1971 - 2018
edition Underwriters Laboratories classified
mark Manufacturer's name
Manufacturer's address
Manufacturer's garment identification
number Bar Code
Date of
manufacture Size
Fiber contents
Firefighters name attached to inner and outer garments.

____COMPLIANT ____ NON-COMPLIANCE

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.

Hook and Loop (Velcro)

All references to Velcro® will be defined as Flame Resistant hook and loop Velcro and shall be and black in color. The use of aramid hook and loop Velcro shall not be permitted.

____COMPLIANT ____ NON-COMPLIANCE

The outer shell shall be constructed of Pioneer or Equivalent with material weight 6.6 oz per square yard. The shell material must be treated with a durable water-repellent finish that also enhances abrasion resistance.
Outer shell color: **Black**

____COMPLIANT ____ NON-COMPLIANCE

Thermal Liner

The thermal liner shall be constructed of Defender M NP or Equivalent Face Cloth: Lenzing FR Rayon/Para aramid/Nylon (Spun Yarn) Plain weave Batting: 1 layer of Aramid Neddle punched with a finished weight of approximately 7.0 oz. per square yard. Colour Brass

The thermal liner shall be attached to the moisture barrier at the perimeter of the liner system employing a self- binding.

____COMPLIANT ____ NON-COMPLIANCE

Moisture Barrier

The moisture barrier shall be the STEDAIR 3000 or Equivalent

The moisture barrier material shall meet all moisture barrier requirements of NFPA 1971-2018 edition. 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.

____COMPLIANT ____ NON-COMPLIANCE

Coat Construction

The body of the shell shall be constructed of four separate body panels consisting of two front panels and one back panel and shall be joined together by double stitching with NOMEX® thread. The body panels shall be shaped to provide a tailored fit thereby enhancing mobility.

____COMPLIANT ____ NON-COMPLIANCE

Sizing

The coats will be available in numeric sizing with 2 inch chest increments and 1” sleeve length measurements. The length of the coast will be measured from the rear collar and back to the hem of the coat and will be approximately 28 inches in the front and 34 inches at the rear hem.

Generalized sizing, such as small, medium, large, etc., will not be considered acceptable. All

patterns will be graded to size to insure proper fit.

In person sizing will be completed at the fire station.

____COMPLIANT ____ NON-COMPLIANCE

Linear System Construction

The thermal liner will be sewn to the moisture barrier at its perimeter with the breathable membrane oriented inward toward the thermal liner and away from the outer shell. The thermal liner and moisture barrier shall be stitched together and turned and top stitched to create a self-binding. The cuffs of the coat and pant liner system will have a binding of Neoprene on cotton poly to eliminate the possibility of wicking contaminants. The moisture barrier/thermal liner shall finish no more than 1" from the cuffs and 2" from the hem.

There will be an extra internal layer of thermal liner material sewn on the shoulder area of the liner system for increased protection and insulation. The extra layer will be sewn to the thermal liner layer only.

The coat liner system contains an internal pocket made of 1 layer of outer shell material and measures approximately 7 inches by 9 inches and is sewn on the left front panel. A Pencil Slop approximately 1.5" wide shall be stitched vertically on one side of the liner pocket.

____COMPLIANT ____ NON-COMPLIANCE

Moisture Barrier/Thermal Barrier Attachment

The thermal liner and moisture barrier shall be completely removable from the coat shell. Strips of ⅝ inch wide FR Velcro 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 loop portion of the Velcro shall be attached to the liner system with the hook fastener attached to the outer shell.

The remainder of the thermal liner/moisture barrier shall be secured with a minimum of five snap fasteners appropriately spaced on each coat facing and two snap fasteners at each sleeve end.

The thermal liner and moisture barrier shall be completely removable from the pant shell. Seven snap fasteners shall be spaced along the waistband to secure the thermal liner/moisture barrier to the shell. The legs of the thermal liner/moisture barrier shall be secured to the shell by means of two snap fasteners per leg.

____COMPLIANT ____ NON-COMPLIANCE

Drag Rescue Device (DRD)

A removable Firefighter Drag Rescue Device shall be installed in each coat. Two ends of a 1½ inch wide aramid strap will be sewn together to form a continuous loop. The strap will be installed in the coat between the liner system and outer shell such that when properly installed will loop around each arm. The strap will run through an access port located on the upper back of the

coat and designed to fit between the shoulder straps of an SCBA.

A three inch by four inch (Home Plate) “Easy Grip” patch constructed of outer shell material will be attached to the strap on the outside of the coat. The “Easy Grip” patch will cover the access port and will secure to the outside of the coat by hook and loop Velcro. The “Easy Grip” patch will be covered with a reflective Lakeland logo patch for increased visibility to clearly identify the feature and will have the Lakeland symbol along with bold lettering: **DRD.**

____COMPLIANT ____ NON-COMPLIANCE

Collar and Throat Tab

The collar of the coat shall measure not less than three inches in height and will be graded to size. The collar will be a four layer construction with two outside layers of outer shell material encapsulating two layers of moisture barrier. The rear internal layer of moisture barrier will be stitched at the perimeter of the collar only. The forward layer of moisture barrier shall be quilt stitched to the front outer shell layer of the collar to trap air and increase thermal insulation. The collar shall extend to the leading edges of the coat front body panels so that no gap occurs at the throat area.

A strip of 5/8 inch FR hook Velcro will be sewn to a one inch wide outer shell extension panel running the full length of the inside lower edge of the collar. It will be positioned to engage a corresponding piece of 5/8 inch FR loop Velcro along the neckline of the liner system.

The throat tab will be a four-layer construction with two layers of outer shell material encapsulating two center layers of moisture barrier material. The throat tab shall measure not less than 3 inches high by 10 inches long and will be of a scooped design for proper interface with an SCBA mask. The throat tab will be attached to the forward right front side of the collar. The throat tab will be secured in the closed and stowed position with FR hook and loop Velcro. A 1½ inch square piece of FR hook Velcro will be sewn to the inside of the end of the closure strap. A corresponding piece of FR loop Velcro measuring 1½ inches by 3 inches shall be sewn horizontally to the left outside leading edge of the collar, thereby providing a high degree of collar strap adjustment when wearing a breathing apparatus mask. In order to provide a means of storage for the closure strap when not in use, a 1½ inch square piece of FR loop Velcro will be sewn to the forward right front side of the collar immediately in front of the throat tab. The throat tab shall fold in half for storage.

A hanger loop constructed of a double layer of outer shell material will be located at the top rear of the collar.

____COMPLIANT ____ NON-COMPLIANCE

Pleated Back

The back of the jackets will have two 2” outward facing vertical pleats sewn into the jacket outer shell. The pleats will extend from the top of the shoulder seam near the sleeves and will extend down the sides of the jacket. The pleat will taper from two inches in width at the top while narrowing to a point at the bottom end.

The liner will have two corresponding pleats on the back that will fall adjacent to the out shell

pleats to avoid bulk in the shoulder area. The shell and liner pleats will facilitate extended range of motion while reducing the likelihood of compression burns at the upper back and arm area of the coat.

____COMPLIANT ____ NON-COMPLIANCE

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. 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.

____COMPLIANT ____ NON-COMPLIANCE

Shoulder Reinforcement

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

____COMPLIANT ____ NON-COMPLIANCE

Sleeves

The sleeves shall be of two-panel construction and set-in type configuration. The sleeves shall be ergonomically curved to follow the natural shape of the arm unlike straight, tubular sleeve configurations. An underarm gusset shall be incorporated between the underside of the sleeve and the body of the coat and shall be used in all layers of the garment (shell, moisture barrier, and thermal liner) to provide for a high degree of uninhibited arm and shoulder movement. The underarm gusset shall measure approximately 6 inches wide by 20 inches long (all layers) and graded to size.

____COMPLIANT ____ NON-COMPLIANCE

Elbow Reinforcements

The elbows of the outer shell sleeves shall be reinforced with Arashield material or Equivalent. The elbow reinforcement shall be double stitched to the sleeve elbow areas. The reinforcements will have an extra layer of Neoprene coated cotton poly moisture resistant material sewn underneath for extra thermal protection. The overall dimensions of the elbow reinforcements shall measure approximately 6 inches wide and 8 inches high.

____COMPLIANT ____ NON-COMPLIANCE

Sleeve Cuff Reinforcement

The sleeve cuffs shall be reinforced with Arashield material or Equivalent. 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.

____COMPLIANT ____ NON-COMPLIANCE

Wristlets

Each coat shall be equipped with **50/50 NOMEX®/KEVLAR blend knit wristlets** not less than 4 inches in length and of double thickness. A ½" Black NOMEX Twill Tape loop shall be stitched to the end of the cuff to create a Thumb Loop.

____COMPLIANT ____ NON-COMPLIANCE

Sleeve Wells

The wristlets shall be sewn to flame resistant neoprene coated cotton/polyester moisture barrier material, which in turn shall be sewn to the inside of the sleeve shell approximately five inches from the sleeve cuff. This sleeve well configuration serves to prevent water and other hazardous elements from entering the sleeves when the arms are raised. The neoprene moisture barrier material shall also line the inside of the sleeve shell from the cuff to a point approximately five inches up, where it joins the sleeve well and is double stitched to the shell. Two NOMEX® 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. This configuration will ensure there is no interruption in protection between the sleeve liner and wristlet.

____COMPLIANT ____ NON-COMPLIANCE

Coat Facings

The coat will incorporate separate facings to ensure there is no interruption in thermal or moisture protection in the front closure area. The facings shall measure approximately 3 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 coat facings and configured such that it is sandwiched between the coat facing and the inside of the respective body panel. The breathable film side shall face inward to protect it. The thermal liner and moisture barrier assembly shall be attached to the coat facings by means of snap fasteners.

____COMPLIANT ____ NON-COMPLIANCE

Storm Flap

The storm flap will be centered over the left and right side body panels to ensure there is no interruption in thermal or moisture protection. The storm flap will consists of 2 layers of moisture barrier sandwiched between 2 layers of outer shell material measuring approx. 23.75 inches by 4.25 inches wide. The storm flap is sewn onto the left panel of the coat and positioned within 0.5 inch of the collar attachment seam to prevent leakage.

____COMPLIANT ____ NON-COMPLIANCE

Chest Pocket

Under the storm flap in the upper chest area will be a slit style pocket located under the left front body panel. The pocket opening shall measure approximately 5-inches long. The inside pocket shall measure approximately 5-inches by 8-inches. The pocket shall be located between the outer shell and the liner system.

____COMPLIANT ____ NON-COMPLIANCE

Draw Cord

The jacket will be equipped with a “Draw-Cord” on the inside rear of the outer shell. A 1” wide layer of outer shell material will be sewn to the inside rear jacket panel from side seam to side seam, just above the pockets, to create a tunnel for the Draw-Cord. The Draw-Cord will be constructed of KEVLAR cording. The Draw-Cord locking “Barrel” mechanism will be constructed of NFPA compliant High Temp polymer.

The employment of the Draw-Cord will gather the extra bulk of the outer shell around the torso to rear of the jacket so the front will remain flat for improved access to pockets. This will prevent bunching of the excess material at that the front of the jacket when donning and securing an SCBA strap.

____COMPLIANT ____ NON-COMPLIANCE

Storm Flap and Front Closure System

The coat shall be closed by means of (zipper and Velcro) a 22 inch size #10 heavy duty high-temp polymer zipper on the coat fronts and FR Velcro on the storm flap. The teeth of the zipper shall be mounted on NOMEX® cloth and shall be sewn into the respective coat facings. The storm flap shall close over the left and right coat body panels and shall be secured with FR Velcro. A 1½

inch by 24 inch piece of FR loop Velcro shall be installed along the underside leading edge of the storm flap. A corresponding 1½ inch by 23 inch piece of FR hook Velcro shall be sewn to the front body panel and positioned to engage the loop Velcro when the storm flap is closed over the front of the coat.

____COMPLIANT ____ NON-COMPLIANCE

Bellows Handwarmer

Each coat will be equipped with Bellows/Handwarmer pockets on the left side and right side of the front of the coat. The pockets shall be located at the bottom of the coat near the storm flap and be double stitched to the respective body panels. Retro-reflective 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 inside of the bellows pocket will be fully reinforced with an extra layer of KEVLAR Twill material on the front, back, bottom and sides. The pockets shall measure 2 inch deep by 8 inch wide by 8 inch high. The bellows portion of the pocket will be accessed from the top.

The pocket flaps will be constructed of two layers of outer shell material, and shall measure 5 inches deep and ½ inch wider than the pocket. Two pieces of 1½ inch by 3 inch FR Velcro will secure each flap in the closed position. The Velcro on the flap will be oriented in a vertical position while the Velcro on the pocket will be oriented horizontally allowing for the flap to be secured when the pocket is fully expanded. The upper pocket corners and pocket flaps shall be reinforced with bartacks.

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 lined with Q8.

____COMPLIANT ____ NON-COMPLIANCE

Pocket Pull-Tabs

Every pocket on the garment shall be equipped with Pocket Pull-Tabs constructed of a double layer of outer shell material. The Pull-Tabs shall measure approximately .75 x1.5 inches and located at the bottom center of the pocket flaps to facilitate opening or pulling up the pocket flap.

____COMPLIANT ____ NON-COMPLIANCE

Flashlight Snap and Strap

Each coat shall be equipped with a flashlight snap and strap. An inward facing safety hook/coat snap shall be attached to the upper chest in a vertical position. The inward facing snap hook will accommodate the clip portion of the flashlight. Below the snap hook will be a strap constructed of outer shell material to wrap around the barrel of a flashlight. The strap will have FR Velcro sewn to the ends to secure to itself. There will be approximately 4 inches between the upper snap hook and lower strap. The flashlight snap and strap will be sewn to the coat on the right chest.

____COMPLIANT _____ NON-COMPLIANCE

Radio Pocket

Each coat shall have a pocket designed for the storage of a portable radio. This pocket shall be of box type construction, double stitched to the coat, 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 5 inches deep and ¼ inch wider than the pocket. The pocket flap shall be closed by means of FR Velcro. With a Velcro Antenna Opening on each side of Flap for the A 1½ inch by 3 inch piece of FR hook Velcro shall be installed vertically 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 Velcro shall be installed horizontally on the outside of the pocket near the top center and positioned to engage the hook Velcro. In addition, the entire inside of the pocket shall be lined with neoprene coated cotton/polyester moisture barrier material to ensure that the radio is protected from the elements. The moisture 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 2 inches deep by 3.5 inches wide by 8 inches high and shall be installed on the left chest.

____COMPLIANT ____ NON-COMPLIANCE

Microphone Strap

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 radio pocket and shall be constructed of double layer outer shell material.

____COMPLIANT ____ NON-COMPLIANCE

Dee Ring

A dee-ring shall be riveted to the coat in a vertical position through the outer shell. The rivets will be reinforced with die-cut leather washers under the outer shell. The dee-ring will be located on the lower storm flap, centered.

____COMPLIANT _____ NON-COMPLIANCE

Retroreflective Fluorescent Trim and Patterns

The retroreflective fluorescent trim shall be lime/yellow ScotchliteTriple Trim (L/Y borders with silver center) Segmented Comfort Trim. Each coat shall have retroreflective fluorescent trim sewn to the outside of the outer shell to meet the requirements of NFPA #1971 (2018 edition) and OSHA. The trim pattern shall be:

NYC style
3 inch wide stripes:
around each sleeve at the cuff and above the elbows (the upper sleeve stripe will have an underlayment thermal reinforcement layer of neoprene on cotton poly for protection against Stored Energy burns) around the hem of the entire coat horizontally across the chest and around the back below the sleeves.

____COMPLIANT ____ NON-COMPLIANCE

Lazer Trim Coat

The coat shall be equipped with Silver Reflective piping for enhanced visibility. The piping will be constructed of NFPA compliant Silver Scotchlite Reflective material wrapped around a NOMEX Cording. The “Lazer” trim shall be sewn into the outside sleeve seam full length and around then entire arm-hole where the sleeve joins the body of the coat.

____COMPLIANT ____ NON-COMPLIANCE

Sewn on Reflective Lettering

Each coat shall have a Tail Letter Patch. The Tail Letter Patch shall be constructed of a double layer of outer shell material. The “Tail” Letter Patch will be contoured to follow the curved hem of the jacket for a finished appearance. The patch will attach to the lower rear hem of the coat with stitching around the full perimeter to assure full adhesion.

____COMPLIANT ____ NON-COMPLIANCE

Pant Construction

The body of the shell shall be constructed of four separate body panels consisting of two front panels and two back panels and graded to size. The body panels shall be shaped so as to provide a tailored fit, thereby enhancing body movement, and will be joined together by double stitching with NOMEX® thread.

____COMPLIANT ____ NON-COMPLIANCE

One Piece Lover Leg Panels

The lower leg panels shall be of one-piece design and wrap around the lower leg terminating at a rear. The lower leg seam and will be joined together by double stitching with NOMEX® thread**.** This rear seam design will eliminate side seam abrasion at the cuff of the pants, thereby enhancing mobility and performance. *The use of “patch” to cover the side seams, essentially breaking the circumference trim band will be deemed inappropriate and in conflict with NFPA guidelines.*

____COMPLIANT ____ NON-COMPLIANCE

Pant

Will be constructed with an elastic water wells.

COMPLIANT ____ NON-COMPLIANCE

Sizing

The Pants shall be available in even size waist and inseam measurements of two inch increments. Generalized sizing, such as small, medium, large, etc., will not be considered acceptable.

Sizing will be in person at the fire station.

____COMPLIANT ____ NON-COMPLIANCE

Liner System Construction

The thermal liner will be sewn to the moisture barrier at its perimeter with the breathable membrane oriented inward toward the thermal liner and away from the outer shell. The thermal liner and moisture barrier shall be stitched together and turned and top stitched to create a self- binding along the waist. The cuffs of the pant liner will be bound with Neoprene on cotton poly moisture resistant material to avoid wicking of contaminants.

____COMPLIANT ____ NON-COMPLIANCE

Moisture Barrier/Thermal Liner Attachment

The thermal liner and moisture barrier shall be completely removable from the pant shell. Seven snap fasteners shall be spaced along the waistband to secure the thermal liner/moisture barrier to the shell. The legs of the thermal liner/moisture barrier shall be secured to the shell by means of two snap fasteners per leg located at the side seams.

____COMPLIANT ____ NON-COMPLIANCE

Suspender System

Suspenders will be ergonomic in design. The main one-piece body of the suspenders will be padded and 2.5 inches in width over the top of the shoulders. This creates a wider contact surface on the shoulder dispersing the weight over more area increasing comfort and support.

The rear straps of the suspenders will be adjustable to fit a wide range of torso lengths. The front suspender straps will be equipped with pull-tabs for final adjustment.

The front ends of the suspender body will be equipped with vertical mic straps/thumb loops.

The front of the suspenders will have a horizontal adjustable strap clip. The strap will act as a deterrent to keep the suspenders from slipping off the shoulders. The adjustable clip shall be located on the top of the left side suspender body so that it is padded against the chest. The strap will be attached to the edges of the right-side suspender body to form a mic strap. The horizontal strap can be stored under the vertical mic straps on each side.

____COMPLIANT ____ NON-COMPLIANCE

Waistband

The waist area of the Pants shall be reinforced on the inside with a separate piece of black NOMEX outer shell material not less than two inches in width. 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.

____COMPLIANT ____ NON-COMPLIANCE

Pant Closure System

The exterior primary positive locking closure shall be a 2" wide Black NOMEX or KEVLAR Webbing Belt with high temperature thermoplastic buckle.

The internal fly flap closure shall consist of 1½ inch wide by full-length FR Velcro and a heavy-duty zipper. One half of the zipper shall be sewn to the inside of the leading edge of the external fly flap. The corresponding zipper half shall be sewn the right front body panel and shall be positioned to engage the zipper half on the fly flap. The top of each zipper half shall be further reinforced with a bartack.

A snap fastener will be installed at the leading edge of the waistband for the purpose of further securing the Pants in the closed position.

____COMPLIANT ____ NON-COMPLIANCE

Kevlar Belt/Belt Loops

Each Pant will be provided with a belt measuring 2 inches in width and, constructed of NOMEX or KEVLAR® webbing material. The end of each belt shall be equipped with high temperature thermoplastic buckles for ease of attachment and adjustment. The belt will act as the positive closure for the pant.

The Pants shall be equipped with a series of belt loops constructed of a double layer of outer shell material and spaced around the waist to accommodate the NOMEX or KEVLAR® belt. The front two belt loops shall be and will be of a 2-piece design – top and bottom. The top and bottom of each loop will attach to each other with snap fasteners and flame-resistant hook &

loop Velcro sewn to ends

The pant shall also have two Pant Handle/Belt loops on each side, constructed of 1" Black NOMEX Twill tape and shall be located over the sides seams of the pant. On each side of the pant, two of the belt loops will extend above the waist of the garment and will be configured to form a "handle". The handle(s) will facilitate ease of donning and doffing.

____COMPLIANT ____ NON-COMPLIANCE

External Fly Flap

The fly flap will consist of a layer of thermal liner and moisture barrier material sandwiched between 2 layers of outer shell material. The fly will measure measuring approx. 9.5 inches long by 3.75 inches wide and will be double stitched to the left front body panel and centered over the pant opening. A snap fastener will be located at the top of the fly to assist in the closure.

____COMPLIANT ____ NON-COMPLIANCE

Take Up Straps

Two take up straps constructed of 1-inch wide black NOMEX twill and high temp thermoplastic slide will be positioned on the outside of the garment; one on each side. Each take up strap shall be comprised of two sub-component straps. The rear portion of the strap will be attached to the high-temp thermoplastic slide. The front strap component shall run through the slide and extend toward the front of the pant. The front strap component shall be inserted through the slide on the rear strap component and extend toward the front of the pant where it will act as the pull-tab. The tab will be pulled toward the front to tighten. This shall allow for approximately 4 inches of adjustment per strap (8 inches overall).

____COMPLIANT ____ NON-COMPLIANCE

Pocket Pull Tabs

Every pocket on the garment shall be equipped with Pocket Pull-Tabs constructed of a double layer of outer shell material. The Pull-Tabs shall measure approximately .75 x1.5 inches and located at the bottom center of the pocket flaps to facilitate opening or pulling up the pocket flap.

____COMPLIANT ____ NON-COMPLIANCE

Bellows Pockets

Each pant will have two angled expansion pockets. The pockets will measure 2 inch deep by 10 inch wide by 10 inch high at the rear and 8" high in the front. The bellows pockets shall be double

stitched to outside hip area of the pant. Two rust resistant metal drain eyelets shall be installed in the bottom of each bellows pocket to facilitate drainage of water. The inside of the pocket shall be fully reinforced with an extra layer of KEVLAR Twill material on the front, back, bottom and sides.

The pocket flaps will be constructed of two layers of outer shell material, and shall measure 5 inches deep and ½ inch wider than the pocket. Two pieces of 1½ inch by 3 inch FR Velcro Velcro shall secure each flap in the closed position. The Velcro on the flap will be oriented in a vertical position while the Velcro on the pocket will be oriented horizontally allowing for the flap to be secured when the pocket is fully expanded. The upper pocket corners and pocket flaps shall be reinforced with bartacks.

Additionally, the right side pocket shell be equipped with a divider constructed of self-material. The divider will be stitched vertically and centered splitting the pocket into two compartments. With a 2 Pak Internal Tool Pocket of Kevlar Twill on left and right pocket.

____COMPLIANT ____ NON-COMPLIANCE

Pleated Knees

The pants will have horizontal pleats located above the knee reinforcement to provide a greater range of motion. Two 2-inch pleats, will be located, one each side, along the front leg panels at the top of the knee area. The pleats above the knee will be fully functional, not like the knee pleat designs that fully and permanently employ each knee pleat, under the knee reinforcements, creating bulk and mass.

The liner knee shall also employ the same pleat design, but off-set to the shell pleat and located at the center of the knee to work in concert with the shell pleats.

____COMPLIANT ____ NON-COMPLIANCE

Liner Knee Thermal Enhancement

An additional layer of thermal liner material will be sewn to the knee area of the liner system for added protection and increased thermal insulation. 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.

____COMPLIANT ____ NON-COMPLIANCE

Knee Reinforcements

The knee area shall be reinforced with "Stedshield" or Equivalent material. The knee reinforcement shall be slightly offset to the inside 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.

____COMPLIANT ____ NON-COMPLIANCE

Padding Under Knee Reinforcements

For greater thermal protection and comfort the knees will be padded with two extra layers of thermal liner material. The two layers material will be boxed stitched to the outer shell knees to prevent migration of the padding. The padding will be installed underneath the outside reinforcement layer of the knees.

____COMPLIANT ____ NON-COMPLIANCE

Pant Cuff Reinforcements

The cuff area of the Pants shall be reinforced with "Stedshield" or Equivalent material. The cuff reinforcement shall not be less than 2 inches in width and folded in half for approximately one-inch exposure on the inside and outside of the leg openings. The cuff reinforcement shall be double stitched to the outer shell. Two NOMEX® snap tabs measuring approximately 1 inch long shall be attached to the inside of each leg of the outer shell approximately three inches from the bottom of the Pant leg. Snap fasteners will be installed at the end of each tab and at the bottom of the Pant thermal liner/moisture barrier within three inches of the cuff to secure the liner to the shell.

____COMPLIANT ____ NON-COMPLIANCE

Boot Cut

The Pant leg cuffs will be constructed such that the back of the leg falls higher than the front to avoid the chance of premature wear of the cuffs and improved interface with the fire boot.

____COMPLIANT ____ NON-COMPLIANCE